

# MANAGING A SURREY HEATHLAND COURSE



Ian McMillan Course Manager Hankley Common G. C.

IN an earlier article John
Harris described the
management philosophy that
has provided the foundation
for course management at
Hankley Common. I would
like to cover the greenkeeping
practices that have been built
on this basic management
philosophy and used to develop and maintain the unique
Surrey heathland that is
Hankley Common Golf Club.

The club was established in 1895 as nine holes and redesigned in 1921 as 18 holes by the great James Braid at a cost of £1800. It became an Army training area during the 1939-45 war and was restored post-war by club members, the Tyler brothers. In 1976 a large area of the heath was devastated by fire.

The late Bobby Locke used the course to prepare for the championship and he always described it as the course nearest to an inland links. In 1972 the late Charles Lawrie described the course as "One of the best inland layouts in Britain, in the worst possible condition".

**UNIQUE**Hankley Common is a dry

heathland site of 856 acres, which is classified as an area of special scientific interest and with natural characteristics that justify my claim to its uniqueness. It requires no drainage apart from aeration to relieve compaction. There are several bridle paths that go through the site and cross several fairways, adding to the strategic value of the holes. For example, standing on the 17th tee, golfers are faced with

the option of going for the carry across the bridle path or playing short.

The course's sand soil structures are best illustrated by the photographs with this article showing the various stratas of soil and sand. The grasses are fescue/agrostis indigenous grasses as on other heathland sites, but unfortunately, as on other courses they are no longer the only species to be found on the greens due to the induction of annual meadow grasses for a variety of reasons.

**MAJOR ATTRACTION** 

A major attraction is the ling and bell heathers, of which there is an abundance, whilst moss, algae and lichen can be a problem and crop up on compacted and thin areas of the fairways.

The ingenious trees are rowan, scrub oak, silver birch and some pine. A point worth noting is that there is virtually no molinia grass other than in the rough on the 3rd, which is very close to the water table.

Wildlife on the heath includes a combination of pests and endangered species: namelyrabbits, foxes, deer, badgers, sand lizards, snakes (adder, smooth and grass), Natterjack toad, rare birds (Dartford Warbler, hawks, Yellow Hammer etc) and crows and magpies.

Imported characteristics include past ryegrass overseeding imported by 1970's divoting and in the use of alien turf in past construction programmes. Fairway overseeding in the 1970's after the leatherjacket devastation imported annual

meadow and other "farmers" grasses. Compaction, overwatering and misuse of fertilizers has also contributed to the colonisation by the enemy of all professional greenkeepers, poa annua. Its only virtue is its ability to fill in any wound or opening in the turf, giving coverage for a short period of time.

War is being waged with every method known to us.

The sward on the greens is generally agrostis, isolated but multiplying patches of fescue on some greens, with the balance which I would estimate at 25% being poa annua. The fescue is a rare sight on inland greens and only time will tell if this will return in the percentage that we would like. I have reservations about this because I am not convinced that it will flourish cut below 3/16th".

The past use of downland turf has also brought with it the additional problems of worms and non indigenous weeds such as daisies, buttercups, and buckshorn plaintain. The latter may have also been introduced in imported soils and by the use of sludge (sewage) as a fairway fertilizer. Scots



pine has been introduced in quantity by the planting of post war years. These plantations account for the most major change in the character of the heath.

# CONSERVATION

The club has had a policy of conservation for the last four years and as John Harris said in his article, the club has a policy to retain the natural heathland characteristics for future generations. The programmes to achieve this goal include heather replanting/seeding, heather revetting, indigenous grass encouragement, birch and pine culling, culled tree root control, preservation of rowan and scrub oak, re-routing foot and vehicle traffic and educating golfers.

Communication to members plays an important role in these activities because, like all golf clubs, we have members who confuse conservation with preservation. The heathland is by nature an open environment and to conserve this, control of the silver birch weed and the imported Scots pine is very necessary".

Unfortunately until four years ago the trees had been allowed to reproduce themselves profusely. The chainsaw has a most important role to play at Hankley Common in the programme of conservation of the heath. Trees are culled and the roots are then treated with the mixture of diesel oil and Garlon.

