

# Look Before You Seed!

By NORMAN L. MATTICE, Greenkeeper  
Pine Valley Golf Club, Clementon, New Jersey

**A**LTHOUGH the cost of grass seed on a well maintained golf course is a comparatively small item, it is an extremely important one when thoroughly analyzed and considered from every angle.

Long before the seed bed has been thoroughly prepared, the wise chairman of the Green committee and the greenkeeper, unless either or both are qualified to select and purchase the right varieties and quality of seed, should get expert advice from the Green Section of the U. S. G. A., or from some one who has had broad training in the subject of fancy grasses and is well recommended.

## *Fairway Mixture*

As a rule, most fairways in the northern half of the United States and part of Canada should be seeded with a mixture of New Zealand Chewings fescue, Kentucky blue grass and red top, with a small percentage of South German mixed bent thrown in. The percentage of each variety and the amount of seed per acre will, of course, depend on soil conditions. Unless these varieties are purchased with a guarantee as to germination and purity accompanying each lot or variety, many unforeseen difficulties may arise which will not only be costly to the club, but will spell failure for those responsible to the management of the club.

## *Deterioration of Chewings Fescue in Shipment*

New Zealand Chewings fescue (*festuca duriuscula* or *festuca ovina*) is nothing but hard or sheeps fescue imported from the British Isles into New Zealand and acclimated to that Island. In England, it grows in bunches and is a coarse, tough, hardy grass. Owing to its bunchy nature, weeds grow together with the grass, and when it is harvested for seed, many noxious weeds are naturally found in the seed. In New Zealand, it changes its habits and becomes a finer, more delicate grass of a stoloniferous nature, which forms a thick turf that crowds out the weeds and the seed is practically free from weed seed and usually high in purity. Unless this seed is selected and sown in the latter part of August or early in September, there is little use in attempting to use it in a fairway mixture.

As a rule, New Zealand Chewings fescue shows a high percentage of germination when it arrives in America, but it will not retain its viable strength through the winter months. That is, if it shows a germi-

ination of 90% in July or August, it will probably not germinate more than 40% the following April, and more often it will not germinate at all. The seed seems to be affected by the salt air in transit from New Zealand. If a seed house advertises New Zealand Chewings fescue with 90% germination in March or April, they are doing one of two things. They are either selling on the germination test made on arrival in America in July or August of the preceding year, or else they are selling a substitute of hard or sheeps fescue under the name of New Zealand Chewings fescue. In the first instance, the turf will be thin and uneven unless many times the right amount of seed is sown, which adds greatly to the cost. If, on the other hand, sheeps or hard fescue is sown, the fairway will never be smooth or easy to cut and weeds will become very troublesome and unsightly.

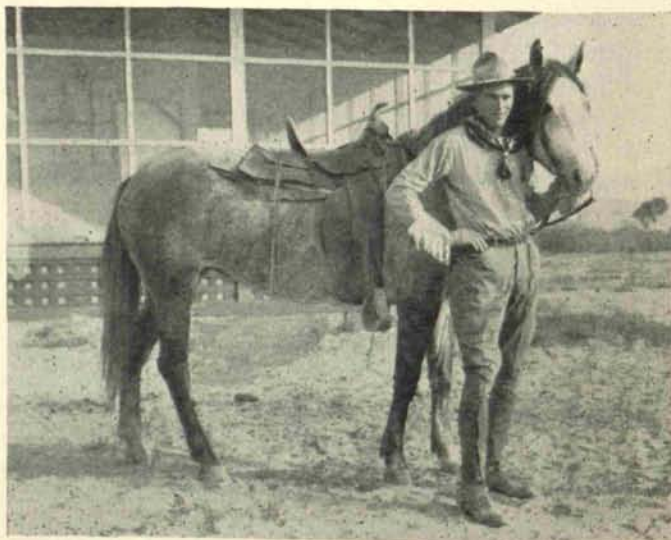
### **EDITOR'S NOTE**

*Mr. Mattice, before taking up greenkeeping, was a trained seed analyst of several years' experience. Pine Valley, his present club, is one of the most famous of the golf courses in the Eastern States.*

## *Kentucky and Canada Blue Grass*

Kentucky blue grass is grown in Kentucky or Missouri (mostly in Kentucky), and if a high purity percentage is demanded,—say purity 90% and germination 85%—there is little danger of going wrong. Kentucky Blue Grass has occasionally been adulterated with Canada blue grass, the seed of which is very similar

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*Norman L. Mattice, in the Western manner. Former stockman, soldier and seed analyst, he is now on a round-up of the greens at Pine Valley*



in greenkeeping, I have no difficulty in securing one for him.

