

Appendix A: Generic Football Pitch Maintenance Programme

1. **Mowing** – Cut between 30-40mm height of cut with a cylinder mower, or roller mower, if cylinder cutting is not available. Cutting should take place at least once per week in the growing season, often twice weekly is necessary. Changes to the height of cut should be undertaken gradually ideally changing the height of cut no more than 10% between cuts and never more than 30% on any single cut. Mowing should be allowed for on at least 30 occasions per year and greater frequency is required in mild weather or warmer locations and where rainfall is more uniform through the seasons. Specific requirements exist for new pitches and introductory cutting regimes.
2. **Fertiliser:** Application of fertiliser will be required on a minimum of 2 occasions per annum and depending on construction as many as 4 times per annum. We consider it generally irresponsible to recommend particular products at this stage but as an indicator of the type of products that might suit a generic setting the very least fertiliser application in:
 - April/May of 12% nitrogen based minigranular at 35g/m²
 - And
 - September of 5-7% nitrogen based minigranular at 35g/m²

This would be the bare minimum requirement for almost any pitch. Fertiliser must be applied evenly using a uniform delivery spreader.

3. **Weed Control** – the use of an appropriate selective fertiliser is likely to be needed, the product will be determined by those species present within the turf. Application should follow maker's instructions to the letter and must only be completed by PA certificate holders in line with legislation whether in-house or by contractor.
4. **Fungicide** – Although it is unusual for football pitches to suffer disease attack it is not impossible. Good plant husbandry should avoid the need for fungicide use on winter and cricket games pitches. Any disease activity which is not recognised with absolute certainty should be consulted on with a grass diseases specialist or an Independent Sports Turf Agronomist, either of which should be BASIS registered.
5. **Pesticide** – Invertebrate pests have reached record levels in recent times with the removal of generic pesticide products from the market. Very specific control measures are available and it is essential to consult an Independent Sports Turf Agronomist for the optimal control measures. Only one chemical control is available at the time of writing and only then following strict stewardship controls. Worm casting control will require specific and careful measures using a variety of maintenance techniques.
6. **Aeration / Compaction Relief** – Management of the soil is required to relieve soil compaction that arises from sports use and machinery traffic that causes loss of pores in the de-structured soil. Work must take place at the surface and at depth. Spike and heave decompaction or rotary decompactors must be used with care as they may, over time, lift stones through the soil profile and agronomist advice on this site is required before commencing to avoid this. Upper surface solid or slit aeration measures are normally employed and assist in maintaining topsoil surface infiltration and percolation. Any aeration treatment must only be undertaken when ground conditions are suitable.

Where either permanent or of temporary intent where secondary drainage is present the compaction relief treatments must run parallel with the sand grooves or slits installed.

7. **Sand topdressing** – The application of sand topdressing is essential to pitch care and should be applied at a rate of at least 80 tonnes/adult pitch during spring renovations ideally (applications at other times of year tend to create challenges) and should be applied to the whole outfield area not just pitch areas. Sand should be worked into the soil surface using drag mats or brushes to evenly distribute the material. Low drain runs may need targeted topdressing.
8. **Overseeding** – At least once per annum (typically spring) the pitches should be overseeded using a mix similar to or identical to the seed mix employed during initial sowing. Though perennial ryegrass may be the main species employed other species may suit the site well after construction e.g. Smooth Stalked Meadow Grass, Tall Fescue, etc. and good independent Agronomic advice from an independent Sports Turf Agronomist should be sought if deviating off the original seed mix or periodically to ensure the best cultivars are employed.

