

CHAPTER XIX

QUANTITIES OF FERTILISER AND OTHER MATERIALS REQUIRED FOR THE PROPER UP-KEEP OF SPORTS GROUNDS

Regulation Measurements of Sports Grounds, List of—Calculation Tables A, B and C—Table "A" to Calculate the Quantity of Grass Seeds, Fertilisers, Wormkiller, Carterite, Lime, Charcoal, Sand, Compost, Breeze, Stable Manure, etc., required to Dress Areas varying from 400 square yards to 1 acre—Table "B," Quantities to Use per square yard and per acre—Table "C," the Approximate Quantity of Fertilisers to Use on Various Sports Grounds at the Rates of $\frac{1}{2}$, 1, and 2 oz. per square yard—Miscellaneous Information.

Regulation Measurements of Sports Grounds

It is difficult to give the exact areas of Courts, Pitches, etc., as in many cases not only is there a choice between maximum and minimum measurements, but no regulations are laid down in regard to the actual areas required for the games to be played in comfort. Consequently it is only possible to give the regulation measurements, and where they exist the recognised outside measurements.

		Yds.			Sq. yds.
Lawn Tennis, regulation	..	26 × 12	=		312
Lawn Tennis, full size ..	..	40 × 20	=		800
Croquet Lawn, regulation	..	35 × 28	=		980
Croquet Lawn, full size	..	40 × 30	=		1,200
Bowling Green .. ..	..	42 × 42	=		1,764
Cricket Pitch, minimum	..	25 × 25	=		625
Cricket Pitch, maximum	..	50 × 50	=		2,500
*Rugby Football .. ..	..	110 × 75	=		8,250
*Association Football, maximum		130 × 100	=		13,000
*Association Football, minimum		100 × 50	=		5,000
*Hockey, maximum .. ..	..	100 × 60	=		6,000
*Hockey, minimum .. ..	..	100 × 55	=		5,500
*Polo, if boarded .. ..	..	300 × 200	=		60,000
*Polo, if unboarded .. ..	..	300 × 160	=		48,000

* No allowance has been made for side or back run.

Calculation Tables

In order to keep Sports Grounds in first-class condition it is necessary to be in a position to carry out any treatment promptly and without loss of time.

This means that all preparations should be made in advance, and all necessary materials stored and ready for immediate use. If a careful record is kept of the size of all Greens, Courts, Pitches, Fields, etc., it is then quite easy to ascertain from the following tables the approximate quantity of any material required. The British system of weights and measures does not allow exact calculations without the use of decimals, so in all cases I have worked to even or convenient figures.

TABLE "A."

For calculating the quantity of sand, fertiliser, wormkiller, lime, charcoal, etc., required for various areas at rates from $\frac{1}{4}$ oz. to 2 lb. per square yard.

Area in sq. yds.	$\frac{1}{4}$ oz.	$\frac{1}{2}$ oz.	1 oz.	2 oz.	4 oz.	8 oz.	1 lb.	2 lb.
400	6 $\frac{1}{4}$ lb.	12 $\frac{1}{2}$ lb.	25 lb.	50 lb.	100 lb.	200 lb.	400 lb.	800 lb.
500	8	16	32	64	125	250	500	1,000
600	9 $\frac{1}{2}$	19	38	75	150	300	600	1,200
700	11	22	44	84	175	350	700	1,400
800	12 $\frac{1}{2}$	25	50	100	200	400	800	1,600
900	14	28	56	112	224	450	900	1,800
1,000	15 $\frac{1}{2}$	31	62	125	250	500	1,000	2,000
1,100	17	34	68	136	275	550	1,100	2,200
1,200	19	38	76	150	300	600	1,200	2,400
1,300	20	40	80	160	325	650	1,300	2,600
1,400	22	44	88	175	350	700	1,400	2,800
1,500	23	46	92	184	375	750	1,500	3,000
1,600	25	50	100	200	400	800	1,600	3,200
$\frac{1}{4}$ Acre	19	38	75	150	300	600	1,210	2,420
$\frac{1}{2}$ Acre	38	75	150	300	600	1,210	2,420	4,840
1 Acre	75	150	300	600	1,210	2,420	4,840	9,680

1 cwt.	=	112 lb.	11 cwt.	=	1,232 lb.
2	=	224	12	=	1,344
3	=	336	13	=	1,456
4	=	448	14	=	1,568
5	=	560	15	=	1,680
6	=	672	16	=	1,792
7	=	784	17	=	1,904
8	=	896	18	=	2,016
9	=	1,008	19	=	2,128
10	=	1,120	20	=	2,240
$\frac{1}{4}$ Acre	=	1,210 sq. yds.	$\frac{3}{4}$ Acre	=	3,630 sq. yds.
$\frac{1}{2}$ Acre	=	2,420 " "	1 Acre	=	4,840 " "

TABLE "B."

