Maintenance

When it comes to maintenance, tyres are one of those items that tend to be overlooked until they go flat. Incorrect operating pressures can seriously affect a machine's performance as well as being a possible safety hazard.

Over inflation could cause:
- loss of traction
- excessive soil compaction
- rapid wear both on grass and hard surfaces
- higher fuel consumption
- lower performances
- an uncomfortable ride

Under inflation can lead to:
- side wall damage
- poor ride
- beading coming unseated
- increased wear

Like the other components of a machine, tyres need to be regularly checked.

- Inflation pressures should be checked at least every fortnight.
- The pressure must be correct for the load and the operations that are being carried out.
- Valve caps should always be in place
- Inspect the tread and side walls for signs of damage, wear or bulges
- Remove foreign bodies from the tread such as stones and repair any deep cuts.
- Were equipment is not used regularly the tyres need to be rested. To do this the whole unit can be raised up on jacks or blocks.
- Store any tyres or wheels with them fitted, in a dark place away from oil, petrol or chemicals. They should also be kept away from electric motors, which give off ozone that over a time will break down the rubber.

For the best performance and smoothest ride check your tyres regularly.
This month, Greenkeeper International’s bi-monthly series featuring Course Managers and Head Greenkeepers from every Region, looks at alternative spikes.

## Alternative Spikes

Compiled by Malcolm Huntington MBE

**Name:** Elliott Small  
**Course:** Tulliallan GC  
**Region:** Scotland  
**Course Type:** Parkland and some heathland  
**Staff:** Head Greenkeeper, plus five

**Name:** John Huntington  
**Course:** Ilkley GC  
**Region:** Northern  
**Course Type:** Parkland  
**Staff:** Head Greenkeeper, plus five

**Name:** Richard Barker  
**Course:** Kirby Muxloe GC  
**Region:** Midland  
**Course Type:** Parkland  
**Number of Holes:**  
**Staff:** Head Greenkeeper, plus five and a part-time gardener

**Name:** Richard Whyman  
**Course:** Bude and North Cornwall GC  
**Region:** South West and South Wales  
**Course Type:** Links  
**Staff:** Head Greenkeeper, plus two, plus part-time assistant

**Name:** Ian Semple  
**Course:** Old Fold Manor GC  
**Region:** South East  
**Course Type:** Heathland  
**Staff:** Course Manager, plus four

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1. What was your initial reaction when you heard about a new alternative to metal spikes?

That it would be interesting to see the experiment but that I couldn’t see soft spikes taking over from metal spikes.

Soft spikes could be better for greens as there is less spiking up and so obviously this will be a help to greenkeepers.

It was no great surprise. I have worn soft spikes for about 18 months and find them comfortable to walk on, particularly on concrete paths and round clubhouse areas.

Sceptical. I felt it could be a gimmick.

Because of the problems with wear and tear, I welcomed the introduction of soft spikes and I have certainly seen an improvement on the course.
2. To what extent have your views changed since then?

Probably 100%. I have four pairs of shoes three with soft spikes which I now use all the time. I find them comfortable and they don't mark the greens.

3. What is your feeling on alternative spikes and their agronomic benefits or otherwise?

The main advantage is that greens now don't get spiked up as much as they did with only metal spikes. I find the traction every bit as good as with metal. I haven't slipped at any time. We have no problems with the putting surfaces and I am happy with the soft spikes.

4. Having worn the recently introduced Black Widow spikes, how do you rate a) their traction and b) their effect on the putting surface?

Black Widow spikes give you a very good grip, but again I have only used them in good firm conditions. I have not seen any marking on our greens at Ilkley from the use of soft spikes, but the greens have been firm during the trial period.

5. Does your club have, or is it thinking of introducing, an alternative spike (soft spike) policy?

No, and I not aware of any policy to bring one in. I can see the benefits for some clubs with high quality greens but I haven't seen enough benefit for me to recommend them to our greens committee. As I said, I am happy with either type of spike.

Since using them I have found them very comfortable. Our fairways have been very firm and with soft spikes you get a bit more spring and comfort. They also have a good grip.

The jury is still out on this issue. They don't spike up the greens as much as metal, so to that extent it has an agronomic benefit.

Excellent traction, but I have mixed views on their effect on the putting surface.

Not at present. The subject has not been discussed by our green committee.

Our members have been asked to change and many have done so, but we don't insist. If someone slipped wearing soft spikes they may take legal action. We are a members club but the public can play there two days a week and some of them may not like having to pay £6 or £7 to change from metal to soft.
Elmwood College's 18 Hole golf course has recently achieved a unique environmental double. Earlier this year the course became the first UK golf course to receive the ISO 14001-environment award and at the same time was awarded the Scottish Golf Course Wildlife Charter. Master Greenkeeper John Quinn, who is Director of Elmwood Golf Developments, explains what makes the Elmwood course special.