The heather at Hankley Common is quite spectacular, if not always appreciated by the wayward golfer. The heather is always allowed to flower and seed before being cut and extensive transplanting of heather has a place in many of our construction programmes. I am investigating means of collecting heather seeds for seeding purposes, and if this proves successful it will provide a less labour intensive means of propagation.

Routine maintenance programmes include mowing, verticutting, top dressing, fertilizing, aeration, spraying, bunkers, irrigation reviewing hole and tee positions and course presentation.

Vigour in growth on our course is very slow and therefore it is necessary to provide stimulation, especially on the fairways, in order to cope with the ever increasing wear and tear by traffic and golfers' divots. All rhizomes and stoloniferous growth are removed with every divot and due to dryness, lack of fibre. removal by birds and sweeping of fairways for presentation purposes, the take rate for divot re-generation is extremely low. Divoting takes place on a regular monthly basis and prior to major competitions.

### **IMPROVEMENTS**

It is hoped that our programmes will create the necessary improvements so that the divoting is reduced and reclamation is achieved by means of rhizomes and stolons.

Growth is encouraged by the use of nitrogenous and organic fertilisers. Sulphate of iron is applied to control moss, algae and lichen and produce colour for presentation purposes. Nitrogen in the form of sulphate of ammonia is applied in an attempt to keep

### Cross section of sand pit.

annual meadow grass at bay. The fairways are cut weekly

with a hydraulic 5. This is a testimony to the gradual improvement that is being made in quite recent years I understand that cutting only took place about four times a year. Fertilization and weed control programmes must be very carefully timed with minimal rates of application at any one time. If you get it wrong on this heath the damaged can be long lasting. As the late Bobby Locke said, the fairways at Hankley are most definitely the closest in character to the seaside links that can be found on any inland course in Britain. Our intention is to improve their condition whilst retaining their character.

# **FERTILIZERS**

Greens are dressed at least once per month, and more often early in the season, and in preparation for important club competitions. Nitrogenous fertilizers are used in several forms, such as sulphate of ammonia, dried blood and hoof & horn. Sulphate of iron is applied in liquid and solid form through autumn, winter and spring to keep disease at bay, harden plants and provide colour. We avoid using sulphate of iron and sulphate of ammonia during the summer because this is known to cause dry patch. We rely totally on the natural colour of the high percentage of bent grasses for the whole of the summer period.

Another indigenous grass that is found on the greens is the light coloured heathrush that gives a speckled appearance. This species is common to dry heathland sites as opposed to most other rushes, which are found on wet sites.

Irrigation is monitored most carefully and is applied in relation to the prevailing climatic conditions and soil moisture content. Artificial holding conditions are not created at Hankley Common. Localised hand-watering is used because even with maximum aeration and the use of wetting agents, surface run-

## The 16th hole

off is inevitable on closely mown surfaces - especially during periods of drought.

The greens are cut on a daily basis during the growing season and weekly during the dormant period, using both pedestrian and triplex mowers as appropriate. Verticutting is less of a requirement here because the greens are naturally less vigorous. It is done only during lush growing periods and to keep thatch at bay. Similar practices are applied to surrounds, approaches and tees. Holes are changed twice weekly and on all competition days. Tees are checked daily and moved if necessary to spread wear.

# CONSISTENT

There is an on-going programme of course presentation to offer members consistent playing conditions with extra time and effort allocated for the club's major golfing days. All staff take an active role in course presentation and have an input at discussions to facilitate further improvements. Overall durability and the consistent all-the-year-round quality of the course is not sacrificed for presentation purposes.

The golfer is always kept in mind when planning work programmes and the practices employed in greenkeeper/golfer relations are:-

- Early starts

- Work programmes 18th to 1st
- No major work on competition days
- Evening programmes at height of season
- Afternoon course closure before major competitions Construction is carried mostly during the period November through to April. During the past four years, construction has been carried in relation to:-
- Tees
- Bunkers
- 2nd green re-build
- Heather turfing
- Roadways and paths
- Fences
- Carparks



The purchase of a back hoe has proved an important investment in relation to these major construction programmes.

