



Collection of stunning photography from Gareth Roberts, showing MAIN ABOVE: 10th hole; LEFT: Colourful view from the 12th to 15th holes; INSET ABOVE: 15th and 16th holes



The 8th green

the cattle definitely proved to be the best method to keep the land free from tree samplings.

“Without the cattle we have to employ contractors, or use our staff to physically remove the samples and it can take a large part of the budget.

“That’s why we are looking at bringing the cattle back again. The members really liked having them about.”

The other projects which have kept Gareth and the team busy in recent years are one of course lengthening and bunker modernisation.

“We had the Open Qualifier for 14 years up until ’99 but when it moved to Hindhead we started to look at the length of our course – 6400 yards – and how it compared to those courses around us – the likes of Sunningdale, Walton Heath and Wentworth, who had all put in new Championship tees.”

It was a slow process as they had to work with English Nature, as the course is a SSSI, SPA, AOC and AOB, but they received a lot of help from Dr Keith Duff.

“We did the eight tees over a two year period taking it up to 6700 then we put in a new tee on the 3rd for the British Boys’ Home Internationals in 2009, which turned a short par-4 into a long dogleg par-4.

“With approval for another new

tee on the 11th just approved it will lengthen the course to around 6800 yards which we consider to be about right.”

While building the new 3rd tee they uncovered two old ponds, which a local historian informed us, had been built in the 17th century by Monks who kept fish for the Duke of Winchester’s banquets when staying at Farnham Castle. In effect it was an early fish farm.

“We would have liked to incorporate the ponds into the hole but Natural England said it wanted the land left the way we had found it so it is a very natural wet area around the tee which is accessed by a bridge.”

With the lengthening all but achieved Gareth and the team are turning their attention to the bunkering some of which have become obsolete due to the advancement in ball and club development and also the player’s fitness.

“We are looking at making the golfer think and not just pull out his driver and smash it. We want him to think about clearing a bunker or laying up with a 3-wood or rescue club.”

Gareth designs all the new bunkers and tees himself, providing the committee with photographic impressions of what the new bunker or tee will look like, and how it will fit into the hole, produced

“We are looking at making the golfer think and not just pull out his driver and smash it. We want him to think about clearing a bunker or laying up with a 3-wood or rescue club”

Gareth Roberts

RIGHT and BELOW: part of the bunker renovation programme





on a computer with a paintshop programme.

Among the other interesting elements of Hankley Common is the hibernaculum, which they have built to provide a winter hibernation for snakes with the club acting as home to the complete set of British snakes; the on-site borrow pit, complete with digger, from which the club can provide all its own construction materials; 10 bee hives and the Atlantic Wall which was a training facility for the British Army in the Second World War so they could prepare to breach enemy barricades.

All of which offers Gareth a wonderful opportunity to indulge his passion for photography, a hobby which led to him winning the 2010 BIGGA Golf Photography Competition, sponsored by Syngenta.

"I've got a Canon 350D with various lenses as well as a little 14 megapixel Fujifilm JX, which I carry around with me so if I see a good opportunity I can grab it," said Gareth, who has also been placed in the competition in previous years.

His camera was also part of his essential luggage when he climbed Kilimanjaro in February with three friends in aid of local charity Help Autistic Children.

"We were all 50 or about to become 50 and decided we needed

a bigger challenge, so over a pint we decided to take on the climb. We covered 100km, walking eight hours a day for eight days, often over very difficult terrain and changes in altitude and reached the summit on morning of February 18.

"In the past year we have raised over £50,000 through two golf days, a dance and the climb, and over the 9 years since we started the charity golf day, played at Hankley we have raised £100,000, and I'd like to thank the many companies within our industry who have donated and helped the cause."

Back at Hankley, sitting in his office, Gareth still glows with pride at the achievement but when he looks out of the door he should be more proud of what he and his team have achieved on a far from common golf course.

BELOW: A new bunker looks the part
ABOVE RIGHT: View from the ridge
RIGHT: The Greenkeeping team



NO.1 IN THE UK FOR HIGH QUALITY STEEL BUILDINGS

DESIGNED AND CONSTRUCTED TO YOUR SPECIFICATIONS

DOMESTIC - COMMERCIAL - AGRICULTURAL

EXAMPLES OF OUR WORK



GOOD REASONS TO CHOOSE A WEST COUNTRY STEEL BUILDING

- West Country Steel Buildings is an authorised distributor of Capital Steel Buildings, the leading producer of cold rolled steel buildings in the UK and Ireland. Working together we give fantastic service and clever design.
- This allows West Country Steel Buildings to provide you, the customer with the very best, cost effective buildings designed specifically to suit your needs.
- Our success is based upon several factors. Firstly we have built up over the last 40 years a fantastic reputation around the UK for our professional and friendly service. Secondly, we have

- experienced staff for both design and construction with a proven record of accomplishment.
- From advice on location, design and planning permission through to informing you of delivery dates and when the assembly team will be at your site to erect the building. At West Country Steel Buildings we value you, the customer and enjoy giving a fantastic service from the very start of your project to handing over the keys once everything has been completed.