Quantities to use of various materials required for the proper upkeep of Sports Grounds.

Name.	Quantity to use per square yard.	Quantity to use per acre.
Grass seeds for renovating	$\frac{1}{2}$ oz.	150 lb. or 6 bushels
ditto ditto	$\frac{1}{4}$	75 lb. or 3 "
Grass seeds for sowing new ground at standard rate	1	300 lb. or 12 "
Grass seeds for sowing new ground at double rate	2	600 lb. or 24 "

Name.	Quantity to use per square yard.			Quantity to use per acre.		
	$\frac{1}{4}$ rate.	$\frac{1}{2}$ rate.	Full rate.	$\frac{1}{4}$ rate.	$\frac{1}{2}$ rate.	Full rate.
COMPLETE FERTILISERS—						
Carters Complete Grass Fertiliser No. 1	$\frac{1}{2}$ oz.	1 oz.	2 oz.	$1\frac{1}{4}$ cwt.	$2\frac{1}{2}$ cwt.	5 cwt.
Carters Anticlover Fertiliser No. 2	$\frac{1}{2}$	1	2	$1\frac{1}{4}$	$2\frac{1}{2}$	5
Carters General Purposes Grass Fertiliser No. 3	$\frac{1}{2}$	1	2	$1\frac{1}{4}$	$2\frac{1}{2}$	5
PHOSPHATIC FERTILISERS—						
Basic Slag	$\frac{1}{2}$	1	2	$1\frac{1}{4}$	$2\frac{1}{2}$	5
Superphosphate	$\frac{1}{4}$	$\frac{1}{2}$	1	$\frac{3}{4}$	$1\frac{1}{2}$	3
NITROGENOUS FERTILISERS—						
Dried Blood	$\frac{1}{4}$	$\frac{1}{2}$	1	$\frac{3}{4}$	$1\frac{1}{2}$	3
Nitrate of Soda	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{1}{4}$	1	2
Sulphate of Ammonia	$\frac{1}{4}$	$\frac{1}{2}$	1	$\frac{3}{4}$	$1\frac{1}{2}$	3
PHOSPHATIC AND NITROGENOUS FERTILISERS—						
Bone Meal	$\frac{1}{2}$	1	2	$1\frac{1}{4}$	$2\frac{1}{2}$	5
Bones Dissolved	$\frac{1}{4}$	$\frac{1}{2}$	1	$\frac{3}{4}$	$1\frac{1}{2}$	3
Guano Dissolved	$\frac{1}{4}$	$\frac{1}{2}$	1	$\frac{3}{4}$	$1\frac{1}{2}$	3
Guano Fish	$\frac{1}{4}$	$\frac{1}{2}$	1	$\frac{3}{4}$	$1\frac{1}{2}$	3
Guano Peruvian	$\frac{1}{4}$	$\frac{1}{2}$	1	$\frac{3}{4}$	$1\frac{1}{2}$	3
POTASH FERTILISERS—						
Potash, Muriate of	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{1}{2}$	1	2
Potash, Sulphate of	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{1}{2}$	1	2
Kainit, Nitrate of	$\frac{1}{2}$	1	2	$1\frac{1}{4}$	$2\frac{1}{2}$	5
FERTILISERS FOR YOUNG GRASS—						
Carters Compound Mulch	1 bushel per 16 sq. yd., or 1 5-bushel bag 80 sq. yds.					
Malt or Kiln Dust	2 to 4 oz. per sq. yd., or 5 to 10 cwt. per acre.					
Malt Culms						
Rape Dust						
OTHER MATERIALS—						
Wormkiller, Carters	$\frac{1}{2}$ lb. per sq. yd. or 1 ton per acre.					
" Carterite " (Lawn Sand)	$\frac{1}{4}$ — $\frac{1}{2}$ " " " " " "					
Charcoal	1 " " " " " "					
Nottingham Marl	5 " " " " " "					
Lime, Carbonate of, or Pulverised Chalk	1 " " " " " "					
Carters Shell Compost (75 per cent: Carbonate of Lime)	$\frac{1}{2}$ —1 " " " " " "					

TABLE "C."

