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February 27, 1952

George S. May Company, 122 East 42nd Street, New York 17, N.Y.

Philip F. Cayburry Company, Inc.

Home of Better Plumbing and Heating

In the latter part of 1950, we decided to engage the services of the George S. May Company to develop and install the necessary Administrative and Cost Controls which our company had lacked up to that time. Representatives of your Business Engineering Staff called on us, and installed Prime Cost and Estimating Controls, Profit and Expense Controls with the aid of the Flexible Budget, Inventory Controls, and basic Organizational Controls.

Our Accounting and Bookkeeping procedures were also completely revised basic Organizational Controls.

and improved.

Although there was a little doubt and some scepticism as to the value of the work done at that time, we now feel that your business engineering services have proved to be highly satisfactory and valuable. Our key personnel have been relieved of a great deal of detail work. We have access to records and contract and job cost ledger sheets that inform us periodically, as the work progresses and is completed, the gross profiles one each contract and job, and the comparison of the direct material and labor costs with the estimated costs. The work done by your Engineering Staff and the results accomplished were considerably more than what we had contracted for originally.

We do not hesitate in stating that the benefits we received from your We do not hesitate in stating that the benefits we received from your services, both actually and on a projected basis, have exceeded the initial cost or outlay we then incurred. We have decided to retain you periodically to tighten the various controls and reset our standards.

Philip F. Cayburry Co. Inc.

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"... the results accomplished were considerably more than what we had contracted for ....



## **Counter That Sells And Stores**

In modernizing the shop at Louisville (Ky.) CC Eddie Williams had built the long counter that is partially shown in this illustration.

Top of the counter is slightly tilted so two rows of shirts or other merchandise catch the shoppers' eyes. Beneath the counter is storage space. Merchandise on display is frequently changed so it's become a habit of members to look at the counter for something they haven't seen before.

Williams says that the selling done by this counter is so far ahead of any shop merchandising experience with merchandise, other than balls and accessories, kept in showcases that he is convinced that any pro who'd change from showcase to counter display would show enough sales increase in a week or so to pay the cost of the counter.

Pro shop selling is best done, according to Eddie, when everything possible is arranged to make it easy for the customer to buy what he or she should have. In about 98 cases out of a 100 at a private club the pro is wise to put the accent on buying by the customer rather than selling by the pro, says Williams.

Eddie is the studious fellow with the hat who's giving a tip on how to "unstiffen" to the party who's showing the practice swing. Another sales tip from Williams that has figured in purchases of clubs from him is that the pro should study the hands of his customers for clubs, and when advisable make the grips thinner or thicker to provide a real custom job. It is Williams' experience that the size of the grip—the union between the player and the club—sometimes needs alteration so the customer can properly hold the club and get correct hand action.

In several instances this season grip alterations have accounted for sales of sets of irons and woods to men and women in Williams' shop.

Keep merchandise in the pro shop up-todate. If you've got anything that's been followed by later models and newer styles get rid of the older stuff at a cut price. Nobody can always buy right but the sound pro merchant is the one who doesn't keep his money tied up and his customers uninterested in unsold merchandise.

By watching your inventory closely you can make good use of slow-moving stock by using it at reduced prices to beat store competition.

-Bill Gordon

Professional, Tam O'Shanter CC Niles, Ill.



# Gaybird FREE-FOR-ALL Jacket

## Start your spring selling with this success

From the time the professionals first displayed them last fall, Gaybird Free-For-Alls have been making headline news in pro shop jacket sales. A standout in pro Xmas sales, Gaybird's success story has been repeated throughout the winter golf section. Behind its remarkable sales record is a "Direct-from-Maker-to-Professional" sales policy which enables you to offer a jacket of exceptional quality and design at a surprisingly low price.

For men and women in small, medium and large sizes, in single and reversible models. Colors:

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Blue, Red, Green, Gold, Maroon and Natural. Any of these six colors may be had on one side of reversible jackets with natural (tan) on the other side. Suggested retail prices: \$12.95 for the single jacket; \$25 for the reversible. Slightly higher on the West Coast.

Write for literature describing features, color tones and professional's prices.

