

Tracked farm buggy stays afloat in boggy Scottish Borders soils



Kelso-based Crop Services runs its Kubota RTV on 30cm wide tracks fitted with beefed-up drive rollers to cope with the high torque loading and wet conditions

When boggy ground conditions keep you off the fields for weeks at a time, staying on top of ballooning slug populations and raging grassweeds can be a real headache.

But after adding retro-fit track units and a state-of-the-art granular applicator to its Kubota RTV buggy, Scottish Borders contractor Crop Services is managing to stay afloat while others are forced to keep their machines in the shed.

"Here in the Borders we're now beginning to see resistant black-grass and sterile brome creeping in. Control is an issue because, unlike farms down south, we don't have the window of opportunity for stale seed-beds between harvest and drilling winter crops," explains the company's Douglas Stephen.

"Add to that the increased slug burden of warmer, wetter growing seasons and we've got to be able to get on and apply granules and pellets come hell or high water."

For a number of years Crop Services has run a Kubota RTV buggy for its soil sampling service – its enclosed, heated cabin providing a dry, warm environment year round for both operator and the sampling kit used for that job. About six months of the year was taken up with that work, and a further

Mounting grassweed and slug problems have prompted a Scottish Borders farmer to adapt his farm buggy to apply Avadex and slug pellets in almost any conditions. **Nick Fone** went to see the modified machine in action

few weeks saw the machine kitted out with a slug peller.

"The RTV does a far better job than any quad – its diesel engine runs at tickover most of the time whereas the bikes we ran previously were under constant stress and we were often blowing up.

"More importantly I can send

guys out in minus 5C sleet and they're warm and happy with a radio to listen to and windscreen wipers to see where they're going."

While the buggy immediately proved its worth as a sampling and spreading platform, there were occasional issues with it getting stuck in the Borders' sometimes

challenging conditions. Despite being kitted out with low-pressure tyres and not carrying huge weights, the Kubota could also leave ruts in the wettest areas. That meant the company often had to pull out, making for a very narrow working window. Clearly a solution had to be found.

"We decided that tracks were probably the best option and found that Camoplast made a set specifically for ATV buggies that cost about £4,000 – that had to be an investment worth making if it extended our working window," says Mr Stephen.

So for the last two seasons the RTV has run on these 30cm wide tracks, which give the buggy a total footprint of over 1.3sq m.

"They have made a huge difference to the work we do – we can now travel in any conditions without leaving a mark.

"However they're not without their issues and they have significantly higher running costs than normal wheels and tyres.

"Really they're designed for the slopes of Val d'Isere rather than a ploughed field, so they're not used to the high torque loading and the wet, soggy conditions. The standard bearings just fall to bits."

It has been the drive rollers that have suffered the worst and →p72



A control box for the 12m Opico Micro Pro is fitted in the air-conditioned cab

MACHINERY | TRACKED UTV

initially these had to be replaced every two to three months. To get round this problem the company has had wider, beefier rollers made up to accommodate bigger commercial van hub bearings. Mid-rollers and idlers have had similar treatment and these seem to be holding together much better.

With the tracked buggy now set up to cover the acres without leaving a trace, it was seen as the ideal platform for a more accurate means of applying granular grass weed control products such as Avadex.

"In the last two to three years we've seen blackgrass getting itself established in the area and more and more sterile brome creeping

in from the grass margins," says Mr Stephen. "We're now finding that a one-hit chemical application isn't wiping out these problem weeds. We're having to use Avadex to sensitise the young plants and then a subsequent post-emergence product to knock them out.

"But to do the granular job properly with uniform coverage, you've got to have an accurate means of applying it. Last year we decided we needed to be proactive in tackling the issue and bought an Opico Micro Pro with a 12m boom."

Mounted on the Kubota's rear load deck, the 400-litre machine has individual metering wheels to measure exact amounts of product for delivery down the boom pipes. With 16 fan-type outlets across the 12m working width, granule distribution is reckoned to be about as good as it gets and is virtually unaffected by wind.

The suspended steel boom is generally fairly stable but the addition of tracks has made it even steadier trundling over rough ground. The importance of not causing compaction, running in between each tramline and being able to travel in less-than-ideal conditions are the main advantage of the tracked RTV over a large

CROP SERVICES (SCOTLAND), KELSO

Services offered

- * Agronomy
- * Chemical supply and distribution
- * Spraying
- * Soil sampling and variable application mapping
- * P&K and lime-spreading
- * Avadex and slug pellet application
- * Mobile seed dressing, sprayer hire (from a 600-litre, 12m mounted to 4,500-litre, 28m trailed)
- * Two country stores and a cleaning equipment supply business

Machinery

- * 3 x Kellands Agri-buggy A280's 24-28m booms
- * 1 x Multidrive M380 36m Landquip de-mount

- * 1 x Multidrive FC F380 with 36m Landquip de-mount and Transpread de-mount spreader
 - * 1 x Multidrive M380 24m Landquip de-mount & Transpread de-mount spreader
 - * 1 x Multidrive M420 Bredal K85 de-mount spreader
 - * 2 x Sands SLC4000 24-36m de-mount 24m
 - * 2 x JCB Fastrac 2170 landquip de-mount 24m
 - * 1 x JCB Fastrac 2155
 - * 1 x Deutz 620
 - * 1 x John Deere 6920s
- Staff**
- * 11 full time spraying operators
 - * 7 Agronomists
 - * 4 Engineers
 - * 20 Office/admin/retail/delivery staff
 - * 8 Part-time office/retail

Douglas Stephen uses the applicator to spread slug pellets and Avadex



tractor-mounted applicator in Mr Stephen's eyes.

"Our emphasis has to be on treading a light footprint on the delicate soils we look after but there are other big advantages to the Kubota.

"Being lightweight, the engine isn't overly grunty but the Micro-Pro only needs 20-30hp to run so what would the point be in mount-

ing it on anything more powerful which would maul the ground more and use more fuel?

"With the tracks, the ultra-accurate boom spreader, the soil sampling kit and the TopCon GPS guidance the buggy is pretty much the perfect machine for us and now it can run year-round no matter what the weather is doing."