It would have been easy for me to go through the long list of management objectives and environmental projects that go to make an ISO14001 award, but it would not make very enjoyable reading. In any case to do that would be to miss the point of the award entirely. ISO 14001 is awarded in recognition of a well-planned, facility wide, integrated approach to environmental management. The management system is far more valuable to the environment, the customers and employees of the facility than the sum of its constituent parts would be. The most important thing to bear in mind at all times is that we did not set out to achieve an award, we set out to bring environmental awareness into everything we do at Elmwood College and Elmwood Golf Developments.

The Golf Course
Elmwood golf course was constructed in 1995/96 and opened for play in August 1997. It is an 18-hole course built on ex-arable and pastureland and includes full USGA Specification greens. The course was built primarily as a training resource for Elmwood's 450 or so greenkeeping and golf course management students who attend the college annually. However, the learning experience is made even more realistic for the students by the fact that the course is a fully operational commercial golf course with 700 paying season ticket holders. The course will typically see around 30,000 rounds annually, and is open on full greens and tees for the whole 12 months of the year.

The course is maintained by a full time greenkeeping team of six and has a state of the art machinery fleet and PC controlled irrigation system both supplied by Toro. Some of the environmentally sensitive management practices, which have helped the course towards ISO 14001, are as follows:

IPM
Integrated Pest Management, although the buzz term of today, describes a method of turf management that many UK greenkeepers have always used, they just haven't written it down in a formal management programme. At Elmwood we take a very long-term view of turf management and how it affects the overall environment of the course and its surroundings. IPM means managing your turf for the long haul and not just looking for results for the next big event or members medal competition. This means assessing the turf condition and then doing what is required to make it, or keep it, healthy. We are not anti-pesticides, but there are no pesticides on the market that do turf or soil any good. All pesticides cure the symptoms, not the root problem. Plants and beneficial soil fungi interact in symbiotic relationships, which help the plant to obtain the nutrition it needs. Broad-spectrum preventative fungicides are not selective in which fungi they kill, they are by definition effective on all fungi. The same can be said for most pesticides.

Even at Elmwood, however, there is a place for pesticides. We do use some herbicides, mainly tols on paths or new construction areas and occasionally selectives applied by spot treatment to problem weed areas on fine turf. We have never applied an insecticide, but we did have to spot treat greens with a curative fungicide in February 1996.

This low pesticide input has not occurred by accident; everything we do is geared to maintaining a healthy soil/plant relationship. Cultural practices are to the fore. On our USGA greens we topdress as lightly as we can set the machine, every 14 days during the main growing season. These applications are so light that they disappear with one pass of the brush and the effect on play is hardly noticed. Thatch build up is controlled by this continuous dilution with rootzone material. During the summer we spoon feed
greens and tees with liquid fertilisers (16.0.9 NPK fertiliser with trace elements and with a seaweed supplement added) every 10 days. In autumn and winter a granular fertiliser (3.0.22 NPK) is applied once a month. Total nitrogen input on greens is 220 kg/Ha per annum. Soil phosphate is adequate, so there is no need to add more. Potassium inputs reflect the sandy nature and low CEC of the rootzone. On USGA spec rootzones the CEC is generally low and spoon-feeding programmes work to supply the plant with the nutrients it needs when it needs them.

In dry weather, irrigation follows the maxim of 'Deeply not Daily' and the roots go all the way down to the bottom of the rootzone. Hand watering of hotspots conserves water and prevents the greens from losing their firm and smooth surface.

Greens are mowed at 5mm in summer and 7mm in winter. This generally amounts to five cuts with pedestrian mowers per week. This helps to minimise perimeter wear and tear. If dry patches appear we hydroject and apply a wetting agent with the hand watering applications. Hydrojecting also goes on throughout the season on walk off areas and any other compaction black spots.

Conservation
Conservation was prominent also right from the start of the project, with an Integrated Golf and Conservation Management plan being drawn up before a sod was turned. This was a prescriptive plan following the Scottish Natural Heritage format. Some of the projects arising form the plan have included planting eight hectares of rough, indigenous grasses such as sheep's fescue, hard fescue and highland bentgrass. These areas have been managed by mowing and removing clippings twice or three times per year in an effort to reduce the fertility of the rich agricultural land they are planted on. This programme is now beginning to show results and the roughs will now be left to regenerate naturally with only one cut per year.

On the more impoverished areas we will begin planting wild flower plugs this autumn with plantings of gorse and broom also contributing to the overall conservation value of the site.

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Over 25,000 trees and hedgerow plants have been planted as part of the project and these have been drawn from a short list of native species also. These are primarily as follows: Scots pine, birch, ash, rowan, hawthorn and dog rose. Most of the trees were planted as saplings and are supported through the Forestry Authority Woodland Grant Scheme, while Scottish Enterprise, through the Contract Grow Scheme, has supplied all the trees on the course.

Dry-stone walls have been left in place wherever possible to reflect the

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course’s previous use as farmland. We leave the course boundaries and out of play roughs to regenerate naturally with no management input and this has paid dividends in the number of species present on the course. Elmwood came second in Scotland in the Bird Watching Ryder Cup in 1998 with 56 species spotted, not bad for a newly-opened course built on previously barren arable land. Among those species were four ‘top of the food chain’ raptors; buzzard, sparrowhawk, kestrel and barn owl which are a good sign that the entire eco-system is in a healthy, thriving state.

