Chapter 1 - Lawn maintenance scheduling

Introduction

This chapter looks into the timing of the maintenance operations needed to produce quality lawns. Quality lawns that are dense, visually pleasing, uniform in colour and texture, growth and of course able to tolerate wear and tear. The most frequent operations associated with lawn or garden care are those of mowing and watering. Though these in themselves do not directly guarantee the growth and development of a healthy, vigorous sward. Minor operations, as detailed in the following pages are just as important to overall, long-term turf grass health and development.

The most vital aspect in obtaining a high quality turf surface is the hard work put in by the lawn owner. The lawn owner must have an appreciation of the growing habits and characteristics of grass, the effect and consequences of user wear upon the surface, an understanding of how and why each maintenance task is carried out and an understanding to the responses of the grass plant to each (as outlined in this book). Armed with this knowledge a quality turf grass surface will be guaranteed.

It is also important to note that many mechanical operations can be carried out as and when necessary (we do not have to stick religiously to calendar dates!) as long as the turf is growing vigorously enough to recover. The calendar below acts as a guide. It is not designed to be exact (For a more detailed calendar see page 5) but gives you the lawn owner a good idea as to when you may think about carrying out any particular procedure or operation during the year.

The descriptions found after the *'little maintenance calendar'* explain the importance and relevance of each operation and lead you to further pages of the book for more detailed explanations if required.

The little maintenance calendar

	Mow	Irrigate	Feed	Aerate	Scarify	Top-dress	Weed control	Disease control	Moss control	Renovate	Apply seed	Lay turf
January				☻				When needed				
February				☻				When needed				☻
March	☻			☻			☻	When needed			☻	☻
April	☻	☻	☻	☻	☻	☻	☻	When needed		☻	☻	☻
May	☻	☻	☻	☻	☻	☻	☻	When needed		☻	☻	☻
June	☻	☻		☻		☻		When needed				☻
July	☻	☻		☻		☻		When needed				☻
August	☻	☻	☻	☻	☻	☻	☻	When needed	☻		☻	☻
September	☻	☻	☻	☻	☻	☻	☻	When needed	☻	☻	☻	☻
October	☻	☻		☻			☻	When needed		☻		☻
November	☻			☻				When needed				☻
December				☻				When needed				

Mowing – Should be carried out according to growth. There is no set time for commencing mowing operations or finishing them this s purely dependant upon growth. Removal of clippings can increase the amount of fertiliser needing to be applied to the lawn over the year. The higher the height of cut set the stronger the plant will become. Even a very slight increase in the height of by 1 mm will enable the grass plant to photosynthesis more efficiently. The plants root depth will be proportional to the height of cut. See pages 12 - 15.

Irrigation – Irrigation practices should encourage root growth. Heavy and infrequent applications are best. Irrigation should only be carried out when necessary. See pages 22 – 23.

Nutrition – Carried out as and when needed. Optimum root and shoot growth periods to aim for will be during the spring and early autumn correct application at these times can greatly improve the colour, density and quality of a sward while ensuring fast recovery of any wear that may have occurred. However, light applications of nitrogen or iron during the summer period (if irrigated properly) can improve colour and leaf vigour. See pages 17 – 21.

Aeration – This is vital for root growth and general plant development. If also carried out during the summer period when the soils oxygen demand is high improvements in plant growth will be encouraged as will increases in the natural process of thatch reduction. Aeration work carried out during the colder months will improve water infiltration rates into the soil and speed up the rate at which it moves through the soil, keeping the surface relatively dry while allowing the soil to warm up quickly when spring arrives. During the summer it aids the growth of the plant and helps decompose thatch. See pages 24 – 27.

Scarification/Verti-cutting – Can be carried out frequently to remove and control thatch. No more than two directions the second being 45^{o} to the first. If scarification is to be carried out frequently it is advisable only operate in one direction each occasion. The grass plant must be growing vigorously to

ensure speedy recovery. A light application of fertiliser two weeks prior to scarifying or will encourage a speedy recovery. Verti-cutting is less damaging and can be carried out more frequently. Irrigation will be vital to ensure recovery after this operation. See pages 28 - 31 and 22 – 23.

Top-dressing – Should be carried out infrequently (twice per year). Applied heavily after aeration practices such as hollow-tining to improve the soils texture, structure, drainage, and aeration properties. Frequent light dressings are recommended if a smooth surface is required, light frequent dressings also prevent thatch build-up. See pages 32 – 33.

Weed control – To achieve a true, dense and uniform lawn, surface weeds will need controlling periodically (see yearly maintenance planner for timings). The best defence against weed growth will be a dense turf surface that prevents the weed seeds from germinating. Identification of weeds and control measures can be found on pages 60 – 73.

Disease control – Diseases can be a problem any time of the year. With good maintenance practices proneness to disease will decrease. However, diseases are often encouraged by heavy and late applications of nitrogen (after late September), top-dressing material that has a high lime content, poor irrigation practices but, most importantly, the environmental conditions such as soil moisture, soil and air temperature, humidity, pH of the soil etc. Environmental influences are mostly beyond our control but the management techniques carried out incorrectly can encourage outbreak and attack of disease.. Correct cultural practices will be the best defence against disease. See pages 47 - 55

Moss control – Most effective if treated during the autumn time. Control can also be achieved during spring. The whole plant should be dead before removal from the sward. See pages 43 – 44.

