

MAINTENANCE OF GRASS PITCHES FOR RUGBY





Performance quality standards

Knowledge of your local ground conditions and existing pitch drainage is essential, together with the current and future demand and usage. This will include matches, training and mini rugby. Is there an irrigation scheme? Is it pumped? Once a realistic level of quality and standard has been chosen for a particular pitch, then the club and ground staff should endeavour to achieve the desired results through the effective management of the pitch. It is recognised that standards and desired parameters will probably not be achieved all of the time, especially as the season progresses. However, the intent should be to aspire to these standards throughout the whole year.

The Institute of Groundmanship's 'IOG Perfomance Quality Standards - Rugby' document lays out in detail a range of methods that can be used in testing the performance of a rugby pitch.

Equipment and machinery

Maintenance equipment and machinery can be purchased or, where appropriate, hired. Investing in good quality, up-to-date equipment will greatly increase efficiency and make maintenance work less time consuming. Clubs should set aside a budget for new equipment, annual servicing and replacement of worn out implements. Machinery can be hired out and clubs may also contract the work out, saving on initial capital costs and the problems associated with maintaining the equipment. To undertake successful maintenance a club should have the following equipment:

- Mower various models fulfil different requirements. Cylinder mowers produce a better quality finish
- Chain harrow/roller to break up clumps and re-level the surface. Heavy rolling is no longer considered suitable due to adverse effects on the root zone
- Tractor
- Hand tools spade, fork, half moon brush, drag brush, edging shears, wheelbarrow and measuring equipment
- Stockpile of sand, medium fine, good draining sand to be used on wet areas to help save fixtures.
 Suitable sands (medium sands) range from particle size of 0.125mm to 1.0mm (whose principle particle range is between 0.25mm and 0.75mm) for amelioration and top dressing of winter pitch surfaces

Expensive equipment may be hired as and when required.

- Aerator tractor mounted or pedestrian
- **Sprayer** for application of liquid fertiliser and pesticides. Health and safety reasons may make it preferable to buy in this work through a contractor, as spraying requires a licence

Typical maintenance schedule:

September

The start of the season. Keep on top of the mowing (aiming to maintain the grass height at between 50mm and a maximum of 75mm during the season) as there will still hopefully be a good amount of growth. If at all possible, chain harrow the pitch after each weekend. This will stand the grass up, replace a few of the divots from the games and is a great way to put a good pattern on the pitch.

October

The mowing will still need to be done. Make sure that the grass is being cut properly by ensuring that the blades are correctly set to cut and that it is not too wet on the leaf to mow. It is always good to chain harrow when there is morning dew on the grass. This knocks off the wet and leaves you with brilliant pattern.

Look to apply your autumn and winter feed towards the end of the month, something like 4-12-12 (nitrogenphosphate-potash), low in nitrogen, high in phosphate and high in potash to strengthen cell walls and roots of the grass. Use the weather forecast as a guide. Do not fertilise if frost is forecast. Have a couple of hand forks available to hand fork away any surface water on match days. The referee will be grateful for his-her touch-judges runs being hand forked on the morning of a wet match day.

November

The weather may now be breaking to give a lot more rain. Now is the time to give the pitches a good spiking albeit with a slitter or aerator. Do it on a dry day if possible and leave the pattern in for the weekend's games. The last cut of the year may well be this month. If the weather was to stay mild, you may get a little growth, but one or two frosts at night tend to stop most growth.

December

Typically one of the hardest months for a Groundsman. Try to keep machinery off the pitches as much as possible. If you can, chain harrow the pitches in two directions - the earlier in the week the better. That way, you have replaced divots, put a pattern on and now have no need to go onto the pitch apart from marking it out.

If there is a cold snap, try to roll the pitch with the mower. It will help to save matches if the surface is flat. A well-grassed pitch will cope better than a bare one. Make a decision in the club as to your policy: do you want to be playing on frost-bound pitches? If you need to play a game and the forecast is for frost, use a mower roller after you have chain harrowed the pitch. Use the stockpile of sand to topdress any areas that may be rutted after scrums, rucks or mauls. Two men and a wheelbarrow can move and spread a fair amount of sand. If you work as a team, you can be chain harrowing and spreading sand at the same time.

If however you decide that it is too hard to play on, keep off the pitch and let the referee see that it is rutted and unplayable.

January

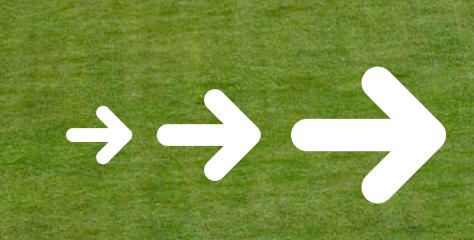
Very often the coldest month. Go onto the grass only when necessary. Keep players off in either very wet or very cold conditions. Use the harrow and mower roller only when you have to. Hand fork any standing water away before it freezes. If the weather allows, get another spiking done.