**GAYBIRDS**, INC. 261 Fifth Ave. • New York 16, N.Y.

# Cool Season Grasses\* In Today's Turf

### By H. B. MUSSER

The quality of the turf on a golf course is the result of many closely related and interdependent items. The type of grass used is only one of these. Things like weather, soil, management, and use, also have a very direct bearing on what is ultimately produced. Consequently, to say that if such and such a grass is used, the results will be thus and so, is covering a lot of territory. It is true that there are inherent differences in the ability of individual grasses to produce good turf. But it also is true that they may perform differently under a given set of conditions. Any evaluation of a particular type must be based on its performance for a sufficient period of time and under a sufficiently broad range to make our conclusions at least reasonably accurate.

This is especially important in attempting to evaluate the cool season grasses. They are grown over a large area under widely varying conditions. What is good in one section may be mediocre in another. So we cannot say that even such a standard grass as Kentucky blue is the right or wrong choice for a given location, unless and until we have enough evidence of its performance over a wide range to provide reasonable support for our conclusions.

The quality of turf which an individual grass will make is dependent upon a number of specific characteristics of the grass, and how these are affected by its surroundings and the treatment it gets. When we have determined what these qualities are, and to what extent they may be affected by weather, management, and similar factors, then, and only then, can we make a sound appraisal of its value.

If we examine the cool season grasses from this angle, we find that they fall into 3 rather sharply defined classes: 1. Those which we can judge quite accurately, because of long experience with them, 2. Those relatively new types which are commercially available in limited quantities, and which we have known for

\*Paper presented before GCSA annual Turf Conference

a comparatively short time, and 3. Types that have had only limited local usage or are still entirely in the experimental stage.

Quality of Cool Season Grasses

Class one includes the common commercial types of most of our permanent species - Common Kentucky bluegrass, and red fescue, colonial bent grass, the older kinds of creeping bent, such as Seaside, Washington, and Metropolitan, and the velvet bents. All of these have been with us for a long time. We have had a chance to watch them under widely different conditions and we think we know pretty definitely just about what we can expect from them. Let's take a brief look at some of their more important characteristics. It should help us to determine more easily whether new types are actually improvements over what has been available in the past.

Common Kentucky bluegrass has been the most widely used of the cool season grasses for a long time. Probably the particular characteristics which first drew attention to it were its ability to form a dense pleasing turf under moderate cutting heights, its tolerance to a wide range of climatic conditions and its ability to make an amazing recovery after unfavorable growing periods when other grasses were completely killed. The secret of its recovery powers lies in its underground stems. These are fleshy structures in which surplus food materials are stored in periods when growth is normal. When the top growth is destroyed by bad weather or other causes they persist in the soil and sprout new plants when growing conditions become favorable.

It has long been recognized that Kentucky blue is not a poor land grass. It needs a constant supply of nitrogen and liberal quantities of phosphate. It will not tolerate high acidity and does not like wet feet. It dies out rapidly on soil that is heavily compacted or poorly drained. Hot weather will not kill it but it grows slowly during the summer. Consequently, it does not make much recovery when anything injures it during that time.

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It is highly susceptible to several diseases and is severely injured by them. The most troublesome of these are the leaf spots which not only affect the leaves but may destroy the roots, also.

#### Kentucky Bluegrass and Close Cutting

There is a common belief that bluegrass will not stand constant cutting to heights of less than 11/4 to 11/2 inches. Also, that it cannot be held on watered fairways. There is no doubt but that the weight of practical evidence justified this conclusion. There is a real question, however, whether the clipping and watering are the primary offenders, or whether they are merely "the last straw that broke the camel's back". Evidence is accumulating that the true explanation of why common Kentucky bluegrass will not tolerate close clipping and high soil moisture is its inability to survive under such treatment when weakened by disease, heavy compaction, or other causes. When it is healthy it will survive close clipping, and at least some overwatering, for a long time.

Chewings and creeping red fescues are very similar to common Kentucky bluegrass in their dislike of wet soils. Also, they are attacked by the same diseases and suffer equally from soil compaction and poor physical condition. They grow even more slowly than Kentucky blue, and consequently close clipping and heavy watering injure them very severely when they have been weakened by disease or other causes.