Renovation – Carried out during spring and/or autumn when shoot and root growth is at maximum due to the naturally occurring high moisture levels and raised temperatures associated with these seasons. Prepares and repairs the turf area for the seasons use ahead. See pages 34 – 36.

Application of seed/laying of turf – Essentially these operations can be carried at any time indicated. Irrigation should be applied after seeding or turfing from late spring to autumn if dry weather is encountered or forecast. Application of seed early spring must be complemented through the summer period with irrigation if death through desiccation of the newly germinated plants is to be avoided. See pages 37 - 42

The yearly maintenance planner

This maintenance planner should be treated as a suggested routine that could, if carried out correctly, ensure vigorous, healthy turf coverage throughout the year.

Month	Operations to be carried out	Tips
January	- Service and clean mower, tools and equipment	Set winter height of cut
	- Remove any debris that may have accumulated on the lawn, keep off during frost	Light brushing
	- It is possible to lay turf at this time	
	- Repair and adjust turf levels with suitable soil by hand (peel back turf)	Fill or remove soil
	- Establish edges	
	- Check for signs of disease	See pages 47 - 55
February	- Check for signs of worm activity. If casts appear brush these in when dry	
	- Complete any major turfing before the month ends during periods of good weather. Ensure soil condition is suitable before attempting this.	
	- Check for signs of disease	See pages 47 - 55
	- Keep off during frost	
March	- Mow the turf at a relatively high height of cut (tip off sward)	See page 12
	- Reduce height of cut slowly (if necessary) over the next three months	Helps root growth
	- Toward end of month prepare for spring sowing	See pages 39 - 42
	- Hand pick any weeds from turf	Use daisy grubber
	- Over-sow with seed or lay turf toward end of month	See page 34
	- Check for signs of disease	See page 55
	- Keep off during frost	Prevents damage
April	- Remove any patches of coarse grass by hand, fill, level and seed if necessary	Cut and fill with suitable turf
	- Treat moss if necessary (can take up to 3 weeks to die off)	Lawn sand
	- Apply weed killer if necessary (hand weeding preferable)	See pages 60 - 73
	- Scarify or rake turf to remove thatch & moss	Ensure moss is dead first
	- Apply fertiliser early to middle of month (depending on weather)	Spring/summer dressing
	- Top-dress	Do not smother turf
	- Irrigate only if long term forecast is predicting dry weather	See pages 22 - 23
	- Check on the progress and soil levels of germinating grass or newly laid turf	
	- Mow according to growth	
	- Seed any sparse areas	
	- Aerate the soil	Hollow time if thatchy
	- Establish edges	
May	- Slowly establish summer cutting height	See pages 9 and 12
	- Continue weed killing if necessary	Chemical use possible
	- Irrigation may be needed	Watch weather forecast
	- Apply sulphate of iron if moss still a problem	Use spreader
	- Aerate if drainage, compaction or thatch a problem	
	- Mow frequently as growth dictates	
	- Check for signs of disease	See page 55
June	- Mow frequently as growth dictates	
	- Check and adjust mower blades	
	- Lightly top dress	Sand if drainage problems
	- Irrigate if necessary	Watch weather forecast
	- Lightly scarify if thatch a problem (ensure water is applied after)	Hand raking may suffice
	- Establish edges	
July	- Mow as growth dictates	
	- Remove any weeds by hand	Daisy grubber
	- Feed lightly (nitrogen only)	See pages 17 - 21
	- Irrigate as necessary	
	- Aerate soil if thatch a problem, ensure soil is in suitable condition for operation	Slit tine or solid tine
August	- Mow as growth dictates	
	- Irrigate when necessary	
	- Top-dress	Can be applied heavily
	- Fertilise mid August	Nitrogen and potassium
	- Weed kill if necessary	
September	- Mow as growth dictates	
	- Hand weed	Use ‘daisy grubber’
	- Begin to raise the height of cut on mower	
	- Check for disease	
	- Treat moss	Dichlorophen only
	- Fertilise lightly late September	Potassium & magnesium
	- Check for worm activity and brush in casts	

	- Top-dress - Aerate the soil and thatch layer - Seed any worn areas after aeration - Establish edges	
October	- Set mower at winter height of cut - Apply seed early or lay turf mid to end of month - Mow as growth dictates - Aerate this month if unable to do so during September - Remove any falling leaves immediately - Brush the lawn stiffly twice this month (before mowing) - Possible to turf at this time - Apply iron fertiliser	1- 2" would benefit lawns See pages 37 - 39
November	- Only mow if necessary - Keep off the lawn during frost - Continue removing any fallen leaves - Watch for disease - Possible to turf at this time	
December	- Oil moving parts of maintenance equipment - Keep turf clear of debris - Keep off during frost - Watch for disease - Lightly aerate soil with fork or solid tines if soil in correct condition	

Note - To prevent leaf yellowing or death from dog urine apply water to area immediately after

For further information on operations see:

Pages 12 - 16 for Mowing
Pages 17 - 21 for Fertilisation
Pages 22 - 23 for Irrigation
Pages 24 - 27 for Aeration
Pages 28 - 31 for Scarification
Pages 32 - 33 for Top dressing
Pages 37 - 39 for Turfing
Pages 39 - 42 for Seeding
Pages 43 - 44 for Moss control
Pages 47 - 55 for Diseases
Pages 60 - 73 for Weed control
Pages 75 - 76 for Thatch

All the technical terms used are described and explained within Chapter 3 'The maintenance procedures' and a glossary of terms can be found at the rear of the manual.