Northrup King announces the latest breakthrough in heart research:

Medalist® 5 Overseeding Formula.

The heart of any golf course is its greens, especially during the winter overseeding months. Greens are critical to a quality course. Yet, they're easily the most difficult part of the course to establish and maintain.

Since 1968, Northrup King research has led the way in solving this problem for Southern superintendents with Medalist Brand formulas—the best line of winter overseeding blends available. Medalist 5 is our latest breakthrough.

It's a carefully formulated and play-tested blend of improved fine-leaved perennial ryegrasses. In Medalist 5, Pennfine Perennial Ryegrass is combined with Eton, Pelo and Derby to give you rapid establishment, excellent mowing qualities, good transition characteristics and exceptional reliability.

If you have problems with the heart of your course (or aprons or tees), talk with your Northrup King man. He'll diagnose your problem and prescribe the right formula for your needs.

For more information, write:
Medalist Brand Formulas,
Northrup King Co., P. O. Box 959,
Minneapolis, Minnesota 55440.
During the past two years our South Florida Golf Course Superintendent's Association has undergone a major shift in direction and priorities. Tom Burton assumed the President's Role when we were at a crossroads. He chose the right path and our membership felt a strong comradery developing. When Leroy Phillips was elected President he brought to our Board of Directors a quiet, forceful leadership that produced many innovated changes in our bylaws and a unified Board that worked for the betterment of our Association.

We are now to the point that each member must be actively involved in our Association. Throughout the history of our country people have discovered that only through unity can their goals be achieved.

With this in mind my theme for the coming year will be “Bring Us Together.” Your Board is already actively working on ways to have 100% South Florida Golf Course Superintendents as members and 100% participation of members in Association activities. Along this line I would urge you to read the poem on page twenty-one.

I am enthusiastic about the coming year and look forward to working with each of you.
The South Florida Green
The Official Bulletin of the South Florida Golf Course Superintendents Association

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COVER PHOTOGRAPH
By Harry McCartha

7th Hole, Seminole Golf Course, North Palm Beach, Florida (Note: ocean to rear of green)

NOTICE: All correspondence concerning business matters, circulation, editorial and advertising should be addressed to the Editor, 7521 N. W. 12th Street, Plantation, Fla. 33313. Opinions expressed by writers in by-lined editorials are not necessarily those of this publication. "The South Florida Green" is published quarterly; the 1st of January, April, July, October. Closing date for advertising and copy is 45 days prior to publication. Not copyrighted. Please credit the author and "The South Florida Green."
OVERSEEDING - THE CHALLENGE IS YOURS

By SAM E. ELLINGTON
Northrup, King & Co.

Overseeding is a challenging experience. The advent of superior fine-leaved grasses in several species makes it possible to tailor-make your green into the type of putting surface you desire, and one that will make the members proud that you are a part of their organization.

Prior to the 1950's, selecting a grass for overseeding was not very difficult. The question was more of whether to or not to overseed. Annual ryegrass was the standard overseeding grass at that time. Annual ryegrass emerged and established quickly, but possessed several negative characteristics. It has disease problems, a coarse texture, adverse reaction to cold weather, and unpredictable transition.

The 1950's brought a new era to overseeding. Tests were conducted using the fine seeded grasses, Poa Trivialis, Kentucky Bluegrass, Bentgrass and fine leaf Fescue. The selection of grasses became more difficult, but with it came an opportunity to establish a better putting surface than was possible before. Several problems existed. Some of the varieties available at that time were susceptible to disease; therefore, did not persist, leaving an inferior turf for the duration of the season. They were susceptible to wear, and transition remained a problem.

The early 1960's brought challenges to researchers to discover or develop grasses that would be fine-leaved and possess the qualities required for superior putting surface, but yet be dependable during establishment, as well as throughout the season. The Northrup King research staff accepted the challenge. New type narrow-bladed perennial ryegrass varieties were found to possess qualities that meet the needs and expectations of many superintendents and golfers alike. These varieties, NK 200, Pennfine, Eton, Pelo, and NK 100, in addition to being fine textured, have the rapid, dependable establishment characteristics of annual ryegrass and the putting qualities of many of the fine seeded grasses. The varieties have also been found to have a high degree of resistance to Pythium and Dollar Spot when well established. Also, Koban seed treatment aids the seedlings to establish. These varieties are tolerant to cold weather, resist wear and have excellent transition characteristics. Their color is extremely attractive.

(Continued on next page)
OVERSEEDING (Continued)

We at Northrup King have been working with the other species, as well. We have been testing the small seeded grasses to find varieties which are more dependable, enhance the beauty and putting quality of the courses, and further enhance the superior turf qualities of our fine leaved perennial ryegrasses.

Research by Northrup King, University experiment station personnel and golf course superintendents using these superior varieties alone and in combinations have determined the best formulations for superior putting quality and persistence. From this information, we have now developed five formulas to provide grass combinations to meet every golf course need.

Our Medalist 2 formulation has been on the market for several years. It has been improved by the inclusion of Pennfine, along with NK 100 fine textured ryegrass. Used on hundreds of golf courses, Medalist 2 has provided an excellent putting surface along with good color and high traffic resistance. Koban treatment is applied to the seeds to prevent Pythium damage during germination and the first week of establishment.

Medalist 5 formulation combines the high quality, disease resistance, and good mowing characteristics of four fine textured perennial ryegrasses. Golf course results show Medalist 5 produces a better turf than any single variety when seeded alone.

Three formulations using fine textured ryegrasses in combination with other grasses identified by our research as improvements for overseeding have been recently introduced. These formulations have been developed for other geographical locations.

