



Sustainable Drainage and Pond Creation: Melrose Golf Club

INTRODUCTION: Situated in the historic town of Melrose in the heart of the Scottish Borders, Melrose Golf Club is a beautiful 9-hole golf course nestled at the foot of the Eildon Hills with scenic views of the surrounding countryside. Established in 1880, the par-70 course has developed into a popular golf course with both members and visitors. The tree-lined fairways, totalling 5,545 yards, offer a challenge for all golfing abilities.

THE ISSUE

The ongoing challenge of increased and more intense periods of rainfall due to Climatic Change is causing many clubs in Scotland to have increasing problems with flooding and excess surface water on their fairways. Traditional piped drainage solutions may not be sufficient due to topography, groundwater levels and soil conditions with water unable to get to the pipes to be dispersed.

Melrose Golf Club, a 9-hole course in the Scottish Borders had for many years experienced increased course closures due to such surface water problems. Situated below the Eildon Hills, after heavy rainfall there would be torrents of water coming onto the course, which traditional drainage was unable to cope with. These problems were seriously disrupting members and visitor access and enjoyment of the course so to improve playability, the club had to think carefully to find the most effective solution.

THE SOLUTION

In conjunction with the Scottish Golf Environment Group, Melrose embarked on a programme of sustainable drainage across the course. This consisted of changes to mowing regimes increasing rough, turf aeration and other cultural agronomic techniques alongside the construction of a network of swales, open drainage ditches, and retention and detention ponds.

The whole Sustainable Drainage System (SuDS) network also gives an element of treatment to the surface water, naturally removing sediments and any trace chemical contaminants prior to discharge.

AT A GLANCE...

>> Melrose Golf club were facing a huge challenge with surface water drainage problems, course playability impacts and course closures.

>>With assistance from the Scottish Golf Environment Group and funding from Scottish Natural Heritage, the club embarked on a large scale sustainable drainage programme which also improved biodiversity on the course.

>>This included changes to mowing regimes increasing rough, turf aeration and other cultural agronomic techniques alongside the construction of a network of swales, open drainage ditches, and retention and detention ponds.



Spoil from excavation of the ditches and the ponds was deposited elsewhere in the course encouraging runoff from, rather than onto, playing areas. Rough and out of play vegetation was increased and plants and trees were purchased to create additional habitats around the new water features.

Costs for the project included hire of machinery, labour, and plants. This was in the region of £6k, 50% of which was funded by Scottish Natural Heritage.

THE OUTCOMES

The prime objective was to improve drainage of the course, but there were many other positive outcomes and opportunities that arose from the project:

- Sustainable Drainage Solution – improved playability reduced course closures and increased member satisfaction.
- Increased golfing challenge in certain holes through the creation of new water hazards.
- Enhanced overall landscape character of the course – adding to the golfing experience. The ponds and wetlands will be an added attraction to visiting golfers in the future.
- Improved wildlife and habitat interest and biodiversity of the course which had a major part to play in attracting funding to the scheme.

FIND OUT MORE

If your club would like to promote its business success story or require support in this area, please contact your Club Development Officer or Environment Manager Carolyn Hedley c.hedley@scottishgolf.org



During construction



Post construction – ponds and swale

This case study was produced with support from