THE APPROXIMATE QUANTITY OF FERTILISER required, calculated to the nearest hundredweight or multiple thereof.

For a	Measuring	At $\frac{1}{2}$ oz. per sq. yd.	At 1 oz. per sq. yd.	At 2 oz. per sq. yd.
Regulation Tennis Court ..	26 x 12 yds.	$\frac{1}{8}$ cwt.	$\frac{1}{4}$ cwt.	$\frac{1}{2}$ cwt.
Full-size do. ..	40 x 20	$\frac{1}{4}$	$\frac{1}{2}$	1
Regulation Croquet Lawn ..	35 x 28	$\frac{1}{4}$	$\frac{1}{2}$	1
Bowling Green ..	42 x 42	$\frac{1}{2}$	1	2
Cricket Square or Table ..	25 x 25	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{3}{4}$
	30 x 30	$\frac{1}{4}$	$\frac{1}{2}$	1
	40 x 40	$\frac{1}{2}$	1	2
	50 x 50	$\frac{3}{4}$	$1\frac{1}{2}$	3
For 18 Putting Greens ..	20 x 20	2	4	8
	25 x 25	$3\frac{1}{4}$	$6\frac{1}{4}$	$12\frac{1}{2}$
	30 x 30	$4\frac{1}{2}$	9	18
	35 x 35	$6\frac{1}{4}$	$12\frac{1}{2}$	25
	40 x 40	8	16	32

For a	Measuring	At $\frac{1}{2}$ oz. per sq. yd.	At 1 oz. per sq. yd.	At 2 oz. per sq. yd.
Football Field, Rugby	.. 110 x 75 yds.	$2\frac{1}{2}$ cwt.	$4\frac{1}{2}$ cwt.	9 cwt.
Assn. Maximum	.. 130 x 100	$3\frac{1}{2}$	$7\frac{1}{2}$	$14\frac{1}{2}$
Minimum	.. 100 x 50	$1\frac{1}{2}$	$2\frac{1}{2}$	$5\frac{1}{2}$
Hockey Field Maximum	.. 100 x 60	$1\frac{1}{2}$	$3\frac{1}{2}$	$6\frac{3}{4}$
Minimum	.. 100 x 55	$1\frac{1}{2}$	3	6
Quarter-acre	.. ..	$\frac{3}{8}$	$\frac{5}{8}$	$1\frac{1}{4}$
Half-acre	.. ..	$\frac{3}{4}$	$1\frac{1}{4}$	$2\frac{1}{2}$
One acre	.. ..	$1\frac{1}{2}$	$2\frac{1}{2}$	5

Miscellaneous Information

One cube yard of Sand, Sifted Compost, Soil or Breeze or other similar material will cover an area of approximately 150 super yards to a depth of about a quarter of an inch.

Rotted Dung and Peat Moss Manures for digging in new lawns, courts, etc., one to two loads per 100 super yards, or for ploughing in new cricket, football, polo fields, etc., 20 to 40 loads per acre.

A bushel of Grass Seeds weighs 25 lb. 1 cwt. = $4\frac{1}{2}$ bushels.

Approximate quantity of Cinders, Soil, etc., required to cover an area of 800 square yards to a depth of from 1 to 6 inches.

1 in. over an area of 800 sq. yds. = 25 cube yds.

2	.. ..	800	..	= 50	..
3	.. ..	800	..	= 75	..
4	.. ..	800	..	= 100	..
5	.. ..	800	..	= 125	..
6	.. ..	800	..	= 150	..

A cube yard of dry cinders weighs about 10 cwt.

A cube yard of sand weighs about 16 cwt.

A cube yard of soil weighs about 14 cwt.

A yard of "solid" soil is equal to about $1\frac{1}{2}$ yards of "loose" soil.

Red Rubble for topping Hard Courts graded $\frac{1}{4}$ in. to dust. 20 tons for approximately 1 in. over 800 sq. yds.