Verticut knives are closely spaced with short spacer washers.

Turf is verticut in two directions to remove thatch and surplus grass.

**Rye is being crowded out of the overseeding picture as other grasses give better results**

---

**Winter Green Preparation**

**By O. J. NOER**

When greens in the south were planted to common Bermuda, putting surfaces were not the best at any time of the year. During the summer, the problem was to prevent steminess and to keep the Bermuda vegetative and leafy. Stemmy runners greens were top dressed frequently to keep the stems buried. Leafiness was obtained with a minimum amount of phosphate and potash, and by applying nitrogenous fertilizer liberally.

Common Bermuda greens were overseeded everywhere with rye grass. At first, so-called Italian rye, a perennial type from Europe, had a considerable following. Then seed of annual rye, harvested in the Pacific Northwest, replaced Italian rye. The domestic seed was much cheaper and there was not enough difference in behavior between the two grasses to justify the price differential.

**Several Serious Faults**

The common Bermuda-rye combination has had a number of serious faults. Greens are very bad during transition in the fall and even more so in the spring. It takes several weeks in the fall for rye to be-
come fit for play. Surfaces may be poor for up to a month in the spring.

Rye has a very bad effect upon the recovery of Bermuda in the spring because of the heavy seeding rate. Generous seeding is imperative to crowd the grass plants and create fine texture turf. Otherwise, grass is coarse. Rye greens are slower than bent greens because of the heavy seeding rate. Local golfers adjust to this, but it annoys many northern vacationers.

The switch from common Bermuda to finer texture Bermuda grasses, Gene Tift first, and subsequently, Everglades, and now to Tifgreen (328) has been a tremendous forward step. Although the greens are not exactly like bent they are a vast improvement over those with common Bermuda.

Putt More Like Bent

During the winter of 1963-64 Florida’s best greens were the overseeded ones. The weather was too cold for satisfactory Bermuda growth. In a normal winter, golfers prefer to play on greens that have been overseeded. These greens putt more like bent turf.

Rye did not seem like the best grass to use on fine texture Bermuda greens for winter play. Trial plots comparing rye grass with other cool season grasses, alone and in combination, have supported this contention. These plots have been in operation for five to six years. They have provided very useful information.

 Overseeded grasses, must provide coverage quickly and must survive until Bermuda revives in the spring. It must not retard Bermuda recovery. Where poa trivialis is troublesome, the overseeded grass must mask it. Otherwise, putting surfaces can be bad during flowering and seeding of poa annua.

Best Single Grass

Where a single grass is used poa trivialis has been best. Seeding rates have been 6 to 8 pounds per 1000 square feet when used alone. An 18 pound rate at Longboat Key in Sarasota produced a dense, pleasing turf. It did not retard recovery of Tifgreen in the spring. The purchaser must insist on pure seed, free of shepards purse type weeds, and chickweed. Poa annua should be absent in it, and in Kentucky bluegrass when it is one of the grasses in the seed mixture.

Seaside has been the best bent grass followed by Astoria and Highland in that order. Low cost is the big advantage of Highland. Red top is a poor fourth in rank and is falling into disfavor. Pennlawn, Illahue and creeping red fescue are good grasses. They do best as a part of a mixture rather than as the sole grass.

Merion Kentucky bluegrass is too coarse. Common Kentucky is as good as any. The bluegrasses are slow starters but they improve with the season.

Two-Grass Combinations

For two-grass combinations, poa trivialis and seaside bent grass have provided good turf. The poa trivialis is best at the start. The seaside comes into its own during the latter part of the winter. Seeding rates have been in the range of 6 pounds poa trivialis and 3 pounds seaside bent per 1000 square feet.

Combinations of these two grasses with Kentucky blue and Pennlawn or creeping red fescue, alone or together, provide good playing turf. Some of the combinations have been 3 to 4 pounds Kentucky blue, 4 to 5 pounds poa trivialis, 8 to 10 pounds fescue and 2 pounds seaside bent per 1000 square feet. The cost is not much (Continued on page 70)
Davit Grass Seed will help you establish and maintain a better wear resistant turf. We offer only seed of the highest purity and germination. Our prices are right. Immediate shipment from large stocks.

R. A. (Dick) Bruns, Jr. (l), president of the Iowa GCSA and supt. of parks in Cedar Falls, presents the association’s annual contribution for turf research to John P. Mahlstede, head of the horticulture department at Iowa State. The contribution amounted to $3,500.

Winter Green Preparation
(Continued from page 46)

more because of the lesser amounts of seaside bent and poa.

In northern Florida, and farther north, some clubs like to use a little rye in addition to the poa trivialis and seaside. The purpose is to assure green grass during December and January. After that the other two grasses become aggressive. Best practice seems to be to seed with rye grass after the other grasses have germinated and started growth, a matter of two to three weeks. The seeding rate for rye is 20 to 25 pounds per 1000 square feet.

