This article is reproduced by kind permission of Keith Duff, retired Chief Scientist with English Nature and now Environment Consultant (keithduff21@hotmail.co.uk).

My Favourite Roughs

Re-visiting Royal St George's for the Finals of the 25th GCS Open Championships in May 2022 reminded me how important the roughs are in creating the essence and character of a golf course. They set the scene in which the game is played, challenge the golfer to put the ball in the right place, and are a significant part of the intangible feel-good factor that you get from playing on a golf course which lifts the spirits, even if your golf wasn't at its best.

No doubt everyone will have a different perspective on the type of golf course which suits their eye best, but for me the best roughs are always the ones that are most appropriate to the environment in which the course sits. As well as determining the strategy for playing a hole, roughs are often of considerable ecological importance for the plants and animals which they support, hence the reason that over 100 English golf courses are designated as SSSIs, and more than 50 have international designations for their wildlife.

The most bizarre roughs I've ever experienced are in Iceland, where the front 9 at Keilir Golf Club near Reykjavik sit within a lava field! Go off the fairway here and (if you can find it) playing your ball presents a serious challenge to club, ball and other players. But it's a great example of a golf course that sits within its natural environment rather seeking to change it, and certainly concentrates the mind when standing over your tee shot.

The most visually spectacular roughs are often those found in heathland environments, where extensive areas of heather present real challenges to offline shots, whilst also supporting many of England's rarest species. The heathland courses of Dorset, Hampshire, Surrey and Suffolk support strong populations of rare and vulnerable species of reptiles, birds such as Dartford Warbler, and numerous butterflies, moths and other invertebrates.

But my personal favourite is Royal St George's, which I think is the perfect example of a golf course managed in a way that shows sceptical environmentalists that golf and wildlife can co-exist well. I first visited there over 20 years ago, in a previous life as the Chief Scientist of the government's wildlife protection agency English Nature. I'd organised a training course for our officers whose areas included golf course SSSIs, to raise their understanding of how golf courses were managed, and to see at firsthand what was being done to manage the roughs which were the reason for SSSI designation. It was clear that many were sceptical, but when we walked them over Royal St George's, in company with then Secretary Gerald Watts and the Head Greenkeeper at the time, and they heard what was done to manage the roughs, I could see and hear attitudes start to change. When I heard one of them say that the habitat was as good as on some of the National Nature Reserves in their patch, I knew that we had a breakthrough. I recall burning being suggested as a way of thinning out some of the areas of very thick rough which the head greenkeeper identified as being a problem for him; whilst this was a step too far at the time, it's interesting (and encouraging) to note that under the

current Course Manager Paul Larsen this has become part of the club's standard practice for controlling some of the areas of thick coarse grassland on the course.

But what is it that makes Royal St Georges so special? Its thin sandy soils are very freedraining and low in nutrients, meaning that fine grasses such as bents and fescues dominate, creating the conditions which allow wildflowers to flourish. Indeed, it's the most important sand dune and coastal grassland system in southeast England, supporting large and healthy populations of some of the UK's rarest species of plants and insects. The most significant of these is the lizard orchid, with the golf course containing more than 2000 plants, some 90% of the whole UK population of the species. Standing nearly a metre high this is a very striking plant, and its long term stewardship is a source of pride for the golf club. Other plants of note which are common here include man orchid, green-winged orchid, clove-scented broomrape and vipers bugloss, along with ground-nesting birds such as skylark and meadow pipit, whilst the characteristic thatched shelters across the golf course are used by nesting swallows.

What Royal St George's demonstrates so well is that golf and wildlife objectives can be delivered at the same time if the right management techniques are used. It reminds us that the roughs on many of our long-established golf courses are often of very high ecological quality, almost entirely because clubs have wanted to retain the character of the property and the historic challenge which their roughs present. In so many cases, if a golf club had not been established a hundred or more years ago, the habitat still retained in their roughs would long ago have disappeared under housing or coastal development of some sort.

The work done by Paul Larsen and his team at Royal St George's shows very well how presenting a challenging and high quality golf course can at the same time deliver a high quality environment. Keeping the roughs playable by managing them to keep the grasses tall, thin and wispy, through cutting and collecting the grass arisings so that nutrients are depleted, also delivers the environment needed by the rare plants, whilst the occasional burning of areas of thicker coarse grasses does exactly the same. The other point of note is that the club has built a very strong long-term relationship with the government wildlife protection agency Natural England, and have a management agreement which sets out how the roughs will be managed. The consequence of this is that the part of the SSSI which lies within the ownership of the club is now defined as being in Favourable Condition, testimony to the excellence of their management.

The good work being done at Royal St Georges is, however, not unique. The mutual benefit for golf and the environment of managing roughs in sustainable ways is now widely recognised, and is increasingly becoming the norm. I commend all the clubs who've realised this, and encourage the industry to continue on this path.