The new grasses used in these formulas offer greater reliability and persistence, plus unique qualities of their own which makes them desirable over the older varieties of these species.

The new grasses used in these formulas offer greater reliability and persistence, plus unique qualities of their own which make them desirable over the older varieties of these species.

Dawson Red Fescue is a pleasant surprise. It has proven to be much more persistent than Pennlawn Red Fescue; has better color and leaf spot resistance. In addition, its stiff, upright blades make for excellent putting quality. This is probably the most reliable of the fine fescues now available. Atlanta chewings fescue provides added density and increases the adaption of the formulas.

Prato Kentucky Bluegrass complements the other grasses in their growth characteristics. Like other bluegrasses, Prato reacts positively to warm seasons and provides extra cover and turf quality under these conditions. In addition, it offers a beautiful color and uniform growth not available from most bluegrasses.

Seaside Creeping Bentgrass was selected because we have not seen any other varieties which will do a better job to date. Basically, it adds security to spring transition. Only a small quantity is needed for this purpose.

Medalist 200 provides the fine fescues Dawson and Atlanta for their putting characteristics and longevity through the winter. Pennfine and NK 100 fine textured ryegrasses, plus an adequate amount of Seaside Bentgrass completes the formula, well adapted to courses 100 miles inland from Virginia to Texas.

Medalist 300 combines the rapid establishment characteristics of Pennfine and NK 100 with the fine turf characteristics of Prato Bluegrass along with a limited, but adequate amount of Seaside Bentgrass. This formula has been developed mainly for courses in Tennessee and Virginia.

(Woodbury Works for You! (Continued on next page))
OVERSEEDING (Continued)

Medalist 400 is formulated with Pennfine and NK 100 fine textured ryegrasses in combination with Dawson and Atlanta fine fescues. A tough, yet fine textured turf for full season play results from this thoroughly tested combination of improved grasses. Developed for courses in coastal areas from northern Florida to North Carolina.

New grasses, new equipment, and up-to-date research have made it possible to have overseeded greens superior to anything ever before possible. Add good overseeding procedures and good management to superior grasses and we can develop a superior putting surface.

Here are a few tips that may be helpful in your overseeding program:

Overseeding begins with the decision of time of overseeding. The correct time to overseed varies with geographical location. Overseeding should be done about four weeks prior to the first frost in the fall. This date may have to be altered a week to ten days either way due to tournament play, apparent weather conditions, or some other reason.

The greens should be aerified six weeks prior to overseeding. Phosphorus and potash should be applied at that time using soil test recommendations. Also, decrease or withdraw nitrogen applications at that time.

Vertical mow in two directions, ninety degrees to each other four weeks prior to overseeding.

Do not mow greens on the day of overseeding. The larger grass will tend to hold seed in place. It will also give you more to play on if play must be resumed. Vertical mow in two directions, ninety degrees to each other and remove trash. Seed greens, using fungicide treated seed. Apply seed in at least two directions and rag mat seed into grass and onto soil exposed by vertical mowing. Apply about 1/8 inch fumigated top dressing. Drag topdressing into grass, being careful not to disturb the seed. The drag mat will cause less movement of seed when a burlap or carpet is placed under it.

Keep seed moist until all seeds have germinated and seedlings have emerged. The time required for the different grass species to germinate will vary depending on the species and temperature during germination. Frequency of watering is more important than having great amounts at any one time. Several short waterings per day are much more effective than less frequent heavy waterings.

Bentgrass, Red Fescue, and Kentucky Bluegrass all require longer time to germinate than do the fine textured perennial ryegrasses, therefore, when mixtures containing these grasses are used, one must keep grasses moist until all species in the mix have had time to emerge.

Start a fungicide program about a week after seeding.

Mow when there is grass to mow. Use a sharp mower set at 3/8 inch cutting height during establishment. As grass thickens, gradually lower cutting height to 1/4 inch.

If faster greens are desired, a cutting height of 3/16 inch may be used during ideal conditions.

Warm weather during the winter months can cause problems with overseeded grasses. A general thinning or decline in stand in definite areas may occur. Care should be taken to avoid these conditions as much as possible. These are a few points that may help maintain quality turf during the entire season. Overseeded grasses have a shallow root system as compared to bermudagrass, therefore, frequent shallow watering will provide moisture for the overseeded grass without encouraging the bermuda too much. It will also help cool the surface. Raise the cutting height during warm spells and gradually lower it when conditions are more favorable. Fertilized only to maintain color. Avoid unnecessary spiking. Should the winter grasses thin, consider adding additional seed to keep a full stand. A better putting surface will result.

The winter months are challenging times of the year. We at Northrup King are proud to be a part of your success — through research, seeds, and ideas.
TUCCO Issues Grub Control Report

GRUB CONTROL IN TURF is the title of a new Situation Report just published by TUCCO, Division of The Upjohn Company. The report discusses the problems caused by soil-inhabiting insects such as white grub, billbug, Japanese beetle, European chafer, May beetle and others, and the means to control them.

Increased populations of white grubs in golf courses, home lawns and other turf prompted TUCCO to define the preventive measures that can eliminate infestations and develop a program of grub control.

Consulting entomologists for the book point out that knowledge of life cycles is extremely important in the control of these pests. The life cycle depicts times when the insect is most vulnerable to treatment. Since the residual of today’s insecticides is short, proper timing of application is more important for successful control.

Focus throughout the report is on recognition of life cycles, detection of insect problems, diagnosis, prevention and control procedures.

