

CHAPTER XX

WORMS

The Action of Worms—How to Destroy Worms—When to Use Wormkiller—Quantities to Use.

The Action of Worms

Worms are the worst pest that attacks turf ; they riddle the soil and turf to such an extent that it becomes unnaturally muddy and soft, which cannot be corrected by rolling, and otherwise strong turf is made so tender that it soon wears out.

They cover the surface with slimy casts, which not only foul the turf and balls, but when trodden or rolled down actually smother out the fine grasses, and the damage they do to mowing machines is beyond belief.

They work hardest in low, damp areas, which sink into little pot-holes and so destroy the accuracy of the surface. Although there is no apparent connection with worms and weeds, they are closely allied inasmuch as their slimy casts make wonderful seed-beds for weeds, and in consequence they are always found together, and more or less in ratio.

The more one studies the subject the more apparent it becomes that where they abound, the turf is not only coarse, weedy, tender, soft, muddy, and wears out quickly ; but where they are conspicuous by their absence it is finer in quality, freer from weeds, firmer and cleaner under foot, much stronger, and can be kept clean and bright with a true, accurate surface all the year round.

How to Destroy the Worms

Leave the turf unrolled for several days, and so allow the worms to open up their runs.

Select a dull, misty, muggy, warm day with the wind in the south or west when the ground is moist, and the worms are working actively. Broadcast Carters Powdered Wormkiller over the surface at the rate of half a pound per square yard.

Water the Wormkiller in immediately with a hose, water cart or can, and use as much water as possible. The effect

is instantaneous, and the worms, large and small, struggle to the surface in thousands to die.

The Wormkiller is absolutely infallible, provided that the worms are working close to the surface, and plenty of water is used.

To avoid disappointment, waste and failure, try a pound on two square yards before applying the bulk. The first worm should be up within one minute after applying the water, 15 to 20 in five minutes, and 100 or more in 30 minutes. If a satisfactory result is not obtained, according to the head of worms in the soil, stop, and choose a more suitable day. You cannot kill a rat by throwing a brick at it, no matter how carefully it is aimed, unless it hits, and by the same token you cannot kill worms buried in the soil unless the powder in solution comes in contact with them.

If water is not laid on, but a fair supply is available, greater care should be taken in choosing the time of application, that is to say, it should be applied towards the evening during a continuous spell of warm, moist, muggy weather; and if none is available, during a settled spell of very wet weather whilst it is actually raining hard.

If fair to good results are obtained according to the quantity and force of water available, a lawn can be kept free indefinitely, provided that the few that escape or work their way in later are killed on sight, and not allowed to multiply; it is but a question of a few handfuls of powder and a can or two of water.

Although the taste of the powder is far from pleasant, it is not poisonous to either animal or bird life, and if stored in a dry place can be kept indefinitely without losing its virtue. It will, however, kill fish, and should not be used on lawns that are close to, or drained into, fishponds.

When to Use Wormkiller

Worms travel up and down in the earth obliquely to a depth of up to 6 feet, according to the weather. They go deep when it is hot, dry or cold, and come to the surface when it is moist and warm.

The best time of the year to kill them is during the breeding seasons, when they work quite close to the surface, which are roughly from the end of August to the beginning of December, and from the end of March to the end of May.

It should not be forgotten that the invention and intro-

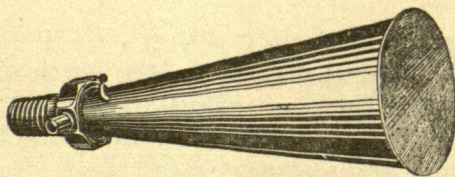
duction of Carters Wormkiller in 1902 made Winter Golf possible on inland courses, particularly on those standing on heavy soil ; and that its use has increased the standard of play of other games played on turf.

Quantity to Use

To ascertain the quantity required to dress any given area, at the rate of half a pound to the square yard, multiply its length in yards by its width in yards and divide by two, the result being the exact number of pounds required.