To preserve the natural characteristics of the heathland/woodland, management programmes are an essential part of the greenkeeper's year. A major part of each winter's programme is devoted to woodland control by:-

- Thinning of pines
- Culling of birch
- Culling of pines
- Burning gorse
  Heathland management is a
  vital consideration in
  preserving the unique golfing
  environment of Hankley
  Common. It is the stated aim of
  the club to preserve the natural
  heathland for future

The heather is cut February/ March and extensive heather re-planting has formed a part of the winter programme for the last four years. Heather is allowed to seed before cutting and the use of heather in the construction of tees and bunkers is the common practice.

generations of golfers.

The practice ground also provides the heather turf nursery of ling dwarfed by many years of annual cutting and gives a priceless supply of turfs.

Indigenous grasses are allowed to seed and indigenous grass species are used for all re seeding.

## **PESTS**

There are a number of rodents and pests which are common to our heath. We control crows and magpies by shooting and rabbits by shooting and ferreting. Leatherjackets and chafer grubs are controlled by spraying and the control of these grubs in turn controls badger and bird activity.

There are three irrigation systems in active use. There is an old mains water supply which proves its worth in periods of drought to provide hand-watering to all greens. This system proves invaluable in watering dry areas, proud areas and areas not covered by our early Watermation system. This is proving extremely problematical because spare parts are no longer available and each repair requires a complete new unit to be installed. In addition, a very useful piece of plant is a Molex tanker which is used to irrigate tees and some areas of fairways. It also has an important role to play in the event of heath fires.

# **FACILITIES**

Working facilities currently leave much to be desired and they consist of a poorly equipped workshop. A residential caravan exists for staff and office facilities, and we have rotting greensheds that leak and are not large enough to house the club's expanding inventory of plant and equipment.

On the plus side there is a recently constructed substantial concrete mixing yard with adequate storage facility for dressings. The really good news is that the club have just received planning permission for new propose-built facilities which are planned for this year and will include greensheds, chemical and fertilizer stores and full staff facilities. Health and Safety regulations will be

### Hankley Common's greens staff

fully met with this new development.

Greenkeeper training takes place on-site in the practice and use of chainsaws, machinery maintenance, use of machinery and greenkeeping practices.

Hankley Common is forward-thinking with regard to staff training and off-site training is organised. Staff are encouraged to take advantage of training for apprentice qualifications in a block release form. We currently have a school leaver on YTS and his training includes block release. Staff are encouraged to attend educational seminars, and trade presentations on special topics.

Plant and machinery in use includes:-

- -3x tractors
- 1x hydraulic 5-gangmowers
- 4x triplex mowers
- 8x handmowers
- Back hoe
- Molex tanker
- 2x landrovers
- 2x fairway spikers
- Cushman & attachment
- Vertidrain

There is a documented machinery replacement plan which has adequately been covered in the earlier article by John Harris.

Routine plant and machinery maintenance is mostly carried out by our own staff. The routine maintenance programmes include greasing, oil changing, filters, points and plugs etc. General checks to safety features and most



breakdowns and repairs such as bearing changes, tractor clutches, welding and winter overhauls are undertaken. A minimum of repair work and servicing is sent out to contract As far as the Health and

Safety regulations are concerned we have written procedures which all staff must read and sign that they have read and have understood and are aware of their reporting responsibilities and their own conduct relating to these matters. Each greenkeeper is supplied with protective clothing. Staff are made aware of the legislation relating to chemicals. Three of our staff will be required to take the written and practical examinations required by the new legislation. Routine safety checks are carried out to all machinery and staff are instructed to report any defects. They are instructed in the safe use of machinery and the safety practices to be followed when spraying.

Currently, consultancy is taken from the STRI under the subscription which entitles us to publications and remote advice. There has been no visiting agronomist since 1984 but it is planned to extend our STRI subscription this year to include a visit. The area of heathland that is known as Hankley Common is a site of special scientific interest and therefore we enjoy the free advice of the Nature Conservancy Council. The golf club lives quite happily with this important body as it also does with the Forestry Commission who have been most supportive of our woodland management programmes.

To conclude, the practices relating to the management of this unique Surrey heathland course are designed for the conservation of those indigenous features which are most suitable for golf by using sound cultural practices that maintain good health and encourage and improve these indigenous features. We work with nature at all times, and whilst we occasionally assist nature, we are determined to avoid long term failures for the sake of short term gains available through the incorrect use of chemicals and fertilizers.

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