

GOLF COURSES IN FRONT LINE DEFENCE OF HEATHLAND HERITAGE

Anyone who doubts the importance of golf courses in the fight to preserve our natural heritage should consider the plight of one plant. Carol Dutton reports.

Heather, home of some of our most vulnerable and endangered species, the Smooth Snake, Slow Worm, Sand Lizard, Wood Lark and Night Jar, in the south, and both the Red and Black Grouse in the north, was, 100 years ago, so prolific on these islands, that we hosted two thirds of the total European resource.

Nowadays, according to Bob Taylor, Senior Ecologist to the STRI, the plant's presence has become severely fragmented, especially in the south.

"Although we have considerably more heather in the North of England and upland areas throughout the UK generally, in the south the species is confined to a few fragmented, and often reducing patches in Dorset, Suffolk, Sussex, Surrey and Hampshire. Obviously, our southern heathlands have been under threat during the last century by a variety of factors including, industry, agriculture, housing and quarrying, which have not effected the northern uplands to the same extent."

According to Bob this north/south difference is reflected in the way in which conservation is viewed.

"In the South of England, heathland management is seen as important, whereas in the Northern Uplands, where the biggest threat is from sheep overgrazing, the heather is managed as it has always been, but conservation is not perceived as vital."

Following a recent survey, the STRI estimates that of our 2,800 UK and Irish golf clubs, 440 are heathland courses, and approx 140 of these are situated in the vulnerable south. With an average heather coverage of six point two hectares per course, these southern golf clubs would appear to be responsible for an approximate 868 hectares of heather between them. Although a small percentage of our total national resource, the STRI are keen to point out that considering the rate of the plant's decline, the fact that a golf course is a stable land use, will render the heather on these areas increasingly more important as time goes by.

Interestingly, 80% of the golf clubs included in the survey wanted to extend and increase their heather coverage, although only 55% believed that the plant was declining. Perhaps this is explained by the fact that 63% believed heather to be important to the playing character of the course and 75% believed heather enhanced member's enjoyment of the game.

Bob who has written two important books relating to heather conservation on golf courses, "Studies In Golf Course Management, Number One, Heathland." and "A Practical Guide To Ecological Management On The Golf Course", lists the following reasons for heather decline in order of importance:

1. Trampling, which leads directly to grass encroachment.
2. No management, which leads to tree and other scrub, plus bracken encroachment.
3. The influence of past management. (In the 60s and 70s Parkland golf courses were in vogue, and many Heathland courses were limed, in a bid to get rid of the heather all together!).

Blackmoor Golf Course, the 18- hole Harry Colt designed Open Qualifier, situated on the Surrey/ Hampshire border, is committed to the rejuvenation of its original three to four hectares of heather. Harry Davies, Head Greenkeeper for the last four years cites the following areas of maintenance, which he feels necessary to achieve this goal:

1. The removal of weeds and grass
2. The removal of saplings
3. Bracken control
4. Golf traffic management
5. Tree clearance
6. The collection of leaves
7. Removal of turf from dormant heather seedbeds, coupled with over seeding in known decolonised areas.

"Last year the club committed its self financially, freeing the resources to begin this major project," he said.

"As a starting point we felt that tackling the grass/weed control would be most beneficial. Due to the undulating terrain, the nature of the work, and the specialist equipment needed, we decided to contract the work out. Weed Free, the Berkshire based specialist sprayers were known to be experienced in this field, and we felt we could confidently put this part of the programme into their hands."

Mark Mason, Contracts Manager for Weed Free, spent three days in January and another three days in June conducting semi trials on both the heather and bracken at Blackmoor. An approved pesticide was applied at the recommended rate with knapsack sprayers to the bracken. ATVs were brought into play on areas where the plant had taken advantage of the extra light afforded by the first phase of a substantial tree-felling programme.



"These areas were infested by the plant, and we pushed it back into the tree lines where there is less light," recalled Mark.