The book points out that observation and examination are the two prime requisites for successful diagnosis of problems caused by soil-inhabiting insects. Examination of the turf root areas showing signs of injury is the only way to determine if grubs are a problem.

Certain preventive measures can minimize the potential for damage from soil-inhabiting insect pests. These methods include sanitary practices, preventive insecticide treatments and maintaining vigorous turf.

Copies of the TUCCO Situation Report may be obtained by writing “Grub Control in Turf”, TUCCO Agricultural Chemicals, Division of The Upjohn Company, Department 9823-190-1, Kalamazoo, MI 49001.

COMING EVENTS

South Florida Golf Course Superintendents Association
October 10, 1978, Doral Country Club
Obtaining permits for White Amur aquatic weed control;
Woody Miley, Department of Natural Resources.

Florida Turf-grass Association
26th Annual Conference and Show; Oct. 15-18, 1978
Sheraton Towers Hotel, Orlando, Florida

Wisconsin Golf Course Superintendents Association
13th Annual Wisconsin Golf Turf Symposium;
Pfister Hotel, Milwaukee.
Information: Bob Welch (414) 764-2300.
As Florida Golf Course Superintendents know, the past three winters have played havoc on bermudagrass turf areas. The cold weather made keeping the bermudagrass in a playable condition during those winter seasons practically impossible. This situation, quite naturally, has further increased interest in overseeding our bermudagrass with cool-season grasses, which if properly cared for, guarantees a first-rate playing surface during that all-important, yet unpredictable (weatherwise) Winter season. This article deals with one key ingredient to the entire overseeding recipe — DISEASE CONTROL.

All of our turfgrass choices for overseeding (perennial ryegrass, annual ryegrass, bentgrass, fescue, and blends of the same) are susceptible to attack from certain disease organisms, particularly *Pythium* spp., which can devastate turf in a day's time; and also *Helminthosporium* leaf spots and *Rhizoctonia* brown patch and damp-off which can cause serious turf loss before and after overseeding. Our overseeded grasses, although susceptible in all stages of their development, are even more susceptible to the *Pythium* during their seed and seedling stages.

Turf areas of major concern for Winter overseeding are greens, aprons, and tees. The time period for overseeding varies, depending on latitude, from late September to early November. Maintenance programs prior to overseeding also vary depending on the experiences and preferences of each Superintendent, but generally include reducing fertilization and verticutting. The complete disease prevention program must be concerned with disease occurrence before as well as during and after the overseeding operation.

The growth rate of the bermudagrass declines prior to overseeding due both to cooler weather and the preoverseeding operations we just mentioned. This decline in growth rate increases the susceptibility of the bermuda to disease, primarily *Helminthosporium* leaf spot and *Rhizoctonia* brown patch. The decline in growth rate also accentuates the severity of these diseases, when present. Bermudagrass plants can be reduced or severely injured by these organisms, which can also inhibit or delay regrowth in the Spring. Additionally, each organism, if not checked, can increase in its prevalence in the turf area. With *Rhizoctonia*, this means an increase in disease activity at the time of overseeding, during seedling emergence, and to the established turfgrass stands of blends/mixtures. A fungicide application made 14 and 7 days prior to and again at overseeding (as the last operation) helps reduce the incidence and prevalence of both *Helminthosporium* and *Rhizoctonia*. These applications (Continued on next page)

Protect Overseeded Greens From Pythium Damage—
SPRAY TERSAN® SP

Pythium can destroy your greens in a matter of days if you're not careful. But you can prevent pythium damage by spraying TERSAN® SP properly. TERSAN® SP is safe to use, gives effective, economical control, and is non-phytotoxic. Plus, TERSAN® SP is very easy to use.

Prevent Dollar Spot Damage with TERSAN® 1991 & TERSAN® 75

Spray TERSAN 1991 in combination with TERSAN 75 to prevent possible development of tolerant strains of dollar spot.
protect not only the bermudagrass, but also the overseeded turfgrasses. Effective fungicides to use for this purpose include “Tersan LSR Turf Fungicide,” “Fore,” or “Daconil 2787.” Of particular interest is a combination treatment several Superintendents have put together using “Tersan 1991 Systemic Turf Fungicide” with one of the aforementioned products; the combined action of systemic plus contact activity appears to be giving significantly more complete control and prevention.

Regardless of the grass specie used for overseeding, the disease prevention program would include either using seed treated with ethazole (“Koban” or “Terrazole”) or drenching the area with this fungicide immediately after seeding. Use of a sterilized topdressing soil mix is also important to disease prevention efforts. Following seedling emergence “Tersan SP Furf Fungicide” should be applied to prevent turf loss from Pythium damping-off (“Tersan SP” may be used on newly emerged seedlings without danger of injury.)

Throughout the October to April overseeded period, Pythium blight can occur anytime night temperatures remain above 68 degrees Fahrenheit and day temperatures are 80 degrees Fahrenheit or higher. The higher the day temperature (up to 90-95 degrees F.) the more rapidly Pythium blight will develop. Repeat applications of either “Tersan SP” or “Koban” will prevent or check Pythium disease development during these favorable weather conditions. Other diseases, i.e. Helminthosporium spp. and Rhizoctonia brown patch, can be controlled with the same products outlined for these pathogens on the bermudagrass prior to overseeding. An added benefit in controlling Rhizoctonia damping-off and brown patch diseases may come from using “Tersan SP” for Pythium control. “Tersan SP” is the only turf fungicide for Pythium that also has good activity on Rhizoctonia.

