



## **Natural Grass Pitch Maintenance**

### **Annual Maintenance**

The demand and expectation for good quality grass pitches is always increasing. The annual maintenance of winter pitches is not only important in improving the quality and quantity of football played at a site, but is also contributes to a reduction in injuries to players.

In an effort to assist clubs with the maintenance of their natural grass pitches the FAI have put together a short document on pitch maintenance. The guidelines breaks down the annual maintenance of natural grass pitches into the four seasons as indicated below and the level of maintenance work required will obviously be dependent on the level of use on the surface.

Please note that the following guidelines notes are only general recommendations for clubs to follow and that any club looking to develop a large scale maintenance programme should engage professional advice specific to their site.

The level of maintenance a club is able to undertake will ultimately be contingent on the varying level of funds available to respective clubs. Generally professionals will advise that in the case of limited budget sand and fertilizer should be prioritised in order to best serve a pitch against the usage levels of a typical playing season.

### **Spring (end of playing season - renovation)**

- Reduce mowing height to 15 to 20mm before scarification, depending on conditions.
- Scarify the surface to remove 'debris', remove arising if possible. Consideration should be given to re-cycling green material.
- **Irrigation** - where the weather has continued to improve and surfaces are very dry you will need to irrigate to aid the preparation of the surface for maintenance work.
- Maintain surface aeration to aid root growth. The end of season is the time to start deep spiking in order to relieve compaction (only if surface conditions allow). If soil exchange is envisaged, the use of hollow core tines, opposed to solid tines, will also relieve compaction.
- Seeding - direct drilling is always a preferred option as it ensures optimum growth conditions and reduces loss of seed.
- Fertilising as is required from results of soil analysis.
- Verti-drain
- Top dressing
- Drag matting/levelling off
- Inspect for pest and disease infestation and treat as necessary.



- Keep off until grass is 50mm long then top off to 35mm.

## **Summer - (closed season and pitch preparation)**

- Verti-cutting - most effective at this time.
- Aeration - to assist growth and relieve compaction
- Isolated repairs - damaged turf replaced either by seeding or re-turfing
- Irrigate - most efficient time is late afternoon/night - reduces plant demand and evaporation.
- Mowing - regular light mowing will ensure a strong sward - Recommended height of cut 30 to 40mm dependant on facility.
- Check for weed and disease infestation - pesticide application - staff and equipment must meet legislation requirements.
- Worm control but only as a last resort.
- Fertilise after results of soil analysis
- Check drainage systems and silt traps are fully operational.

Preparation of training and match pitches should be similar - gradually lowering cutting height, towards playing season, set out pitches, prepare play equipment.

Inappropriate player training on pitches will cause more damage than match play.

## **Autumn (start of playing season - care and maintenance)**

- Grass - the correct composition of sward is a major importance to ensure growth and resistance to wear and tear under adverse conditions. Sward should be cut to the playing height, no lower than 25mm and ideally should be boxed off. Daily mowing will tighten up the sward, allowing the ball to move better during the game.
- Irrigation.
- Setting and Marking Out - carried out with suitable material so as not to cause injury to players (STRI Report, June 1997 / Pesticide Code of Practice, 1998)
- Special attention must be paid to the erection of Goal Posts and securing them to the surface.
- Fertility - fertile soil will produce a healthy sward. Apply autumn fertilisers (low nitrogen) when required.
- Brushing when required. Again be on the look out for disease infestation.
- Leaf clearing programme instigated, if necessary.
- Surface aeration (to maintain root growth for as long as possible into the late autumn and winter) and deep spiking to maintain drainage, as well as divot replacement. The thin needle tines are best.



- Irrigation systems, where not required, decommissioned for the duration of the winter, make absolutely sure they are drained down to prevent serious frost damage and expensive repairs. Repairs - In very severe wear conditions consider the use of turf for repairs to goalmouths etc. - divotting.
- As the winter progresses the soil will become wetter so care should be taken when carrying out maintenance operations, consideration should be given to the use of low floatation tyres on vehicles employed on maintenance tasks, if in doubt avoid going onto the surface unless conditions are suitable. Avoid working the surface in frosty conditions no matter how light the frost may have been.

### **Winter (playing season - care and maintenance)**

- Wear and tear must be kept to a minimum; so all training should be carefully planned between coach, manager and groundsman. It is essential that training facilities be kept in the best of conditions to help prevent injuries.
- To help achieve this; rotating the training areas regularly is key achieving this.
- As the surface deteriorates increased surface top dressing / sanding will be required, but do not over top dress.
- Spiking - is a vital maintenance task, but only in suitable conditions, resort to hand forking in problem areas, if necessary.
- Surface repairs as required. Mowing should be kept to 'topping' the grass only to maintain playing height.
- Careful selection of machinery is essential, the continued use of low floatation tyres is a must.

### **Spring (playing season)**

- Mowing should be a regular task – recommended height of cut 25 to 35mm for football and 35 – 75mm for rugby, but this will depend on the situation
- Light scarification of surface. Maintain surface aeration to aid root growth, but only if surface conditions allow.
- Irrigation - where the weather has continued to improve and surfaces are very dry you will need to irrigate to aid the preparation of the surface for maintenance work.
- Fertilising as required after soil analysis.
- Inspect for pest and disease infestation and remove as necessary.

Thought should be given to spring resources. Plan early for equipment replacement, facility improvement and possible pitch dimension alterations. Where space permits a slight variation in the positioning of a pitch layout will help protect those areas most vulnerable to wear and tear such as sideline, goalmouths and penalty spots.