These fescues differ materially from common Kentucky blue in their greater tolerance to low fertility and high acidity. The differences, however, are not very real because there is abundant evidence that fescue does not grow because of these conditions, but in spite of them. They will make the best turf when fertility levels are high and acidity is controlled.

They also differ from Kentucky blue in their greater shade tolerance and in their almost complete lack of ability to survive long periods of high temperatures and humidities. They are among the coolest of our cool season grasses and are injured quickly and severely by hot humid weather.

The fescues have one additional bad fault. Dead roots from the previous season and dry clippings are highly resistant to decay. It is common to find this material forming a dense felt of from 1 to 2 inches in thickness under old turf. Very often this effectually prevents water penetration and normal root growth. Unless it is broken thoroughly and systematically it can cause serious turf deterioration. The aerifier or any tool that will do a similar job is good for this purpose.

#### **Chewings Versus Creeping Red Fescue**

Up to this point we have considered the general characteristics common to both Chewings and creeping red fescues. There are points of difference. Chewings is essentially a non-creeping grass, while creeping red, as the name implies, spreads by underground stems like Kentucky blue. True to type Chewings that is available at the present time is somewhat hardier than most commercial creeping red. This is not necessarily a true comparison of the two types. Unfortunately, most of the present seed supply of creeping red stems from a type which tests have shown is not well adapted in much of the fescue growing area. The newer strains of creeping red have shown as good or better performance than the best Chewings.

The bents are the hardest of the common cool season grasses to evaluate accurately. Perhaps the best approach would be to first classify them and then try to arrive at some general points of agreement on their characteristics and quality. We recognize 3 basic forms — the Colonials, the Creepers and the Velvets. These are distinct species and show wide differences in the type of growth and quality of the turf they produce.

Colonial bent is offered commercially under a number of different names. These include Oregon colonial, Highland, Astoria, New Zealand Colonial, and Brown Top. We may even still find an occasional quotation on Rhode Island Colonial. These names serve chiefly to identify the source of the seed. Although there are some differences in the characteristics of the various types, the points of similarity far outnumber the differences. Performance reports on them are so variable and contradictory that it is impossible to arrive at any satisfactory assessment of their relative value. About the best we can do at the present time is to see what we know about them as a class.

The Colonials are essentially upright growers that have only a very few short rootstocks or none at all. They do not make as dense a turf as the creeping and velvet bents and do not thatch and felt as heavily or as readily as these types. This makes them much more useful on fairways where it is difficult to control thatching.

As a group the colonials are less



"Ho hum", says Davie, in a low voiced mutter, "What's the matter with him and his putter? Now, if his putter was of Golfcraft brand, The putt, long ago, would have been canned; Then all those golfers waiting their turn, Wouldn't have ulcers from thoughts that burn; There's a Golfcraft model to fit every style, The ball rolls true, tempers don't rile," Of course, Davie's waiting for a ball, To roll into grass that's thick and tall; The Golfcraft ball he treasures most, But that's so white-- it's seldom lost !

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## ESCONDIDO, CALIFORNIA

affected by acidity and wet soils than Kentucky blue. On the other hand, they are fast growers, and need good fertility and soil moisture levels. Their high leaf density and rapid growth rate permits quick recovery from injuries and makes them tolerant of close cutting. They are highly susceptible to the brown patch disease and are attacked to a greater or less extent by other diseases common on the bents. This lack of disease resistance is one of the most important limiting factors in their use. However, it is not as vital as for Kentucky blue and fescues because the faster growth rate of the bents enables them to recover better, and so reduces the degree of permanent injury.

#### A Good Colonial Bent is Needed

It has been generally recognized that the colonial bents are desirable for use on watered fairways where frequent close clipping is necessary. Unfortunately, it has been difficult, during the past few years, to secure seed that is not contaminated with varying percentages of creeping bent. Since the latter spreads more rapidly it soon takes over and we are confronted with a serious thatch control problem. This could be handled much more easily if the creeping types were kept out of the seed we use.

The creeping bents include the many vegetatively propagated individual strains that have been selected and multiplied during the past 30 years. Seaside bent, seed of which is available commercially, also belongs to this group. While there are wide differences among the individual types, there are some general characteristics of the entire group that should be recognized.