Summarizing, here is when disease prevention is needed to protect your investment:

Before:
- Fungicide applications 14 and 7 days prior to and as the last operation of overseeding (to prevent the build-up of Rhizoctonia and Helminthosporium which would affect both the bermuda and overseeded turf)

During:
- Treated seed or chemical drench of seeded area (protect seed from Pythium)

After:
- Fungicide applications after seedling emergence (protect seedling from damp-off by Pythium and Rhizoctonia) and then on an as-needed basis (to check and prevent Pythium blight, Rhizoctonia brown patch, and Helminthosporium leaf spot)

(Continued on page thirteen)
SUPER ideas...

★ About 1,000,000 Americans will have a heart attack this year.
★ 350,000 will die before they reach a hospital.
★ What measures are you taking to assist those stricken on your course?
★ Call your local chapter of the American Heart Association for information regarding training for your golf course personnel.

The first few minutes after a victim falls are critical to his survival. Your people can be trained to give life support until professional help arrives.

Shown above are photos made on August 22, 1978 at Aventura Country Club.

Six photos are of Helen Violette, R.N., Hollywood Memorial Hospital, Certified CPR Instructor. Mrs. Violette was assisted by Tom Banks, EMT, and Don Perdue of Hollywood Fire & Rescue.

21 members of Aventura Country Club Golf and Grounds Maintenance participated in CPR training and were given tests to qualify as Heartsavers.

All greed the intensive training was well presented and valuable.
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SEED SPREADER CALIBRATIONS

Calibrating the seed spreader is an essential part of any seeding operation. Below is a simple method which can be used for either rotary or drop-type seed spreaders.

STEP 1.
Fill the spreader with seed.

STEP 2.
Operate the spreader over a known distance.

STEP 3.
Catch seed in a collection pan and weigh the contents. If a collection pan is not available, operate the spreader over a smooth clean concrete floor, sweep up the seed and weigh it.

STEP 4.
Measure the width of area on which the spreader evenly distributes seed and multiply times the distance traveled. This gives the number of square feet the seed has been applied to.

STEP 5.
To compute, set up a proportion and solve.

Readjust the spreader and repeat same process until desired application rate is obtained.

EXAMPLE

Spreader width is 3 ft. and travels 50 ft. Area of coverage equals 150 sq. ft.

If spreader distributes 5 pounds of seed for each 150 sq. ft., how many lbs. of seed would be distributed on 1,000 sq. ft.?

\[
\frac{5}{150} = \frac{X}{1000}
\]

\[
150X = 5000
\]

\[
X = 33\frac{1}{3} \text{ lbs. applied/1000 sq. ft.}
\]

CHEMICALLY SPEAKING (Continued)

Managing turf is an unbelievably demanding profession, but the satisfaction obtained from creating a beautifully manicured turf area makes the effort worthwhile. When that look is created under adverse conditions the satisfaction is intensified. Overseeding for the Winter season is one challenge that can return that satisfaction. Making disease prevention a basic segment of the overseeding plan goes a long way toward assuring success as well as protecting the investment. This is the year to overseed, help assure success through careful planning and execution of the entire overseeding operation — before, during, and after.

1Turf and Ornamental Development/Sales Representative, Eustis, Florida, and Development Representative, Wilmington, Delaware, respectively, E. I. duPont de Nemours and Co. (Inc.), Wilmington, Delaware.
This photographic report by Harry McCartha shows participants in our Association Meetings.

July meeting, Atlantis Golf Club, Atlantis, Florida. Top left: President Emeritus Leroy Phillips. Leroy has accepted the big job of Educational Chairman for this year. Center top Past President Joe Konwinski a tireless worker for many groups. Far right, Mr. Ed Somerville, Greens Chairman Atlantis Golf Club.

In the group to the left we show participants in our July Educational Program. Left to right: Ken Klein, Service Manager Hector Turf and Garden; George Healy, Equipment Manager Woodlands Country Club; Tom Burton, Program Chairman, Coral Ridge Country Club; Garry Foote, Service Manager Debra Turf Equipment; Joe Yuzzi Superintendent Woodlands Country Club and Program Moderator. Far right, Dale Alexander in charge of equipment at Pine Tree Country Club.

Our August Meeting was held at Country Club Aventura where our new President Dan Jones is Superintendent. Our Educational Program was moderated by Tom Mascaro, shown far left, bottom of page. To Tom's right we show Dick Schreiter, Landscape Designer; C. L. Murphy, Club and Grounds Maintenance; and Dan Jones, C.G.C.S., Country Club Aventura.

About one half of those in attendance toured the club's nursery area while most of the others played golf in the afternoon.
Tips on Interpreting a Ryegrass Seed Tag

By: Dr. William Meyer  
Turf Seed, Inc.

In accordance with state and federal regulations, lots of grass seed must be labeled prior to shipment. Below is a typical seed tag of Oregon Grown Ryegrass and an explanation of each item on the tag:

