

Making and Using a Bent Nursery

An expert's advice on the planting and care of stolons in order to secure fine smooth bent sod for putting greens. Selection of ground important

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Read before the annual convention of the National Association of Greenkeepers of America at Detroit

WHATEVER I know about bent grass I feel has largely been acquired from others. I wonder if we appreciate, now that our working conditions have been so improved and freed of ineffectual methods, how much we owe to the work of the Green Section in not only gathering and making available information from practical sources and trained scientists, but in breaking down that old country idea of trade secrets which perpetuates false theories and is a barrier to progress.

Fifteen years ago, our position was little if any better than day laborers; today, we are able to meet together from all over the country as greenkeepers and friends. Our organization itself owes its existence to the unselfish work of the Green Section. I myself appreciate it and I only wish that on my part I were able to add something to the work.

Your committee has requested me to say something about bent nurseries. Now that is something I am really interested in and when I began to think what I could offer that might be original I came to the conclusion that I am entirely a parasite. All that I know has been gathered from others. However, I understand from our scientists that some parasites are harmless and I trust that I am one of that kind.

Took Interest in Lawns

ICAN remember, when I was a boy, I took a good deal of interest in the lawn about our home and that I was very much interested in an article on lawns, in the 1897 Department of Agriculture Yearbook, by Lamson-Scribner. In one paragraph, he described how good turf could be secured by planting pieces of sod six or eight inches apart. This appealed to me and

I gathered and planted some pieces. What kind of grass I do not know; any kind of grass that grew on a lawn was bluegrass to me, except quackgrass. I knew quack and that it was hard to mow. It wasn't quack that I planted.

However, no spectacular results, if any, were obtained and being a boy of fourteen, I forgot about it in a few weeks. I am sure that all who took care of turf between 1897 and 1918 realized the great need of improvement in turf, but even with such a plain hint as to how it could be procured as was obtained in Lamson-Scribner's article, it took Lyman Carrier and those associated with him in the Department of Agriculture to show us how to do it. I wonder how many hints are now lying around pointing to improved ways of doing our work? In this connection, we might find helpful a turf nursery.

When I heard about the new way to obtain turf being tried in Washington, I was anxious to try it. By this time, I was fairly familiar with desirable turf species; and, as soon as possible, I began to obtain samples and put them out in test rows. I gathered them locally, received them from friends, some from Washington, and one that has been called Inverness in this locality from Mr. Rockefeller,

at Toledo. I am still enthusiastically trying new samples; still have hopes some day of finding a grass that will stay green over most of the winter, be entirely immune to all fungus, and so thick and fine as to crowd out even chickweed and pearlwort.

Only Two Strains of Bent

OF ALL the strains tried, at present, there are only two creeping bents which I would recommend for



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putting greens in this locality and they are designated by the Green Section as "Washington" and "Metropolitan." I believe though that you will hear much more about velvet bent during the next year or so; several samples are well worth trying.

Nurseries might be classed as two kinds, one for growing sod or stolons of some particular strain which you have decided on investigation as the one you wish to use. I would suggest putting this on as true a piece of land and free of stones as you can; it will enable you to do a more even job of sod lifting.

The other, an experimental nursery, can properly be on quite rolling ground, so that it will have slopes at least equal to your greens, as some strains of bent apparently give a true surface when flat but on rolls or slopes they have a tendency to form a nap or grain.

My early trial plats taught me a few things about preparing ground for a nursery. If a well worked piece of ground is not available, do not try to plow and work under old sod; it is surprising how persistent and almost impossible it is to weed out the rootstocks of bluegrass, redtop, etc., when you are watering and fertilizing a nursery as it should be. Taking old sod off to the depth of two inches will eliminate the bulk of grass roots and weeds. It is not necessary to work the soil up; in fact, I think that leaving the soil firm is better.

Start Nursery in the Fall

IT IS preferable to start a nursery in the fall, then, by the following fall you are sure of plenty of stolons; but good results are obtainable from spring planting. Make straight trenches about an inch or two deep. If fall planted, three feet apart; in the spring, two feet. String your stolons along this trench and cover with soil scraped from trench, or, if you want to hurry the growth, cover with compost.

Right here, it might be well to speak a word of caution about allowing stolons to dry out. Some drying does not necessarily kill, but it slows up germination and affects the vitality materially. Stolons that are kept fresh hardly stop growing; it seems as though the leaves keep right on developing. But on stolons where the leaves are badly wilted or dried, the nodes are slow to root and send out new shoots.