For Slopes and Aprons

Poa trivialis is superior to rye for overseeding aprons and slopes around the greens. It is better on tees for overall seeding and for use in the soil mix placed in divots. Poa trivialis was used on the 14th tee at Bel Air in Los Angeles. The seeding rate was 4 pounds per 1000 square feet. Seeding was in November. There was considerable poa trivialis left in this Tiffgreen (328) tee on July 10. Golfers were pleased with the turf on this tee.

Costwise the use of poa trivialis is no more expensive than rye grass. Nine pounds of poa contains as many seeds as
93 pounds of rye seed. Pre-seeding fertilization, seed bed preparation and subsequent care until the seedling grass becomes well established are the secret of success with overseeded winter grass.

Nitrogen Held Back
When rye was used the best fertilizer practice was to use phosphate and potash liberally before seeding, and wait with nitrogen until after the rye started growth, or about three weeks after seeding. Additional nitrogen makes seedlings more succulent and increases the danger of loss from damp-off diseases.

The seed of other cool season grasses is much smaller so seedlings need nitrogen right from the start. This is especially true of bentgrasses. Organics can be used to bulk the seed. Their nitrogen will be released as needed by the young grass. Where soluble fertilizers are preferred, their use should start soon after seedlings merge. The use of a good fungicide, capable of preventing pythium type of damp-off fungus disease, is recommended before seeding, and weekly thereafter if the weather is hot and humid.

Seed bed preparation is very important. Opinions differ as to the best method. Aerifying should be finished three to four weeks before seeding. A tufted growth occurs when greens are aerified just before seeding. Seedlings grow much faster in the aerified holes. Spiking does the same thing unless spiking is done enough times to prepare a very good seed bed.

Purdham's Method Explained
Harry Purdham at Pine Tree in Florida cross mows the greens with the mower set to cut very close. Then the verticut is used twice, crosswise the second time. The verticut reel contains double the number of knives. Purdham substitutes washers for the original spacers to accomplish this. The debris is removed with a Springfield sweeper. Fertilizer is applied and seeding is in several directions to insure even distribution. Then the green is matted with a flexible steel mat and seed is covered with a top-dressing.

Others aerify or spike, fertilize and top-

WANTED:
PRO SHOP DISTRIBUTORS

We’re expanding, spearheaded by a special “Tony Lema Promotion”, and need golf pro shop distributors to handle our exclusive line of men’s and boys’ Jockey sportswear, underwear, sweaters and hosiery. Let us know if you are interested.

CONTACT:
A. F. Eisenman, Golf Pro Sales Division,
2318 60th Street, Kenosha, Wisconsin

August, 1964

Jockey MENSWEAR
AT LAST
A COMPLETE
TROPHY PROGRAM
THAT MAKES YOU
MONEY
Send NOW for
FREE
GOLF PRO
CATALOG

AT LAST
A COMPLETE
TROPHY PROGRAM
THAT MAKES YOU
MONEY
Send NOW for
FREE
GOLF PRO
CATALOG

AMERICAN TROPHY
AND AWARD CO.
823 So. Wabash
Chicago, Ill. 60605 WElbster 9-3252

“REGULATION”
FIBERGLASS FLAGPOLES
• Flexible • Low maintenance
• Lightweight • Last for years
• Non-corroding • Economical
Available in 5, 6, 7, and 8’ lengths.
Up to 12’ on request.
Molded fiberglass in permanent white or yellow and striped with red or black. Long-lasting metal base and aluminum top assembly secured by galvanized all-tite swivel.

ALUMINUM TEE MARKERS
Made from aluminum alloy for durability and weather resistance. Numbers available, 1 thru 18.

See your local dealer or write for complete catalog.

Wright Garrett, U. of Houston representative, who is holding the trophy, beat Dave Eichelberger, who is holding the platter, in the final of the 61st Trans-Mississippi Amateur in early July at Broadmoor GC in Colorado Springs. Garrett won a 3 and 2 decision over the 36-hole route. At left is D. P. Stephenson, president of the Trans-Miss GA. Also in the photo is Dow Finsterwald, Broadmoor’s head professional.

dress generously about a week before seeding. Another light top-dressing is applied to cover the sod. It is important not to use too much topdressing then because a heavy dressing buries the small bent grass seed so deep that much of it does not become established.

Water management after seeding is extremely important especially when the weather is windy or hot. It is very important to keep the surface soil continuously moist, but not wet until the seedling grass becomes well established. This way requires light showering four to five times daily, seven days a week, for the first couple weeks. On a windy day, seedlings can wither and die in a matter of a couple of hours if the soil becomes dry. This has been the cause of grass failure in too many cases. Many supts. prefer to water by hand, using a rose nozzle, for the first couple of weeks, then changing to regular sprinklers after the seedling grass is off to a good start.

PGA Championships

Sites for the next three PGA Championships already have been selected. Next year the Championship will be played at Laurel Valley in Ligonier, Pa. In 1966 it goes to Columbine CC, Littleton, Colo, and in 1967 to Firestone in Akron.