1. & 1a.) The name, weight and percentage of the kind or kinds and variety for each seed component present in excess of 5 percent of the whole must be on the tag. Mixtures are those lots having more than one component consisting of 5 percent of the lot. The pure seed percentage consists of pure whole seed plus pieces of broken or damaged seed that are larger than one-half of the original size, plus seeds that have started to germinate and multiply florets containing viable seed.
2.) The lot number is that number given to a lot in the warehouse where the seed was originally cleaned or where it was last blended.
3.) The origin must be stated for each agricultural variety present in excess of 5 percent.
4.) Crop seed would be percent by weight of agricultural seeds other than those stated in No. 1 that are considered crop seeds unless recognized as weed seeds by applicable laws. The crop seed involved could be, for example, Kentucky bluegrass or fine fescue.
5.) Percent by weight of inert matter would include pieces of broken or damaged seed one-half or less the original size of seed of the other crop or variety, straw pieces, soil particles, or any other foreign matter.
6. & 6a.) Weed seeds are those seed bulblets, sporocarps or tubers of plants recognized as weed seeds by laws or regulations. Kinds of noxious weed seeds and rate occurrence per pound must be expressed in accordance with, and not to exceed, the rate allowed by laws and regulations of the state in which the seed is offered for sale. The seeds considered noxious varies from state to state. This particular lot has 0.5 percent rattail fescue so that no noxious weed would be stated on the tag because rattail is not considered as an objectionable weed in any state.
7.) The net weight of the seed package must also be stated.
8.) For all agricultural seeds in excess of 5 percent of the whole, a germination percentage must be stated along with the calendar month and year of the test. Usually 400 seeds of perennial or annual ryegrass are used for the germination test.
9.) A fluorescence percentage should be included in perennial and annual ryegrass lots. The fluorescence test was discovered by Gentner, 1929. He found that typical annual or Italian ryegrass (Lolium multiflorum) when germinated on white filter paper secreted a substance which showed fluorescence or flow under ultraviolet light. Most of the improved turf type ryegrasses were released as varieties with 0 percent fluorescence by their breeders. When a lot of ryegrass variety, which was released a 0 percent fluorescent shows a fluorescence percentage this is an indication of annual ryegrass contamination or the result of hybridization or outcrossing. The two percent on this tablet would indicate that 2 percent of the stated 96 percent of perennial ryegrass is actually annual ryegrass of a hybrid of annual and perennial. The present laws do not require the stating of this 2 percent as other crop, nor do they require that the percentage of fluorescence be shown on the tag.
10.) The test date is the date on which testing is done.
11. & 11a.) A name and address of the person to whom the seed is sold or shipped for resale must also be stated along with the name or Consumer and Marketing Service number of the shipper.
Meet Our New Board of Directors

This photograph was taken at our July Association Meeting. Shown left to right: Dick Lemmel Superintendent Doral Country Club; Fred Klauk Secretary-Treasurer, Superintendent Pine Tree Country Club; Phil Amman Superintendent Bonaventure Country Club; Alan Weitzel Metro Dade Golf Courses; Tom Burrows Superintendent Turtle Creek Country Club; Dan Jones, C.G.C.S. New President S.F.G.C.S.A., Superintendent Country Club Aventura and Immediate Past President Leroy Phillips of General Development Corporation Properties.

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Southern Golf Course Winterseeding
New Perennial Ryegrasses Make The Difference

RICHARD H. HURLEY
Director of Research, Lofts Pedigreed Seed

Not only are the tourists coming southward in droves these days, but so also the new polycross perennial ryegrasses that accommodate them so well on the leading southern golf courses. Newly bred cultivars like Yorktown II, Diplomat and Derby make all the difference.

Some superintendents lament that the new ryegrasses are "too good," - that they don't fade away to allow early, easy spring transition. Probably this is because of limited experience, for the polycrosses have been widely utilized in the South only in recent years (winterseeding lore has been built, rather, upon experience with intransigent annual ryegrasses, and common perennial pasture types). What with all of the technical assistance at hand these days, low mowing, thinning, even chemical growth retardation, would seem efficient avenues to graceful exodus at spring transition.

No question, however, but that the new breed of perennial ryegrasses is more tolerant of disease, leafier and denser, probably more resistant to wear and desiccation, than were the ryegrasses of yesteryear. These are turfgrass virtues of a kind with which superintendents love to cope. And cope with them they can, primarily through adjusting fertilization, revising irrigation schedules, and introducing modified mowing-thinning practices. While no two winters are exactly the same, I have no fear that today's versatile turfgrass manager will quickly learn to orchestrate a ryegrass fade-away and bermudagrass revival quite comfortably, just when and as he wishes it to happen.

If that's the only "bad" news, the good news must be stupendous. And so it is, as has already been implied by the quality features mentioned. Consider that among other improved characteristics the modern perennial ryegrass shows bred-in disease tolerance, elegant texture, excellent color, abundant tillering, unusually short sheathes and consequent decumbent growth, reduced fibrousness for neater mowing, etc. Compared to the older pasture ryegrass the turf-type polycrosses are as a cadillac sedan would stack up against a pick-up truck. It's a matter of specially-bred refinements, but refinements without sacrifice of perennial ryegrass' inherent quickness and responsiveness. You still get that fast, easy start and competitiveness. By way of example, table I lists some of the newer perennial ryegrasses, cited by the Lawn Institute's Variety Review Board, compared to common ryegrass. Several may be blended, such as Loft's Marvelgreen for polystands containing Yorktown, Yorktown II and Diplomat. Yorktown II and Diplomat also have been quite successfully combined with Jamestown Chewings fescue in mixture; the fescue component contributes to later-season density and putting quality, while sacrificing none of the early-season density and putting quality, while sacrificing none of the early-season advantage that comes from the ryegrass.

(Continued on next page)

No. 1. Putting green overseeding with Manhattan Perennial Ryegrass, Jamestown Chewings Fescue mixture 60%/40%.
WINTERSEEDING (Continued)

Winter Performance Ratings (0-10, high is best)

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Table I. Modern perennial ryegrass cultivars on the Lawn Institute's Variety Review Board acceptance list (most of them polycross originations) compared with annual ryegrass and "pasture-type" perennial. Differences between elite cultivars are seldom statistically significant, but all are quite superior to common and annual ryegrasses.