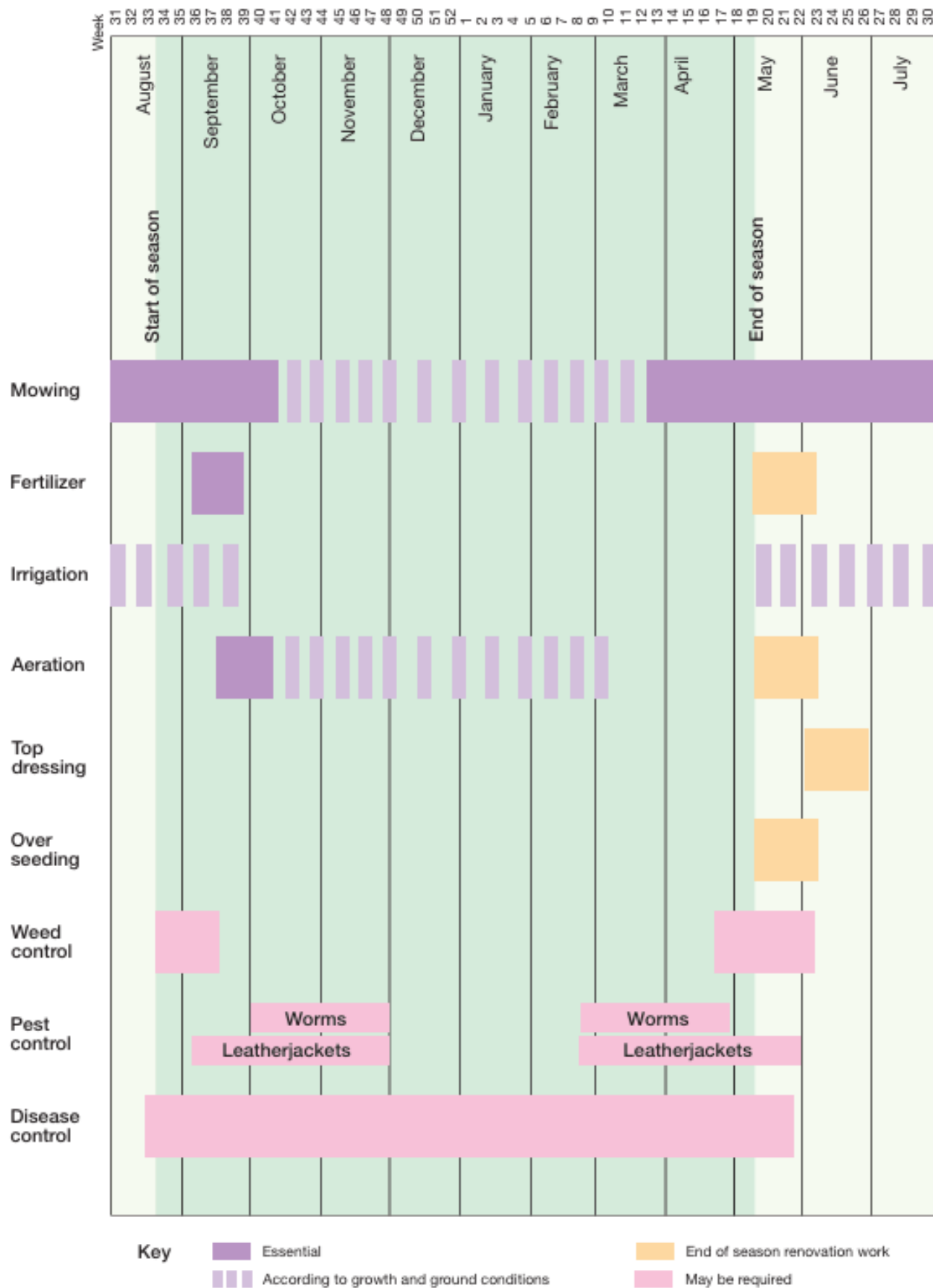
Seed may be applied by broadcast, dimple or drill seeding methods though the latter depth of operation must be carefully set so it is appropriate for the grass species selected, generally 5-12mm depth is appropriate but each species has an optimum. Other than broadcast seeding when drill seeding carry out at least 3 passes over the site to achieve an application rate of between 200-350kg/ha. Seed with pre-treatment often offer enhanced establishment and survival benefits. Second seeding treatments may also be needed.

9. **Harrowing** – traditionally harrowing of pitches has been completed using a smooth side of a chain harrow or drag mat to smooth pitch surfaces under dry ground conditions.
10. **Rolling** – Rolling is generally best avoided but there are circumstances where it can be useful to restore a pitch surface but specific guidance is required in such situations. Rolling routinely damages soil structure and impedes drainage.
11. **Divotting** (Divot repair) – after matches and training divots should be trodden back into place and any scarred areas may be teased back using a narrow hand fork (often pole mounted by pitch groundsmen). Adding sand and seed divot mix can be helpful in repairing areas, especially in mild weather above 5-8°C.
12. **In season Repairs** – extensive damage to the surface can occur in high rainfall or if the pitch is exposed to higher levels of use than recommended. Such damage should be restored by overseeding (if temperatures are high enough) and potentially the application of sandy topdressing mix in order to try to re-establish grass cover. It is best obviously if pitches are not played in very wet conditions as the surface may be damaged for months afterwards compromising playing quality and drainage performance.
13. **End of Season Renovation** – End of season repairs and renovation are normally carried out in late spring (first week or two of May) and determined by prevailing weather and ground conditions. Climate change is requiring far more thought to this process and is

an area Sports Turf Consulting strives to meet the challenges facing sports ground managers. Irrigation is likely to be necessary to ensure seedling success post renovation.

14. **Irrigation** – may be needed in the summer months to ensure optimum turf health. over watering should be avoided and a volumetric water content of approximately 20% is healthy.
15. **Line Marking** – Line marking should be performed using approved pitch line marking products for good results and to ensure materials use compliance. Pitch sizes should be accurately set out (ideally initially using a GPS based system) appropriate to the team size and age group of players.
16. **Goal Post Safety** – Approved goal post systems shall be employed on sports pitches for safety reasons. Any posts or post system should be checked regularly (minimum weekly) and any damage repaired or re-painted. Stability and safety are very important qualities in goal posts.

Table 5: Summary Table of Winter Pitch Management for Natural Football and Rugby Pitches (source: Natural Turf for Sport - Design Guidance Notes. (May 2011))



Winter Football and Rugby League: Summary pitch maintenance programme