It is necessary to plant stolons near the surface and to keep them moist during hot, dry weather, the surface of ground must be kept wet. Anyone who has tried this knows that it is not so easy to do, because to prevent washing, only a small amount of water can be put on at a time. After the nodes root, the grass is more able to take care of itself.

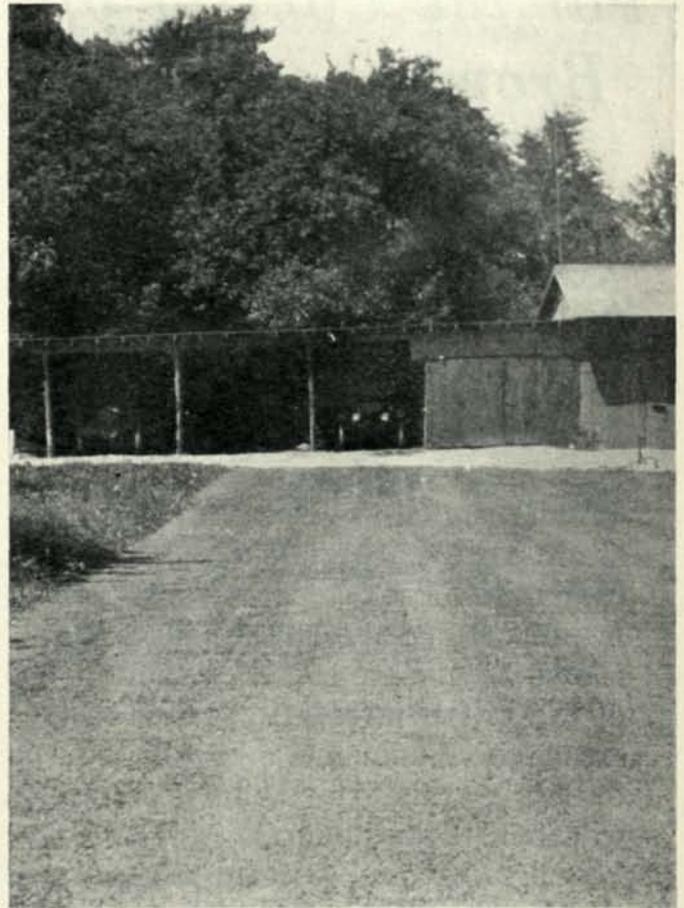
If the rooting period is long drawn out, there is just that much more chance of an accident and weeds have a better chance to get started. As soon as the rows show, begin to cultivate, but use care not to chop off or cover up ends of the runners as it checks the growth. Another thing that checks growth very materially is allow-

ing seed heads to form. This can best be prevented by using plenty of water and fertilizer.

Grass That is Forced Does Not Seed

GRASS that is forced shows very little tendency to seed. While hoeing or weeding, eliminate any grass that shows a variation from type you have selected; difference of growth shows up readily in rows. If you do not use your nursery rows for stolons the first fall or following spring, I think it pays to turn them into a sod bed by mowing and topdressing, and start new rows for stolons. A stolen nursery need not be over one-fifth the area you wish to plant with stolons.

Usually, after the first year, when sod has formed, some clover, bluegrass and other weeds work in; these



*The Bent Nursery at Stony Brooke, L. I.
This nursery was planted in the early fall and was a solid mat of turf the following June*

weeds, along with the bunchy way sod comes up, require more weeding and topdressing to produce a good turf than where year-old nursery stolons are used.

Before starting any nursery, be sure that you can give it regular care. Sod from a neglected nursery is not desirable for a green and experimental plats would give you no real information. Nurseries can be useful, or only a matter of expense. Do not try to have a sod bed so large that it would be three or four years before you could use it. Have just about what you will use in a



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year; it saves a good deal in the cost of mowing, weeding, etc. Keep renewing your nursery where sod has been removed; you will find after removing the first crop of sod, that successive plantings are much more free of weeds. Sod is formed quicker and at less expense by broadcasting stolons.

Use Sod Nursery to Replace Greens

ON AN established course, I should always rely on a sod nursery for the material to replace a green. A few years ago, I took the mixed sod off of nine greens and replanted by the stolon method. Although I did not begin the work until after September 15 I had them playing on better greens than the old ones, by the following May 30. Even so, there was plenty of complaint about being off the regular greens. My greens chairman and his committee certainly stood behind me, but I knew from occasional anxious inquiries as to how the greens were coming that they were recipients of complaints that I never heard about. Since then I have found that I could grow sod, transfer it to the greens during the latter part of November or the first part of December, and the players generally are not inconvenienced.