No. 2. Putting green overseeding with Yorktown, Perennial Ryegrass, Jamestown Chewings Fescue mixture 60%/40%.

But there are always hazards to be faced. A spell of warm weather (above the mid-70's°F.) can trigger demise of seedling grass from Pythium disease, wiping out a juvenile stand. Much of the seed sown these days is treated with fungicide to provide partial protection against damping off. Some superintendents practice disease protection before overseeding, as with a preventive Captan spray, and if weather remains warm may spray weekly with a Pythium specific fungicide such as Koban or Tersan SP.
USS Tee-Green 16-4-8...
When you want uniform particle size we can deliver!

When you apply USS Tee-Green 16-4-8 to your tees, greens and aprons you’re assured that’s where it will stay. There’s no need to worry about mower pickup because the uniform particle size (90% minus 10 + 20 Mesh U.S. Sieve) means the granules will work their way quickly down through the grass to provide a consistent and even feeding.

Of course this is just one of the advantages of this great product. Your local USS Vertagreen distributor can tell you much more about the advantages of nitrogen derived from urea-formaldehyde, the chelated iron, sulfate of potash and the guaranteed amounts of secondary and micro-nutrients in this fine product. USS Tee-Green is another reason we say, “see the best, for the best” — and that’s your local Vertagreen distributor. He can always deliver.

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Randy Bowden, Punta Gorda, Florida ............................. 813 625-4587
Terry Ragan, Altamonte Springs, Florida .......................... 305 862-8549
Phillip Huff, Clearwater, Florida ..................................... 813 461-4386
Larry McCort, Sunrise, Florida ..................................... 305 741-6661
Pythium problems and stimulate the bermudagrass, but should receive usual rations (at a rate of about one pound of nitrogen, at least partially "gradual release," each 2-4 weeks depending upon climate and custom) as seedling grass develops and weather chills. Fungicidal and insecticidal sprayings may or may not be needed, in keeping with local conditions. Other attentions will conform with local needs and customs.

WINTERSEEDING (Continued)

The newer, elite cultivars, can be sown at more modest rates than was formerly recommended (generally 35-40 lbs./1,000 sq. ft., compared to 70-80 lbs.). Also, establishment of wintergrass seems can be accomplished with a lot less bother than was once thought necessary. Probably not all that much scarification, topdressing and so on is really necessary if watering can be controlled. Still, successful sowing of wintergrass into a golf green as the bermudagrass fades seasonally, is not to be treated lightly. It requires no little preparation, and certainly can be helped out by a little luck with the weather. Basically, the steps followed are these, although each superintendent will have his pet procedures adapted to the local climate and conditions:

1. Thin the bermudagrass (typically Tifgreen or Tifdwarf on golf greens) and prepare a receptive seedbed. Close mowing (scalping) is initiated prior to scheduled overseeding, the clippings removed. A preventive fungicidal treatment could be helpful. Thinning or scarifying machines are run over the green at least twice in checkerboard fashion at time of seeding, set deep enough to bite lightly into the soil. Some authorities advise a preliminary thatch-thinning scarification a week or two before overseeding, more thorough treatment at time of seeding. Material loosened should be swept or vacuumed so as not to interfere with uniform seed dispersal.

2. Distribute seed of high quality. Seed free from weeds and of known genetic identity is uniformly sown with a carefully calibrated mechanical spreader. It is typically matted or brushed-in, followed by a light topdressing (two or three millimeters deep) with the usual greens soil. Seed from a reliable source purchased by cultivar name will be of high quality, free from troublesome weeds (even a new cultivar of Poa trivialis, Sabre, is now available free from offending Poa annua and shepherd's purse such as often came with imported seed). Perennial ryegrass is usually sown about 40 pounds to the 1,000 sq. ft., Chewings fescue such as Jamestown maybe 30 pounds, rough bluegrass (Poa trivialis) perhaps 12 pounds, and bentgrass maybe only 3 pounds.

3. Irrigate faithfully. Whatever the sowing techniques, gentle irrigation afterwards will tell the tale insofar as getting a stand quickly is concerned. After an initial soaking, light, uniform syringings should follow frequently enough so that the microenvironment where the seed resides never completely dries out. Depending upon the weather, syringing may be in order several times during the day (or even on an hourly basis, briefly, if automatic apparatus can be set for this). Within a week or ten days ryegrass usually will have sprouted (Poa trivialis is almost as rapid, and fescue only slightly slower; bluegrasses and bentgrasses are somewhat delayed).

4. Initiate greens-height mowing. Some superintendents prefer letting the ryegrass attain slightly higher than permanent stature initially, to allow fuller foliage and more advanced tillering before lowering cutting height to the customary quarter-inch or less. Of course greens kept in play during overseeding establishment probably will be mowed at conventional height continuously.

5. Look to aftercare. Greens with adequate residual fertility should need no fertilization at time of overseeding (excessive nitrogen in warm weather could accentuate

No. 3. Pennlawn Red Fescue, Jamestown Chewings Fescue comparison. Note the vigorous tillering of Jamestown.

EDITOR'S NOTE: Mr. Hurley is presently Director of Research for Lofts Pedigreed Seed, Inc. He has a Bachelors and Masters Degree in Plant and Soil Science from the University of Rhode Island, and is presently working towards his Ph.D. at Rutgers University.
We Present...