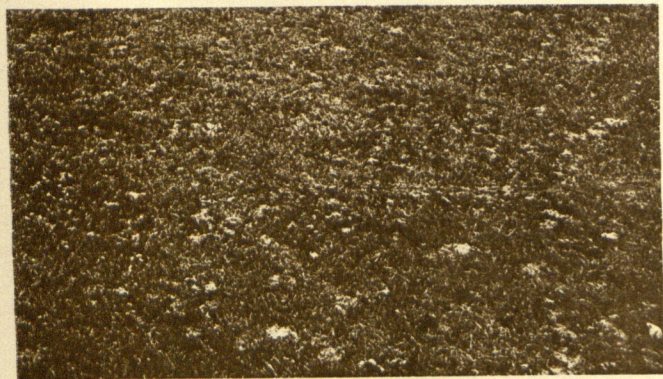
Approximate quantity required for a :—

Regulation Tennis Court	..	26 by 12 yards	1½ cwt.
Full-sized Tennis Court	..	40 by 20	3½ "
Regulation Croquet Lawn		35 by 28	4½ "
Bowling Green	..	42 by 42	8 "
Cricket Table	..	20 by 20	1¾ "
"	"	25 by 25	2¾ "
"	"	30 by 30	4 "
"	"	35 by 35	5½ "
"	"	40 by 40	7 "
"	"	45 by 45	9 "
"	"	50 by 50	11 "
Rugby Football Field	..	110 by 75	37 "
Association, maximum	..	130 by 100	58 "
" minimum	..	100 by 50	22½ "
Hockey Field, maximum		100 by 60	27 "
" minimum	..	100 by 55	25 "
For a	..	¼ acre	5 "
"	..	½ "	10 "
"	..	¾ "	15 "
"	..	1 "	1 ton



CARTERS HIGH PRESSURE HOSE NOZZLE.

Specially recommended for washing in WORM KILLER, hand spraying, and for other purposes where a strong, heavy spray is required. Very strongly made in Brass. Adaptable to any size of hose.



(1) Turf ready for treatment, showing worm casts and its dirty condition.



(2) The same turf after treatment, it is bright, clean, and free from worm casts.



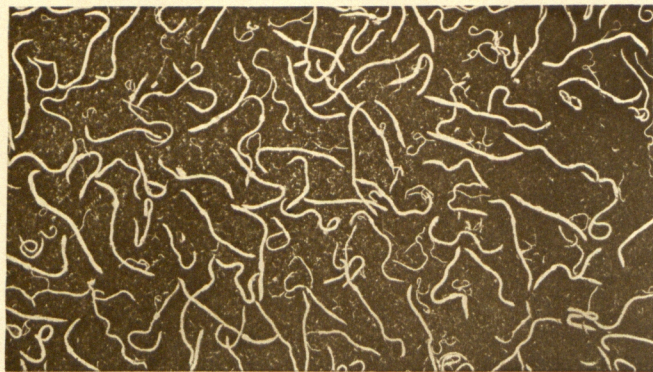
(3) Spreading the WORM KILLER at the rate of half a pound to the square yard.



(4) Watering in the WORM KILLER. Notice the froth and the few dead worms in the foreground.



(5) Worms coming to the surface in increasing numbers 2 or 3 minutes later.



(6) A close-up of the same piece of turf 10 minutes later.



(7) A heap of dead worms.



(8) One of three barrow loads taken from the Green.

Approximate quantities required to dress 1, 9, and 18
Putting Greens varying in size from 20 to 40 yards
square :—

Size of Green	1 Green	9 Greens	18 Greens
20 by 20 yards	.. $1\frac{3}{4}$ cwt.	16 cwt.	32 cwt.
25 by 25	.. $2\frac{3}{4}$	25	50
30 by 30	.. 4	36	72
35 by 35	.. $5\frac{1}{2}$	50	100
40 by 40	.. 7	63	126

For Prices see Supplement.