I believe my methods pay well, for I realize they help reduce my responsibilities so far as labor is concerned.

In dealing with the responsibilities of the greenkeeper, so far as services are concerned he is expected to be very liberal, but when it comes to financial return for those responsibilities, he is expected to be very conservative. This also shows up in his responsibility in expending the appropriation allowed for the maintenance of the course. The financial responsibility of a golf course used to rest chiefly with the Green committee, but now the greenkeeper is held partly responsible.

The modern method is for the greenkeeper to work under a budget system, allowing so much per year for maintaining the course, and fixing separately each item of expense. I believe this is a good system for a greenkeeper to work under, providing he does not try to use too much false economy in order to show how much less he has spent than the budget calls for.

Service is the main thing, and should be the chief aim of the greenkeeper. If he keeps as closely as possible to the budget allowance, he will eventually find that it pays.

#### ***Before and After War Maintenance Costs***

Of late there has been a great amount of discussion

regarding the heavy cost of running an eighteen-hole golf course, but you do not find anyone giving the real facts, which show that wages, machinery and costs of all upkeep have advanced over 70% since the World War. Still the cost of maintaining a course today is very little more than it was before the war. Greenkeepers, especially those who have the confidence of the officials of the club, have been able to cut many rough corners. They are making their own humus; they are not wasting grass seed, in fact I know of many greenkeepers on well established courses who do not use any seed; they are motorizing their courses, and are using hand labor to better advantage.

Conditions for the players are 100% better than they were a few years ago. This demonstrates that greenkeepers are keeping step with the times. While I regret that there has been a tendency to take away from the greenkeepers their responsibilities as to finance, I am of the opinion that this is only temporary. Instead of taking responsibilities from him, give him more. Show him that he has the confidence of the club officials. One of the most tangible assets an official can give to his club is to create conditions that will make the greenkeeper more of an executive.

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in appearance and usually much cheaper. If the Kentucky blue grass should be adulterated with Canada blue grass and is not guaranteed or tested, there will be more breakers ahead for the unwise from a maintenance standpoint.

#### ***Red Top and Mixed Bent***

Most of the red top used commercially is grown in Southern Illinois, and if bought with a purity of 90% or better, good results will be sure to follow.

The South German mixed bent presents a more difficult problem however. It is a first cousin of red top and usually rather expensive. Most of the South German mixed bent imported into this country has a purity of 70 or 75%. The major part of the impurities is chaff. After the Red Top is cleaned to grade 90% or better, there is a quantity of screenings containing some red top and these screenings are sometimes used to adulterate the bents. None but a highly trained seed analyst can detect such an adulteration.

#### ***Bermuda Grass***

In the old south and as far north as the southern half of Pennsylvania, Bermuda grass is the most common grass used for fairways and greens. As this grass does not seed to any great extent in a moist climate it can be planted vegetatively. There are a number

of strains, but the one best suited for putting green surfaces is called the Atlanta strain. In the Imperial Valley, California, and in the irrigated sections of Arizona, Bermuda grass is a very bad weed. The climate in this section is very dry and the grass seeds readily. The seed gets into the irrigation water and spreads over the farming area. Unless kept under control, it causes serious loss to the farmers. The seed resembles timothy seed and is often adulterated with that seed, as timothy is commercially much lower in value. Bermuda grass also seeds in Australia and the seed is imported into this country from there.

#### ***Do You Know Kikuyua?***

Kikuyua grass (*pennisetum clandestinum*) is also another stoloniferous grass that can be vegetatively planted and, although still in the experimental stage, it has been found to do well as a fairway grass in California and Florida. So far, there is little or none of this seed produced commercially.