A very rapid growth rate is one of the most important of these. The creepers produce a dense mat of creeping stems and leaves in a comparatively short time. A seedling plant may spread to a diameter of 2 feet or more in a single season. This vigor and aggressiveness may be very desirable on limited areas such as greens and tees, where it can be controlled by frequent close clipping, brushing, topdressing, and other management practices. It creates a serious problem on large areas where such treatment is not practicable.

Creeping bent needs fertile soil and liberal quantities of water. It will do better under poor drainage and high acidity than most of our cool season grasses. But, here again, it should be noted that it grows in spite of these conditions, not

because of them. It is severely injured by dry weather and is highly susceptible to practically all of the most serious turf diseases. It thrives under close cutting. In fact, if clipping heights average much over  $\frac{1}{2}$  inch as a maximum, we soon find ourselves battling a spongy mass of sod that makes for very poor playing conditions.

The velvet bents also consist of a number of distinct types that are somewhat different in quality and performance. The best known of these are the Piper, Kernwood, and Raritan. Originally, these were developed as individual plant selections and propagated vegetatively. A very limited quantity of seed has been produced commercially. Each strain has the usual limitations in adaptation common to individual plant selections. One does best in one location, and another somewhere else. All are characterized by very dense fine textured foliage. They spread by above ground creeping stems, but growth is slow. This is one of their weak points. Because of their soft texture the velvets injure quite easily and the scars heal slowly. They need at least high average fertility and are quite acid tolerant. Because of their slow growth rate they require less moisture than creeping bents.

#### **Thatching in Velvet Bents**

As a class, the velvets probably are less susceptible to disease than either the colonials or creepers. However, where disease strikes they are hurt badly and are very slow to recover. They form a very dense thatch of roots and stems. This is an excellent medium for the growth of disease organisms and it is difficult to get fungicides into it in sufficient strength to kill them. It also retards the penetration of water and nutrients.

These, then, are the major characteristics which we have come to recognize, through long observation and experience, as typical of our common cool season grasses. They form a basis for determining whether the new types or strains that come out from time to time are likely to be better than what is already available. But to make comparisons of the old and new, we must know what the new has to offer. Which brings us to a consideration of the second general class of the cool season grasses.

It includes these comparatively recent developments that are available commercially to at least some extent. What do *(Continued on page 112)* 



No. 1208 New in design . . . smart in style. A snap-down cap in choice of three checkedpattern color combinations. Tropical weight, extra full crown, acetate Rayon lining, breezeway front of white Nylon-Rayon net. One size with concealed adjusting strap meets all size requirements.



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No. 571 As new as tomorrow and strikingly handsome. Made of fine Moyra cloth in natural color with a unique brown braid trim that is both smart and ventilating.



March, 1953



Pinehurst's new pro shop has a lot of window area. Note the ventilators under the windows. These may be opened in summer and closed in cool weather. The four large glass panes under the eaves at the end of the shop are temporary and will be replaced by ventilator fans.

# **Pinehurst's NEW SHOP**

## Ventilation, Lighting, "Resting Corner," Scoreboard and Flooring are Noteworthy Features

The new shop at Pinehurst, N.C., shows many interesting features the famous old golf resort decided to install after studying the buying service requirements of the thousands who visit its four courses each year.

Due to the large majority of Pinehurst players being from clubs where first class pro selling service is presented there's not the primary need of the sales push of open table display such as extensively used, except for the balls and accessories, at most modern shops. But there's still plenty of open display (not shown in the illustrations) at the new Pinehurst shop.

The lounge space at one corner of the shop is a very attractive arrangement.

A permanent scoreboard is on the back wall of the new shop at Pinehurst. The ground rises away from the shop so all standing on the incline can see the scores. Players leaving the last green of the No. 2 course pass the board on the way to the clubhouse. The board is lit so night work may be done, if

necessary. The platform is removable.

There comfortable chairs invite golfers who can watch others playing and who can talk golf in the pro shop atmosphere.

A little dressing room adjoins the pro shop.

Ample storage space for pro shop stock is provided.

The ventilation and wooden block flooring are two details of the new Pinehurst shop that are going to be studied get the attention of numerous pros and club officials. The air circulation is planned to