Another Turf-Grass Grant

Once again your Association is able to give a $500.00 Grant for Turf Research, this time to two members of the O. J. Noer National Foundation, Joe Yuzzie and Charlie Mascaro. Tom Burton seated on far left watches intently as Phil Amman passes the check through a "maze of hands." Seriously though we're proud to help and Charlie matched our efforts with his check to the Noer Foundation, also.

I WANT TO BE YOUR FRIEND

I see you at the meetings; but you never say hello,
You're busy all the time you're there, with those you already know.
I sit amongst the members and yet I'm a lonesome guy;
The new ones are as strange as I, but you old members pass me by.
But darn it, you folks asked us in, and talked of fellowship,
You could just step across the room, but you've never made the trip.
Why can't you nod and say hello, or stop and shake my hand; then go and sit among your friends, now that I'd understand.
I'll be at your next meeting, perhaps a nice time to spend;
Do you think you could introduce yourself? I want to be your FRIEND.

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You are Really busy!

... and so are we, happily working at our regular endeavors publishing this magazine in our "spare" time. We do not have a professional staff but we try to make "The South Florida Green" a bit better each quarter.

Much material is available to fill our pages ... we just think we should tell more about our South Florida members. We'll write the articles, we'll take the photographs ... all you do is drop a note or give us a call. As you go through your daily work look for things our readers would like to share. They'll thank you and so will we! Together we can improve this magazine.

Staff Members — "The South Florida Green"
Did You Know?

Grass seed is dormant for 3 or 4 months after harvesting. Winter’s cold temperatures rearranges chemicals in the seed so it will germinate at the right time the following spring. It’s nature’s way for protecting the seed for perpetuation of our grasses.

Oregon grown grass seed has 7 percent more pure, live seed than those grown in any other climate.

One year’s production of Oregon ryegrass planted to pasture would graze beef cattle that would produce 6 billion pounds of meat.

Grass seed will germinate much better with warm days and cool nights and when the temperature variation is from 85 degrees F. down to 55 degrees F.

More water is not necessarily a cure for brown grass. If lawn grass is ailing from disease, additional humidity may actually aggravate the sickened turf.

Because grass flowers are wind pollinated, they have no need for bright colors, fragrance or honey to attract bees or other insects.

Facts About Ryegrass Seed

Lawn grasses grown even in winter though they seem dormant. Roots will lengthen while the soil is not frozen.

Oregon’s annual Tall Fescue production would plant more than 450,000 acres to grass forage.

Grasses, unlike trees, shrubs and flowering plants do not grow from the tip. Instead, they elongate from the abbreviated stem. Thus grass can be mowed without hurting new leaf formation.

Oregon produces 217 million pounds of Annual and Perennial Ryegrass each year.

700,000 acres of Orchardgrass will support a number of dairy cows that would produce 3,000,000,000 quarts of milk during one year.

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The Safe-T-Lawn Rise-N-Rain 800 Series, the Turf Giant, provides an unequalled combination of performance, features, and cost. With net prices beginning at just $48.75, the 800 Series is the most economical of large turf pop-ups. It has been engineered for commercial use and designed to handle large areas easily and effectively. Models of the 800 Series are available to provide even water distribution at up to 247" diameter at 147 G.P.M. and can be installed on 90'-100' centers.

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If you’re in charge of maintaining a golf course or other large playing surface, the Turf Giant is for you. It’ll save you time, money and effort. If you’re designing a new irrigation system, you’ll find the Turf Giant will require fewer heads to meet your watering objectives.

To discover how you can take advantage of these money-saving features, call DeBra Turf. We’ll be happy to show you the Turf Giant and help you plan your installation. Don’t delay…Do it today.
Seminole Celebrates Golden Anniversary

Seminole is a seaside links course of the finest tradition. Opened in the fall of 1929 there have been few changes from the original work of architect Donald Ross. Seminole is a private club located near Juno Beach, 15 miles north of Palm Beach.

Bill Whitaker is the golf course superintendent. After a career in the Air Force, Bill attended Lake City Junior College obtaining a degree in golf course operations. Before coming to Seminole in April 1977, he was the superintendent at neighboring Lost Tree Club. Bill is not only a competent superintendent but a good golfer. In 1968 he won the National Left Hand Golfers Association Amateur in Washington, D.C. He is currently a three handicapper. The other department heads at Seminole are Jerry Pittman, golf professional; and Karl Brandon, club manager. The greens committee chairman is George Coleman and the club president is Allan A. Ryan.

Seminole is built on first and second line dunes, giving it terrain features seldom seen in Florida. The vistas overlooking the Atlantic Ocean are unique to Seminole. The ocean wind daily changes the way the course plays. The tropical palm and ficus trees are beautifully placed around the 189 huge and deep sand traps. The fast greens are elevated and make the contours putt to their fullest. The turf on the greens is Tifgreen and the fairways are Ormond Bermuda. The greens will not be overseeded this winter. Ben Hogan has called the 6th hole the finest par 4 in the world. Many people consider two other par 4's more difficult to par. And that is just on the front nine!

Golf Digest rates Seminole in the top ten courses in the nation. Seminole is closed six months in the summer. Approximately 11,000 rounds are played each season. Seminole is one of the few places where you can score ten strokes over your normal game and still enjoy yourself. Because Seminole is Florida's most beautiful golf course, it is an honor just to play there.
Q. The greens at our golf course have been severely damaged during January and February the last two years. As a result, we have decided to overseed this year. What are recommended procedures and grass varieties?

A. You are in a common position with many other golf course superintendents in this part of the state. The last two winters have been somewhat colder than normal, but the previous six winters were much milder than the long-range average.

