



Bowling Green Maintenance Calendar

Task \ Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
(No. of weeks per 'month')	5	4	4	5	4	4	5	4	4	5	4	4	52
Mow @ 8-11mm	1	1	6	6						6	4	3	27
Mow @ 6.5mm				6	3					2			11
Mow @ 5mm					11	14	18	14	12				69
Trim edge of green			1	6	8	8	10	8	6	2	1		50
Aeration: Slit tine	1	1	2	1					2	1	1	1	10
Aeration: Solid tine			1	2	2	1	1	1					9
Aeration: 'Sarel' roll				2	4	4	5	4	4				23
Aeration: Hollow tine									1				1
Top-dress - light				1									1
Top-dress - main									1				1
Overseed				1					1				2
Returf worn ends										1			1
Fertilise				1		1		1					3
Turf tonic, with S/Fe	1										1		2
Combined turf tonic			1										1
Light rolling (for competitions?)				2	1	1	1	1	1				7
Scarification				2	1	2	2	2	2	2			13
Verticutting				1	1	1	1	1	1				6
Vertigroom/ comb				6	8	8	10	8	8	1			51
Dragbrushing				10	8	8	10	8	8	10	8	8	104
Switching				5	4	4	5	4	4	5	4	4	52
Irrigation				6	8	10	12	10	6				52
Clean ditch (a) Install material (b) Remove material (c)			1 (a)	1 (b)						1 (c)			
Pesticide application:	As required during the year and as part of an integrated pest management approach												

Other operations which could also be listed include general repairs during the playing season, ditch and bank maintenance, hand watering of localised areas, turfing at the end of the season, putting out and taking in of mats and green side equipment etc.

The application of pesticides can vary considerably, depending upon the existing quality of the bowling green and especially the content of grasses present, as well as the quality of the maintenance practices carried out.

As an example, a green which is predominantly composed of fescue and browntop bent grasses may require no fungicide application throughout the year. This could be contrasted with a predominantly annual meadow grass green might easily require 8 applications. The cost implication of this can be quite considerable.

Note:

In this example, mowing has been estimated as being undertaken on around a minimal basis during the main growing season.

Materials Costs

The exact cost of materials will vary depending upon several factors such as

- Availability.
- Whether they are specialist or general materials.
- The quality of the material, especially topdressings.
- Location of the site for delivery from the supplier.
- Quantity of materials being purchased - discounts for large quantities.

If we take the maintenance calendar as a guide, the following costs might be incurred:

Material	Quantity and unit cost	Total cost (Spring 2020)
Petrol for machines	Approx. 70 gallons @ £6.50 per gallon	£455
Top-dressing	1 ton in April & 3 tonnes in October, approx. 1 tonne for general repairs etc. @ £125 per tonne in tonne bags (Based on a renovation with solid tine aeration)	£625
Seed	1 x 20 kg bag in April & 2 bags in October @ £180 per bag	£ 540
Fertiliser	Using a standard fertiliser (Not slow or controlled release) and following a soil test, 2 x 20 kg bags in April, 2 in June, 2 in August and 2 over the winter 9 bags in total @ £30 per bag for spring and summer & £20 per bag for the remainder (The analysis and form will affect the cost, typically ranging from £10 - £40 per 20 kg)	£260
Turf tonic, (sulphate of iron)	At 2.5 to 5 g/m ² , a 3.75kg bag covers a green; 3 applications in total = 3 bags @ £28 per bag	£84
Turf bio stimulant.	A 10L container, at 25LperH will covers a green 3 times; @ £80 per 10L	£80
Pesticides:	(These costs will vary depending upon chemical ingredient and concentration of the chemical)	
Fungicides *	£150 per application x 2	£600
Herbicides *	£250 per application x 1	£250
Insecticides *	£250 per application x 1	£250
Moss killers *	£120 per application x 1	£120
Wetting agents *	£150 per application x 2	£300
Irrigation water supply	If a m ³ (220 gallons) of water costs say, 200p; a green requires, say, 25mm per m ² of water per week (1475m ² x 25mm = about 37 m ³). 37 m ³ x 200p = approximately £74 per week. Part of this will, however, be supplied by rainfall during the spring and summer months. If water had to be applied for, say 20 weeks at half the given rate, then this would equal 20 weeks x £74 per week = £300.	£1,480
Total		£5,044 Plus, VAT

*Operations should not be regular operations if the green is maintained to a good standard.

From the information given, pesticides can readily contribute to 40% of the 'typical' material costs for a bowling green. This one area should be targeted for reduction through improved maintenance and management practices