

# Home from the hills

Some of the hardiest of all grass varieties are finding their way into new turfgrass mixtures that can create the perfect fairway playing surface

**The choice of cultivars for fine turf applications such as golf is usually a done deal, with chewings and slender creeping red fescues dominating the mix. But there's a new kid on the block that's set to transform the turfgrass climate of the game.**

Well, not so much new as home from the hills. Sheep's and hard fescues have roamed free across much of the grass and moorland of Britain for centuries.

Probably introduced into the catalogue of grass cultivars in the 19th century, they found few if any sporting uses, being sown largely for low maintenance landscape features, where their evolution to cope with the poor quality, well-drained soils of heaths and mountain regions found a ready application.

Hardy, dense, drought resistant and disease tolerant, they're one of the reasons that grass has become so dominant a species across the landscape.

Lush green in winter and summer, these varieties are as tough as they come but only relatively recently have thoughts

turned to applying them to sporting applications requiring the highest quality fine turf.

Preferences are moving strongly towards more sustainable green-keeping practices that focus on less feeding and watering.

The quantities of weed grasses such as *Poa annua* present in many fairways for example has until now made these twin cost centres a fundamental requirement.

Such grasses are both hungry and thirsty and soon show sickly signs if greens staff fail to satisfy their needs.

Sheep's and hard fescues can change all that. They are perfectly comfortable in the kind of conditions that a grass such as *Poa annua* struggles in, allowing managers to introduce a new level of sustainable grass management.

"Areas full of weed grasses such as *Poa annua* are no longer financially viable to feed and water to high standards," said Derek Smith, Amenity Sales Manager for DLF Trifolium.

"We're building on these grasses' ability to tolerate dry conditions and tick all the green boxes that

private and public clubs and facilities are clamouring for in their bid to introduce sustainable grass management," adds Smith.

Leading the charge of sheep's and hard fescues are the cultivars Manetto and Quatro, which DLF Trifolium claims, outstrip many of the current chewings and slender creeping red fescues across the spectrum of characteristics.

Independent trials conducted on the new cultivars prove that they are prime performers in shoot density, visual merit and winter and summer greenness.

"Their fine, dense, exceptional dark green colour is maintained in times when many grasses yellow off," added Derek.

"Extremely hardy and drought resistant, they can stand the close cutting that many golf courses conduct."

The Turfgrass Seed 2011 publication – prepared by the British Society of Plant Breeders in association with the Sports Turf Research Institute – is the bible for seed buyers and the only truly independent source for them to compare the qualities of available cultivars.



Quatro (*Festuca ovina*) and Manetto (*Festuca longifolia*) top the league table (L6) for sheep's and hard fescues respectively for summer sports.

The importance and use of hard and sheep's fescues will rise significantly in the coming years and, as Derek believes, not only because of the improvement in turf quality gained in using them but also in terms of financial benefits gained from lower fertilising, weeding and watering requirements.

"In our breeding plots and in the STRI trials, they have demonstrated an unprecedented degree of disease resistance [Quatro showed by far the greatest resistance to red thread of any of the sheep's and

hard fescues in the table].

"Their exceptional shoot and sward density also reduces the likelihood of weed grasses becoming established as clubs don't want the turf to open up.

"We soon realised their importance in sustainable turf management in fine turf applications.

"Golf fairways for example can demand extensive watering and management so we decided to investigate how Quatro and Manetto could help managers introduce less onerous practices."

At its Didbrook R&D centre in Worcestershire, DLF Trifolium embarked on trials to determine what percentage of sheep's and hard fescues in seed mixtures could create the optimum inclusion rate in its Johnson's seed mixtures to deliver the required benefits.

Over the last two years, its breeding scientists have been proportionately increasing the presence of the cultivars within J Fairway and have doubled the inclusion rate of the original mixture - from 20% to 40%.

"We have settled on 40% as the optimum level - 20% each of Quatro

and Manetto in J Fairway as well as J Premier Fairway mixtures," Smith notes.

"This percentage strikes a good balance in terms of price, speed of establishment - which is not quite as quick as strong creepers but we have included chewings and slender creeping red fescues in the mixture, which shows good salt tolerance and comparable density.

The latest STRI trials demonstrate that we have achieved pretty much the right balance."

The sheep's and hard fescues in the mixtures grow slowly, helping greens staff to reduce the frequency of cutting and the quantity of clippings taken, which in turn reduces their carbon footprint.

According to Derek, the chewings and slender fescues included, offer extra fineness and show strong speed of establishment.

"What develops after sowing is a tight, fine, highly coloured sward, creating what many would argue is the perfect fairway.

A big green carpet that makes lighter demands on staff resourcing and less wear and tear on machinery."

**"Golf fairways can demand extensive watering and management so we investigated how Quatro and Manetto could help managers introduce less onerous practices"**

**Derek Smith, DLF Trifolium**