Some sod of the same strain as the greens comes in very handy for patching. Early last spring some vandals; that is, caddies not busy caddying, found a can of oil which they poured on a portion of a green and then set fire to it. On discovery, I immediately had the oiled patches replaced with nursery sod and after two weeks of growing weather you could not tell where the patches were. Knowing that he can replace destroyed turf immediately relieves a greenkeeper of just that much worry.

Use sod for plugging where large weed patches are removed; although with a good strain of bent on a green, I do not think large patches should be allowed to form. One thing I would not attempt to do; that is, to change the character of turf on a green by plugging with sod.

A few years ago I heard a greenkeeper say that they had several acres of "Washington" bent sod that they would not use because it turned brown over winter. I did not know what kind of turf he had on his greens; I doubt very much if it was as fine putting and as easily taken care of as the Washington would have been. Now, there was an expense that could have been avoided by the use of an experimental nursery, as a plat 10 x 10 would have shown that club the characteristics of Washington bent.

For Testing Strains, Plant in Rows

FOR testing strains, I should plant in rows. One piece of sod I received from Washington, supposedly of a particular strain, showed on being planted in a row that it was composed of at least five distinct strains.

A nursery is just the place to try out that chemical that

Say you saw the ad in *The National Greenkeeper*

you have been told will kill chick weed and not hurt the grass, or that acid that clover doesn't like. If you think that watering in the sunlight hurts the grass and night watering is better; try the two ways on different spots in the nursery.

Nurseries from seed have small value, as stock from which samples were taken would, of course, not be available when crop had developed.

I would say that if you have never handled bent, it would pay to try some experimental plats for a couple of years to find out which strain you like and how to take care of it. Then you will have a sod bed which, properly cared for, offers a means to change permanent greens over into the finest turf, at no inconvenience to the players.

Philadelphia Greenkeepers Meeting

President Lewis M. Evans gave the Philadelphia greenkeepers a rousing talk about the Detroit convention at the regular March meeting of this association. Mr. Evans was recently elected treasurer of the National Association of Greenkeepers of America, also a member of the Executive committee.

Mr. Leroy, the next speaker spoke on Pennsylvania oils of paraffin base regarding their viscosity, flash point and lubricating properties. Mr. Young a representative of the Ford Motor company next spoke on the quality and properties of the ammonium sulphate produced by his company. Mr. Farnham reviewed the by-laws on membership and asked for criticisms.

The meeting adjourned at 6 o'clock at which time dinner was served.

E. T. Young, Secretary.

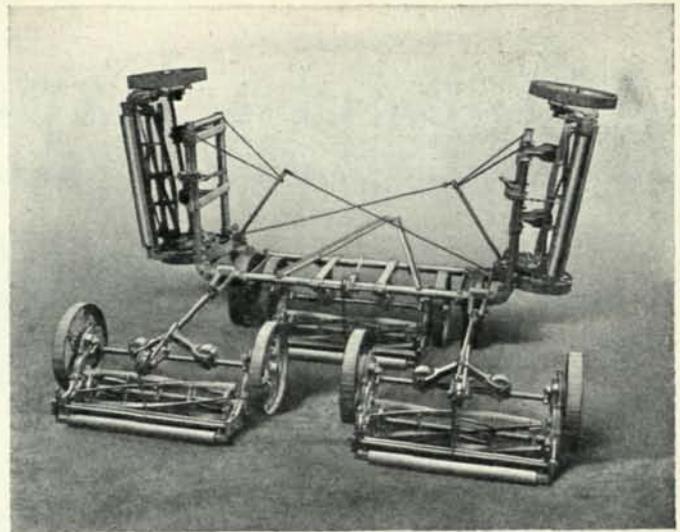
Noer Addresses Mid-West Greenkeepers

Mr. O. J. Noer, author of the ABC of Turf Culture, addressed the regular meeting of the Mid-West Greenkeepers Association held in March at the Great Northern Hotel, Chicago.

Mr. Noer talked upon the subject of "The Physical Structure of Soils," illustrating his talk by means of charts showing the various soils and their classifications namely—clay-silt, very fine sand, fine sand, coarse sand and clay loam. Also the chemical composition of soils, the soil structures and the individual aspects of soils were very interestingly told.

The subject of soils is of tremendous importance and knowledge of same is the fundamental upon which the future construction of greens will be based in order that the best results may be obtained from the application of fertilizer and fertilizer materials. Following Mr. Noer's lecture, questions were asked him.

Ed. B. Dearie, Secretary.



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