February

Wet and cold again. Do try to keep fixtures played by chain harrowing and rolling with the mower. Make sure that you do spike with the slitter or aerator again this month. Having rolled the pitch with the mower for only a few weeks now, the surface will have become compacted so it needs the aerator. This is imperative at this time of the year.

As the end of the month nears, the weather may warm up a little. If funds allow, look to order another feed. (4-12-12)





March

Put on a feed if the weather allows. 7-0-21 is recommended, medium nitrogen, no phosphate, and high potash to strengthen roots and encourage top growth whilst maintaining feed to the roots. The grass will begin to grow, so it may be time to give it a cut later on in the month.

Start to plan and organise what remedial works you think you are going to be doing at the end of April. Feed, topdress and also speak to your contractor as to his availability the day after your last game.

April

If at all possible, try and get your cutters down to around 4mm. This will allow you to work the seed into the soil much easier when you begin the remedial work at the end of the month. Get the last match date in your mind and sort everything out to happen as soon as possible after the final whistle of the last game of the season. Have your contractor in the very next day as the sand that you have already ordered is being delivered that morning. Ensure that things like the seed and feed are on site before you stop playing. You need to catch any spring showers that are around for achieve the best results.

April/May - remedial works

Using a tractor with grassland tyres, topdress with specified sportsturf sand at a minimum rate of 60 tonne per pitch. Make sure that it is spread evenly and that any low or bad areas get a bit more sand. Deep tine each pitch to a depth of 8-10 inches on 3 inch centres with suitable heave on the machine. Brush and chain harrow as much of the sand into all the holes and low spots. Once the sand dressing has been dragged and brushed to a level you are begin to seed. A disc seeder would be best as it cuts, lifts and drops the seed into the ground and rolls it flat again in one pass.

This will ensure that the seed is in the ground at the right depth and covered, ready to grow. Then apply a good feed of 10-15-10. This is a well balanced feed-high nitrogen, enough phosphate to last until November and enough potash to keep the roots growing. Spread evenly across the pitch and then roll with the mower to make sure that the seed is in contact with the soil. Then irrigate as soon as possible or wait for rainfall. Growth will be visible in about 10-12 days.

May

Try to keep the surface moist to allow for best growing conditions. Irrigate if possible during dry spells. Keep off the pitch for at least a fortnight. Then, just cut it at about 50mm with a rotary mower if possible. Do cut once a week after that in different directions. This will help the seedling to tiller and to form a plant much faster. You can let the clippings fly once again. A slow release nitrogen based fertiliser like 25-5-12 should be applied to maintain growth through the summer months.

June

Keep on top of the mowing. Let it begin to grow out to 50mm towards the end of the month. If there is a dry spell, try and keep the areas irrigated. This will be difficult to do if it is a long dry spell, but the more grass you can keep now the better it will be late on in the season.

July

Mowing and watering will be the main task. Get a strimmer and do as much mowing of the outside of the pitches as possible, covering general maintenance of the ground's perimeter and goal posts. Make the place as tidy as you can, it will not grow back as quickly and the whole ground will look attractive to any newcomers.

August

Begin to get ready for the season ahead. Check all goal posts and sockets for safety. It may be 12 months since anyone looked at these posts. Mark the pitch lines out using a safe paint. At this time of the year lines are either being cut out, washed out or grown out. Apply a late summer fertiliser like 14-0-9 mid-late August to bring the sward up to a fresh standard for the start of the new season.

Keep the mowing going and irrigate if you need to. Restrict the training to identified areas and rotate repetitive practises. Do not let the coaches ruin a season's work by being too keen in the summer! If the training areas start to wear out, give them extra sand and perhaps a watering and a feed. They are intensely used at this time of year, but need to be looked after. The longer they train off the pitch the better.

In summary

The key is to look after your pitch properly. The biggest and most important job is to aerate it as often as you can. Begin to look for a spiker of your own to supplement the use of the soil reliever.



IRFU Consultant Agronomist

Mr Eddie Connaughton EBC Ltd 48 Roselawn Lucan Co. Dublin Ireland

IOG (Ireland)

Mr Donal Kearney IOG Consultant & Development Officer The Institute of Groundsmanship Mayne Clogherhead Co. Louth Ireland

Sportsturf Science Consultants

Dr. Tim Butler Sportsturf Science Agronomist Sportsturf Consultancy Ireland Deerpark Lattin Co. Tipperary Ireland