#### ***Have Seed Analyzed***

Most of the states maintain very efficient seed testing laboratories and are always glad to aid the people in their state. If the seed dealer knows that you demand seed true to name and high in germination, with



# The Market Place

## Brushing Bent Greens

IT is only of recent date that greenkeepers have recognized the necessity for raking or brushing up the runners on vegetative greens in order to prevent a grainy putting surface. One of the best pieces of equipment for this purpose which has been brought to our attention is the MacGregor Compost Brush. It is light and easily handled, and the brush of good wearing quality. Whenever necessary, the brushes may be replaced at small cost. John MacGregor, greenkeeper at the Chicago Golf Club, made one of these brushes for his own use, and because of the demand from other greenkeepers of his district, he began manufacturing the brushes along with his well-known compost distributor. Full description of both distributor and brush will be sent to any reader on request from the MacGregor Compost Distributor Co., Box 717, Wheaton, Ill.

## Samples of Grass Seed

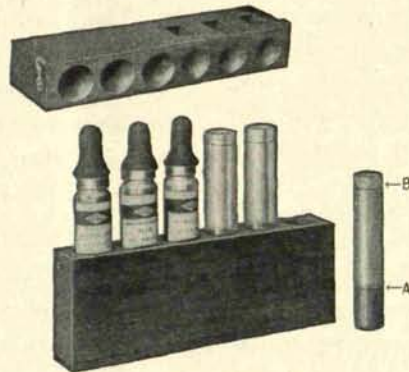
ON account of the cold and rainy spring, we have had a surprising number of orders for golf courses, parks and cemeteries so far this year," writes Mr. Radway of the I. L. Radwaner Seed Co., 11 Water St., New York.

Mr. Radway further states that his family has been importing fine grass seed since 1875, and his company will be glad to send any greenkeeper a large sample of New Zealand fescue and South German mixed bent to try out in nursery beds.

## Testing Soils

THE first requirement of a greenkeeper is to have a good knowledge of his soil. First know your soil,

then give it what it needs. A small soil testing set which has been highly recommended is the Kenny Indicator Set, manufactured by the LaMotte Chemical Products Company, McCormick Building, Baltimore, Md. This little set is accurate and simple in



The Kenny Indicator soil testing set pictured above is a practical aid to the greenkeeper

principle. A postcard will bring to you a booklet describing several testing sets manufactured by this company, but we would suggest that the Kenny type is the most satisfactory of this company's products for the practical greenkeeper to use.

## Bent Needs Close Cutting

VEGETATIVE bent greens have so grown in popularity that we have had an unprecedented demand for the new aluminum roller Super putting green mower," writes Mr. J. H. Bonbright of the Pennsylvania Lawn Mower Works. "It takes a very close-cutting mower to keep ahead of creeping bent, and our sales this year prove that the Super is filling the bill."

## Travelling Sprinklers

AT first glance some people think our sprinklers are complicated, and will get out of order quickly," writes Mr. Charles Dodd of the Economy Irrigation Co., 21 Spokane St., Seattle, Washington. "But after they are put to work, we don't hear so much about the trouble they are having as we do about the area these sprinklers cover without being moved."

If you have seen no demonstration of the Economy sprinkler, we would suggest that you write this company and ask if arrangements can be made to show you one in operation.

## Fairway Watering

CHARLES ERICKSON, of the Minekahda Club, Minneapolis, in an article in this issue, tells of his success with the Toro fairway sprinklers, and our August issue will contain the story of a system manufactured by the Buckner Manufacturing Co., of Fresno, Cal.

The cost of patching and re-seeding fairways burned out in mid-summer from lack of artificial watering has long been an expensive problem with golf clubs in many sections.

## All Year Round Greens for the South

THERE have been some articles printed describing Poa Bulbosa, the new bulb grass, but none so complete as a story by Lyman Carrier which will appear in our August issue. Professor Carrier was in personal charge of the original development of this grass at Washington, and southern greenkeepers should look forward with interest to his article in the August number.

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a state or government check on the transaction, he will be very careful to give you only the best.

Every golf course has a shed or building with a floor that can be swept clean where the different varieties of seed can be mixed after they are received. The mixture can be most thoroughly made by placing the variety that contains the most bulk on the floor first, spreading it out in a square pile with a flat top. Then spread the next largest lot and so on, always keeping the top flat. After all of the varieties are dumped, shovel the pile over at least six times and the resulting mixture will be most satisfactory.

Look to the quality before you seed. Be sure of your source of supply and buy only the best. It is cheapest in the end. The best is freest from foul weed seed which lessens the maintenance cost for many years following the seeding.

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