"Ideally, the bracken needs to be actively growing, but not too tall. Once it's reached waist height, treatment becomes difficult and a health and safety issue arises. In some places, as the plant was four to six feet high, we used telescopic lances, working from the boundary."

The trials included treatment of all bracken present in the heather, to create space, encouraging dormant seeds of the endangered plant to germinate.

Weed Free returned in January this year and applied one application of an approved pesticide for grass control in heather, at the full recommended rate, spraying the heather from ATVs with specially adapted small booms, to compensate for the terrain. Mark says that the turf tyres, which were fitted for this particular job proved ideal.

"Although wider than standard they give light ground pressure, and the plant just springs back upright with no damage done. The vehicles themselves cope well on undulating surfaces, and in this case they were important for our own safety. Heather is notorious for covering hollows."

Mark found that in many places the company were treating relatively small patches of heather, which were surrounded by grass.

"In this situation, when applying a powerful herbicide, it is important for the operator to choose all routes to ensure that neither he, she or the ATV comes into direct contact with the grass. Once the operation is complete, it is essential that all golf traffic is kept away from treated areas so as to minimise the risks of the chemical being transported onto the fairways."

Having treated bracken during the semi trials of 2001, the company found further tree and shrub clearance, predominantly pine, silver birch and gorse, (undertaken by the club as part of the heathland conservation programme), had encouraged another influx, which needed attention. In all, around three hectares of bracken were treated.

Returning in May, Mark was gratified to find that the company's January heather application had done its job.

"All the weeds, mainly cats ear, sheep sorrell, thistles, and rose bay willow herb had gone, leaving voids for new growth," he remembers. "Grass removal was almost as good, with the exception of the purple moor grass which was still present, but less dense."

By August, the heather was responding to treatment, producing new growth, formerly blocked by weeds and grasses.

"Inspection revealed a denser plant, which confirmed our

theories and answered any questions I might have had about the effectiveness of the process. Everything was as it should be," said Mark, "but much better."

Meanwhile, Harry had been continuing to implement other aspects of his heathland rejuvenation programme.

"Once the scrub clearance and selective tree felling is complete we will begin to reseed and strip back areas of turf adjacent to the heather to encourage further dormant seed germination," he says.

Harry would like to thank Clive Osgood, Course Manager of Walton Heath, (which is involved in a major heather regeneration programme) for his valuable technical input. Harry is due to spend additional time at Walton Heath, gathering further information and exchanging notes.

Bob Taylor warns of the pressures on golf courses of golfers trampling over the plant, which is a slow grower and takes years to establish.

"Footpaths across heather, even in upland areas soon revert to grass," he says. "Purple moor grass is the main culprit, but on golf courses bents and fescues can put up strong competition. Not only can they tolerate trampling, which the heather can't, but they also produce thatch. Once the heather disappears, this leaves the ground open to tree regeneration and the whole area reverts to woodland. Even Ilkley Moor has experienced this threat to some degree, with an influx of Silver Birch, Pine and Oak. It must be remembered that heather has a life cycle of 20 to 30 years, and new growth must be given space to develop."

Following progress at Blackmoor, last reviewed in October by Harry Davies, Mark Mason and Michael Cave, Chairman of Greens, the club would appear to be heeding these warnings, and winning the battle to preserve their heathland against considerable odds.

Michael Cave reports compliments on the heather from the club's membership, stating that in his opinion the heather has been better this year than in the last 20, Harry Davies, aware that this is the beginning of a long process, professes to be delighted with the immediate improvements, and Weed Free have had their efforts rewarded, with a booking for more treatment this winter.

But perhaps the strongest confirmation that this particular fragment of vulnerable southern heathland has a firm future comes from the measured reassurance of the STRI. Neil Squires, Regional Agronomist for the South East who visited Blackmoor on behalf of the R& A. to ensure that the standard of the course reached Open qualifier requirements, (it did,) reports that the club are "approaching the management to heather in a professional manner."

Could it be, that in the south at least, the safest place for our endangered heather is in the rough?