WEST COUNTRY STEEL BUILDINGS

For further information: Office: 01633 782684 Chris: 07980 818364 Rob: 07970 827085



15, High Cross Road, Rogerstone, Newport, NP10 9AE
 email: sales@westcountrybuildings.com
 website: www.westcountrybuildings.com



Gather no moss

Mosses are primitive chlorophyll-containing green plants one rung up the evolutionary ladder from the algae and one down from ferns and bracken (Pteridophytes). Some 12,000 species of moss along with their close relatives called liverworts belong to the plant group Bryophyta, writes Dr Terry Mabbett

Primitive they may be, and much more so than grasses, but this does not stop a range of moss type and species from invading turf, both professional and amenity in status. 'A rolling stone gathers no moss' goes the age old saying, but poorly managed turf will gather moss, and rapidly too, causing costly repair work if left unchecked.

Mosses are generally less than 5cm tall and commonly grow in dense clumps or mats comprising many tiny and soft, non-flowering plants with rudimentary green leaves on thin wiry stems. Mosses have neither a vascular system nor a proper root system. Individual moss plants are anchored to the substrate (soil, bark, timber, brick, concrete and tarmac) by 'non-absorbing' roots called rhizoids.

Moss mats and cushions generally thrive in moist shady situations and locations, relying on sufficient moisture in the immediate sur-

roundings to be transferred directly, together with nutrients, into the leaves. Not being flowering plants they lack formalised flowers, fruits and seeds but at certain times of the year produce beak-like capsules containing spores and borne aloft on thin stalks.

When growing in turf, moss is simply a green plant in the wrong place at the wrong time and is therefore classed as a weed, albeit a very primitive one but also a highly successful one. Moss is more apparent and a bigger problem in close-cut professional turf simply because the tiny plants are more obvious and not shaded out as they are in less frequently and higher cut amenity grass swards.

Underlying cause of moss invasion

Since moss lacks a proper water-absorbing root system, and is therefore totally reliant on direct transfer of water (and nutrients) from the

Late winter coming into early spring is the time to assess moss levels in turf.

immediate surroundings and into the leaves, sufficient and persistent surface moisture is essential for its successful establishment and spread. All things being equal moisture is most likely to occur and persist in autumn when turf grass starts to lose its competitive edge with moss, because growth is slowing down in response to falling temperature and reduced light regimes. Early spring is the time to assess the amount and extent of moss in turf and also the best time to tackle it. Late March and into April is the time to start dealing with moss.

Be that as it may, moss will grow during most of the year especially in grass swards where shading, poor drainage, soil compaction and poor mowing practice allow for faster growth compared with the turf grass. Indeed moss invasion of turf is a symptom of poor grass growth and a 'sure-fire' indicator of more basic and deep-seated turf problems. Growth of moss



Moss growing on a wall showing dehiscent (spent) capsules



Cushion moss under pine trees with evidence of foraging by birds for invertebrate animals



Moss bearing beak-like spore bearing capsules on thin filaments



Cushion forming moss is prevalent under trees especially along side exposed tree roots



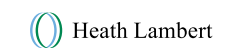
Liverworts are also found on damp poorly drained turf

in turf is invariably accompanied by broad leaved weeds including self-heal, parsley piert, mouse-ear chickweed, slender speedwell and creeping cinquefoil which thrive in the same moist surface conditions, but even these will be choked off once the moss mat spreads and a dense cushion of moss foliage is formed.

Moss is essentially a soil surface weed competing for space and light with grass plants but the root causes of moss are above and below ground in factors like persistent shade and poor soil drainage. Solving a moss problem is not just a case of reaching for a bottle of dedicated moss killer but all-round, year-round good proactive management practice. Greenkeepers and groundsman faced with extensive and lasting moss need to look long and hard at turf management in its broadest context to reduce shading by pruning trees, water-logging through improved drainage and the relief of soil compaction.

Moss more complex than first seems

Moss problems are invariably more complex than at first they



This article comes to you courtesy of the BIGGA Learning and Development Fund.
Thankyou to all our key sponsors

seem. There are three distinct types of moss which invade turf – cushion moss, trailing moss and upright moss – each an indicator weed of specific problems in the turf environment.