This autumn will see the completion of our first five-year plan and the start of the next one, which will have many more measurable conservation and environmental objectives.

Of course we did not achieve the ISO award through the work on the golf course alone. The ISO 14001 recognition is a facility wide award and includes the clubhouse, maintenance facility, offices and everything else that makes the business tick. Some of the initiatives here include recycling; used oils (engine and cooking), filters, grass clippings, pesticide containers, paper, glass and aluminium cans. Energy conservation is very important also, consider energy saving lights, regular machinery servicing and buildings insulation.
and glazing. Staff members are encouraged to switch off lights and appliances when not required. Don’t leave your PC switched on all day (take care with irrigation computers!) and switch off lights when leaving a building or area.

So what is the next stage? Well, although we didn’t set out to win awards, they are a useful focus to help achieve targets and goals in this type of work. The next obvious step is to try to achieve the pan-European Committed to Green Award and we are working diligently on this project at the moment. I would encourage all Course Managers, Head Greenkeepers and club officials to do likewise. Golf courses are the green lungs of many otherwise concrete cities, they can be important wildlife sanctuaries and they are an insurance policy against the land they occupy being developed for industry or housing. A minority of golf courses have given the entire golf course industry in Britain a poor environmental image, which it does not deserve, so let’s show the sceptics that we are all committed to green.

The Elmwood environmental initiative is a team effort and thanks are due to Stuart Macdonald, Team Leader for Conservation Elmwood College, John Salter Environment Officer Elmwood College, Jonathan Smith Scottish Golf Course Wildlife Adviser and the entire Elmwood Golf Developments team.
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The preliminaries have now been completed and the scene set to identify BIGGA's Champion Golfer for 1999 in the new Charterhouse/Scotts National Championship.

A Championship of distinction

Charterhouse/Scotts National Championship 3-5 October 1999

The Section events have now been completed and the successful qualifiers for the first Charterhouse/Scotts National Championship for the BIGGA Challenge Trophy are honing their games in preparation for a wonderful occasion at the magnificent Carden Park, near Chester.

Yes, if the quality of the golf can match the quality of the surroundings - with a round each over the Cheshire and fabulous new Jack Nicklaus-designed course - we shall be in for a thrilling few days.

BIGGA Challenge Trophy, formerly the News of the World Trophy, will be presented to the winner of the Nett competition over the 36 holes with the Gross winner receiving the BIGGA Challenge Cup. Teams comprising members of the relevant Sections will play for the Regional Team Cup.

The Championship is being supported by the Softspike company and as Carden Park is a “Softspike” course, Softspikes will be supplied to all competitors who require a set.
Qualifiers from the BIGGA regions

William McMeikan Ayrshire
Keith McCartney Ayrshire
Shaun McMillan Central Scotland
Kenneth Stirling Central Scotland
Craig Pennycuick East Scotland
Kenneth Mail East Scotland
Scott Williams North Scotland
Mike Wilson North Scotland
John Brown West Scotland
Doug McIntosh West Scotland
Dave Cuthbertson North East
Kenneth Rutherford North East
Richard Castle North West
Michael Nolan North West
Dave Collins Northern
Roger Biebby Northern
Andrew Wood Cleveland
Anthony Burge Cleveland
Andrew Lomas Sheffield
Anthony Lomas Sheffield
Paul Neve North Wales
John Humphreys North Wales
Robert Lewis East Midland
Dave Leatherland East Midland
Stephen Tolley Midland
Graham Wallace Midland
Paul Loffman East of England
Graeme Macdonald East of England
Robert White Berks, Bucks & Oxon
Ross Wilson Berks, Bucks & Oxon
Tony French Berks, Bucks & Oxon
Mark Whittle Mid Anglia
Simon Clark Mid Anglia
Brian Turner Surrey
Gareth Rogers Surrey
Neil Gilham Kent
Duncan Kelso Kent
Tony Bremer Sussex
George Barr Sussex
Ian Semple London
Larry Eden London
Terry Moreton East Anglia
Nicholas Brewster East Anglia
Steve Cox Essex
Chris Ward Essex
Anthony Knight South West
John Hamlet South West
Simon Ridland South Coast
Mark Grogan South Coast
Alan Gawman Devon & Cornwall
Anthony James Devon & Cornwall
Gary Johnstone South Wales
Steven Lloyd South Wales
Alison Sloan North East Northern Ireland
Nick Webber North East Northern Ireland
Joel Crawford South East Northern Ireland
Eamonn Crawford South East Northern Ireland

Itinerary

Sunday 3 October
Practice day. Register at desk in hotel.
12.30 - 18.00 tee times available
(to be booked direct with Carden Park)
19.30 Dinner

Monday 4 October
7.00 - 9.00 Breakfast
8.00 - 15.30 Golf on Cheshire Course
11.30 - 15.00 Lunch
19.30 for 20.00 Gala Dinner
After Dinner Speaker, John Simonett

Tuesday 5 October
7.00 - 9.00 Breakfast
8.00 - 15.30 Golf on Nicklaus Course
11.30 - 15.00 Lunch
Prize Presentation