MOWING DIFFICULT AREAS

When all mowing is difficult, traction is king, writes James de Havilland

No point reminding ourselves that we have enjoyed a wet summer. How much impact upon mowing this will have had at any given course will depend upon many factors, but one thing is clear. If a mower breaks traction on sodden turf, the damage caused goes beyond a loss in productivity.

When specifying any new ride-on mower, be it for the greens, fairways or roughts, one area of the spec sheet it is easy to gloss over is the traction system. Those courses with a few modest undulations will no doubt opt for a machine with just 2WD, the need for an extra driven wheel or wheels seldom needing to be considered.

Add an excess of water to a course with even modest inclines, however, and it can soon show up any problems in a mower’s traction department. In a ‘typical’ season, the odd bit of modest wheel slippage in a wet period will not show up. It is where a mower slips repeatedly over the same areas, typically because these parts of the course have simply not had a chance to dry out, that problems can arise.

A simple way around this is to alter mowing patterns. This can help reduce repeat wheelings.

This past summer has seen even this ruse run into problems. Some parts of a course will have not had any chance to dry at all, with an increased chance of more severe wheel slip regardless of mowing patterns. Close mown semi-roughs over tough terrain are also likely to be an area for concern. Even greens blessed with good drainage have posed their own sets of problems.

GOOD TRACTION HELPS

What can help reduce problems is good traction. Even in dry conditions, a mower that controls wheelslip will have its benefits. So it can be worth going for the ‘all-wheel drive’ version of a mower, even on a course with just the odd modest slope to contend with.

Before moving on, some courses have in the past found the traction of ‘all-wheel drive’ models to be somewhat disappointing. Traction motors on every wheel does not necessarily mean traction is passed equally to each of those wheels.

In the past, a 4WD version of any given mower may well have not necessarily been a ‘true’ 4WD. In really simple terms, the available power would not be diverted to a wheel that has traction. The result could be a 4WD mower actually delivering 3WD traction.

The key issue is to find out how traction is managed. Toro, Ransomes-Jacobsen and John Deere all have systems that ensure power is directed to the wheels that can benefit from it most. How the systems do this will vary depending upon models, but the aim will be the same; make sure the mower can keep going without turf damaging wheelslip.

The problem is that you do not get a mower with the extra traction you may have wanted this season for nothing. Further, this past summer has been a freak year. Why invest in new kit to cope with a problem that may not raise its head within the life cycle of the kit you may be investing in?

There is no easy answer to this, but one point is clear. If you have to mow when the going gets tough, a mower that offers the best traction will not only be better able to cope up slippery slopes but also minimise the damage caused by wheelslip.
The Jacobsen HR5111 batwing rotary mower, pictured at work at the Garnant Park Golf Club in the Brecon Beacons National Park, is typical of the current generation of mowers that are designed to match high performance mowing on the flat with the ability to tackle steep terrain. “Traction is excellent,” said Golf Facilities Manager Kerry Jones. “The mower and it will climb anywhere.”

Toro traction management systems include its parallel hydraulic system. This delivers full-time, bi-directional 4WD, with parallel hydraulic flow between front and rear wheels. The system is designed to deliver more than just a traction boost in difficult conditions. During a turn, the wheels are also claimed to be less liable to scuff. As with all traction systems, it is how they can help protect the turf in difficult conditions that is as important to the ability to scale slippery inclines.
John Deere GRIP all-wheel drive traction is available on the recently released 7400 and 8800 TerrainCut rotary mowers and the 7000 and 8000 Series PrecisionCut range of fairway mowers. The GRIP system reduces wheel slip by diverting oil flow from the front wheel to the opposite rear wheel. By allowing the flow to cross over to the opposite rear wheel, the system maintains traction not only while climbing straight up hills, but also on sidehills as well. The system is permanently engaged when driving forward with the PrecisionCut Fairway Mowers. This means the operator does not have to deselect 4WD, the GRIP system taking care of all aspects of traction.