- Cushion forming mosses are tiny ground-hugging clusters of moss indicative of closely mown and scalped swards, especially where deep thatch is impeding air circulation and aggravating surface moisture retention.
- Trailing mosses with their fern-like, feathered leaves are symptomatic of inherently poor drainage and heavy persistent shade
- Upright mosses comprising larger, taller and more tufted plants are found on drier more acidic (lower pH) soils

Moss growth becomes most apparent in early spring but greenkeepers should be mindful of moss throughout the year and take appropriate measures that deter invasion and suppress existing growth. Heavy persistent shade cast by trees clearly serves to encourage and maintain turf surface moisture levels and therefore moss, and especially the year-round reduction in light level caused by conifers and

other evergreens like holly. Think twice before planting evergreen trees near greens and tees and have the pruning saw ready to cut low hanging branches and even fell trees if necessary.

Regular ‘cleaning out’ of turf by scarification and aeration by spiking all help to avoid the compaction and persistent dampness that encourages moss. But regular water logging of turf causing perpetual moss growth will require a deeper solution to an obvious soil drainage problem.

A balanced fertiliser programme is important to give turf grasses a constant edge in growth and surface spread at the expense of moss. Timely spring and early summer liquid feeds give grass the advantage it needs, while slower but more solid benefits of autumn top dressing should build up soil fertility and stack the odds against moss, especially where soils are sandy and/or shallow.

Moss thrives on low soil pH and its persistent growth, especially on sandy and free draining soils, may indicate that over-acidity is root cause of the problem.

Confirm this using a soil pH test which if less than 5.5 means some



Dense carpet of moss on a golf tee in late winter



Outside of turf and on hard surfaces moss is an important component of many habitats like rotting tree stumps

remedial measure is required. An application of ground limestone can be used but consult on and monitor rates carefully. Rising pH and soil alkalinity from liming can soon cause general deterioration by encouraging weeds, worms and disease, while suppressing the health and growth of fine turf grasses.

'Shaving' the turf at less than the recommended cutting height weakens the grass and creates a window of opportunity for moss, particularly on damp surfaces where mower 'scalping' occurs. Consistency in mowing is important.

Cut at regular intervals using cut heights appropriate to turf type, season and the changing nature and condition of the turf. Autumn moss growth on damp and dew covered grass may have its 'roots' back in summer when drought caused bare patches and paved the way for later invasion by moss.

Moss management and control

Comprehensive and consistent turf management practice should largely banish moss from the turf grass sward, but extensive and actively spreading areas of moss

may require targeted control. Given current emphasis on the fast formulation delivery of dedicated moss control products it is easy to forget long-established and long term benefits of lawn sand. Lawn sand mixtures contain the 'old favourite' ferrous sulphate (iron sulphate or sulphate of iron) to give grass a tonic boost while disposing of moss.

The fine particle formulation is spread over the turf preferably from April to the end of June when the ground is moist.

The fine particles of the powder-like formulation cling to the coarser moss leaves (and broad-leaf weeds) but not to the smoother and finer leaves of grass. This allows the ferrous sulphate component to scorch the moss, which turns black and dies. And without a proper root system there is no prospect of re-growth. The powder should be washed off the foliage naturally by rainfall, or by watering if rain does not fall within two days of application.

Lawn sand also contains ammonium sulphate, which together with the tonic effect of iron, boosts grass growth and assists in fast coverage of the gaps left by dead patches

Outside of turf and on hard surfaces moss is an important component of many habitats like rotting tree stumps



Moss provides important protection for moisture loving woodland plants like sweet violet shown here



Moss will readily grow on a wide range of vertical as well as horizontal surfaces



Moss and surface casting earthworms are active in the same moist turf conditions



Moss invariably occurs together with a variety of broad leaf weeds like parsley piert, slender speedwell and dandelion, among others, shown here

of moss. Typical lawn sand may contain three parts of ammonium sulphate and one part of ferrous sulphate in 20 parts of very fine sand or compost.

Many proprietary moss killers are based on almost 'pure' ferrous sulphate for mixing with water and application by vehicle mounted power sprayer or a lever operated knapsack sprayer depending on the size of area treated. Granular products are generally easier and more accurately applied and therefore safer to use. The moss will blacken and die relatively quickly while the iron simultaneously gives the turf grass a 'short-in-the-arm' from its natural function as a plant nutrient.