In the late 1960's more than half of the golf courses overseeded. After six mild winters less than twenty percent overseeding their greens. During this period many new courses were built and many new, young superintendents were running these golf courses who had never overseeded before. They had not had the opportunity to learn the "art" of overseeding through experience. The procedures or "art" of overseeding are even more important to the successful job than grass varieties.

Most golf courses presently overseed greens with one or more of the new, improved ryegrasses. These grasses are relatively easy to establish and maintain, and are seeded at rates of 25 to 35 pounds per thousand square feet. Ryegrass seed germinates within five days. Once the plants tiller out they are quite tolerant of traffic. Ryegrasses are usually seeded around the first week of December.

A few of the clubs that demand the finest quality putting surfaces use creeping bentgrasses at seeding rates from three to six pounds per thousand square feet. These grasses establish slowly, and are not very tolerant of traffic for the first two months, but will provide superior putting surfaces when properly maintained. Bentgrass are usually seeded the second or third week of November.

Preparation for overseeding should begin in the summer. Turf should be kept tight with a minimum of thatch. Greens should be aerified no later than six weeks prior to overseeding. Verticut greens lightly as necessary every 14 days and topdress greens to smooth surfaces in weeks prior to overseeding.

Four weeks prior to seeding fertilize with a low nitrogen, high phosphorous and potassium for fertilizer such as 5-15-15. Keep nitrogen low and bermudagrass on the hungry side.

Most clubs cannot afford to close the golf course more than one day to seed and the golfers will not tolerate unplayable greens. Therefore, much of the soil and turf preparation must be done gradually, before the time of seeding. We cannot get by with the old “scorched earth” method anymore.

Insects must be kept under control, greens should be weed-free and disease-free at the time of seeding.

The morning of seeding spike greens in at least four directions. Seed only after grass is dry and there is no wind blowing. Calibrate drop spreader (or cyclone-type) to apply half the seeding rate in one direction and half in another. Take care to prevent seed from dropping on collars. It may be necessary to use stakes and strings to insure perfect distribution. Clean shoes and all equipment before leaving green. Fertilize lightly with a slow release nitrogen material at seeding.

Topdress putting surfaces moderately with clean topsoil. Drag in with a hand matt with burlap cloth or carpet on the under-side to prevent dragging seed around. Keep matt on putting surface, do not pull off. Lift matt on and off of green.

Seeds should be coated with Pythium fungicide or a fungicide drench should be applied immediately after seeding. Water greens to wet seed and drench in fungicide with Fan-Type hand nozzles pointed up to minimize washing around of seed.

Keep greens watered every three hours between 10 a.m. and 5 p.m. for 14 days. Do not allow the top ¼ inch of soil to dry out or seedlings will be killed. It may be necessary to do some of the watering by hand.

Set mowers at 5/16” or slightly above normal cut. Bed knives and blades must be extremely sharp. Lap mowers daily. Delay first mowing as long as possible — 7 to 14 days if possible. Than mow every second day. Keep as long as possible until seedlings begin to tiller, at which time they can be gradually lowered to V4” or lower.

Apply pythium fungicide again seven days after seeding.

Apply a broad spectrum fungicide on regular preventative basis throughout the season and keep an effective Pythium fungicide on hand for use should this disease be spotted.

Begin normal fertilizing three weeks after seeding. Keep bermudagrass slightly hungry but maintain good color and growth rate in the cool weather.

You will find that your overseeding success will improve with experience. For this reason, I strongly recommend that you communicate very closely with a respected superintendent or other person who has had good experience with overseeding until you have mastered the “art” yourself.
Guest Editorial

"Communications" a term often used, sometimes misunderstood and many times not properly utilized. Each of us deals with many situations each day that only accurate and thorough "communications" will bring about the desired and correct result.

The 26th Annual Florida Turf-Grass Association’s Conference and Show to be held at the Sheraton Towers October 15th through 18th is an example of good "communications." The Conference program has been designed to "communicate" the latest technical knowledge of the Turf Industry, it has been structured to fit the individual’s need with a variety of subjects and varying levels of information. The conference is also the opportunity to "communicate" with fellow Turf Managers on an informal basis. The free exchange of ideas, problems and solutions can be invaluable for improving your golf course and your operation.

The Show part of the Florida Turf-Grass Association’s annual gathering is an opportunity to thoroughly evaluate products and services. The exhibitors are eager for you to ask questions and "communicate" in order to have a clear understanding of your requirements in products and their ability to fill the requirements.

Hopefully, everyone will avail themselves of the opportunity to improve their professional level and the level of the Industry by attending and participating in the Florida Turf-Grass Association’s Conference-Show October 15th through 18th in Orlando.
All water insoluble nitrogen (W.I.N.) fertilizers are not alike. Some are activated by soil bacteria. Others by temperature. But IBDU® (31-0-0) and PAR EX fertilizer mixes with IBDU are activated very slowly by soil moisture. Nitrogen is released at a controlled, even rate that can’t be hurried by high temperatures or excessive moisture.

It’s important on high maintenance turfgrass to control the level of nitrogen feeding. Excessive bursts of nitrogen can be a greater problem than a nitrogen deficiency. Custom formulated to exacting specifications of the professional turfgrass manager, IBDU and PAR EX fertilizer mixes with IBDU provide a controlled level of nitrogen nutrition that stimulates root growth, shoot density, rich green color and improves overall plant hardiness. Let water insoluble IBDU (31-0-0) and PAR EX fertilizer mixes with IBDU perform for your turf. After all, performance is the name of the game.

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