Iron sulphate is widely offered as a fertiliser and soil amendment (acidifying) agent but unless it is contained within a proprietary lawn moss killer it will not be approved for use as a pesticide and therefore cannot be legally used to control moss. Whether using ferrous sulphate in lawn sand or in a proprietary moss killer it is essential to read the product label with regard to rate, dosage and all other application conditions. When used

in excess or under inappropriate conditions, especially in lawn sand, ferrous sulphate can blacken and seriously damage turf grass.

Ferrous sulphate in lawn sand or as a proprietary moss killer will usually control closely related liverworts as well as algae and lichens at rates recommended for moss control. Algae and lichens can be problematic on neglected and/or persistently wet turf. Algae are simple green plants even further down the evolutionary 'pecking order' than mosses, and they appear on turf as green or black slime. Lichens, which appear in the form of leaf-like growths, are brownish or blackish when 'fresh' turning grey with curled up edges when dry. Lichens are not individual plants but a symbiotic (mutually beneficial) relationship between an alga and a fungus. The alga manufactures the food and the fungus absorbs water and nutrients.

Dead moss should be removed by scarification or raking but the now cleaned up turf will have gaps where the dead moss was taken from. Bare soil in turf is vulnerable to further invasion but this time by opportunistic fast spreading broad-

Moss invariably occurs together with a variety of broad leaf weeds like parsley piert, slender speedwell and dandelion

leaved weeds like dandelions and self-heal taking full advantage of the fertile conditions created to discourage moss. Rapid turf repair by seeding to re-populate with existing or new grasses is a priority.

Mosses growing in turf and on some hard surfaces are strictly weeds but otherwise they are important components of different ecosystems and habitats including heathland, damp woodlands and tree stumps. They are a rich source of insects and other invertebrate animals. This becomes abundantly clear when cushions of moss in turf under trees, and especially around exposed tree roots, are pecked to bits by blackbirds, starlings and other birds feeding on invertebrate animals.

MASCOT[®]

GRASS SEED

The best start for a perfect finish



RT
rigby taylor
Freefone: 0800 424919
www.rigbytaylor.com

Rigby Taylor is a seed agent and a major supplier of high quality grass seed mixtures for all amenity situations



Candid in camera

Candid *adj.* frank, not hiding one's thoughts

In camera *adj. or adv.* phrase. In private.

There are many things you'd like to say, but can't because of the potential consequences. Greenkeeper International is offering you the chance to be a little more free with what you say, safe in the knowledge that your identity will be protected...

I went to a Section Meeting the other day. The golf course, for an inland course so early in the year, was in fantastic condition and chatting to a group of the guys in the bar afterwards, even the greenkeeper (modestly) said he'd never seen it so good at this time of year. I thought he'd then go on to be really positive about the season ahead and his work for the year.

But no – the poor guy was really down. The club had just appointed a new Managing Director, and nothing was right. The bunkers were poor, the greens were too slow, the fairways needed shaping properly, the trees were overgrown and needed pruning. He couldn't do anything right.

The new man had even started discussing his ideas for possible green staff cuts and changes to their working practices with one of the clubhouse staff in the bar, who naturally headed straight down to the green shed to share the information. Before long, the poor greenkeeper had a near riot on his hands which, by his own admission, took a lot of calming down.

I then expected the conversation to move on to beer, women and football, but no, this turned

out to be not an isolated incident and we were soon talking about Green Committees in general, and group rapidly swapped horror stories.

One guy had 19 people on his Committee – “So many people turn up I don't even think the Chairman knows who's supposed to be attending”; “We never seem to get much done, and last year I was told to dig up a tree and move it at one meeting, only to be told

keepers in our group were well unimpressed.

Another greenkeeper recalled the tale of a club where a neighbour had put up a wind turbine in his adjoining property. The turbine was big news locally – gone through planning as part of the Council's “Green Drive”, and was hailed far and wide as a break-through in green energy technology. The club, however, immediately instructed their

It is time Golf Clubs awoke to the modern time before it's too late and become far more business orientated. Appoint professional people throughout to run their businesses, and respect those people for what they do

to put it back again a couple months later at the next one, by two members who'd missed the original meeting.”

It turned out one of them and his wife had dug this particular bush as a sapling off another course where they'd won a big Mixed Open, brought it back and planted it.

Luckily this guy was fairly philosophical and his staff had had a good laugh about it, but I sensed that the other green-

keeper to get out there and plant a row of poplars in front of it “as big as you can get”.

This brought resigned sighs from our group, (Poplars, windbreaks, less-than-efficient turbines, enraged out-of-pocket neighbours, local papers, NIMBY's etc). There was a complete lack of appreciation of how important local opinion is becoming for the survival