At Colleges.
College is truly a "growing experience" for Pennfine, but while the students grow smart, Pennfine grows dense.

For Backyards.
If the grass is always greener in the other fella's yard, the other fella's probably using Pennfine, in a premium grass seed mixture.

For Athletic Fields.
You can run all over Pennfine—it has the speedy emergence and resiliency that make it a good sport.

At Resorts.
Pennfine mows so smooth and clean, that working on the grounds is almost as much fun as playing on them!

In Dry Soil.
With its deep-lying roots, Pennfine holds up under low-moisture conditions and in sandy soil. It's the best thing to pop up through dry ground since the last oil well came in.
Around Hospitals.
Naturally Pennfine does well around hospitals. It's very disease-resistant!

Along Highways.
Yep, that's Pennfine along many major state thruways. Leave it to Pennfine to make the quickest route the scenic route.

At National Monuments.
During the Bicentennial, Pennfine's durability made history at Independence Hall. It likes crowds, and vice versa.

On Cemetery Grounds.
What more could anyone ask for? Pennfine germinates quickly and mows smooth and clean.

On Golf Courses.
Pennfine's quick germination makes it ideal for overseeding at many of America's most prestigious golf courses. About the only place you won't see Pennfine growing is in the cup.

In The Shade.
Willows never weep over Pennfine. It does as well in shade as in direct sunlight.
The seed that's changing the face of America.

Pennfine Perennial Ryegrass

The biggest breakthrough in the greening of America began in 1970. That's when turfgrass specialists at Pennsylvania State University completed development of a remarkable fine-leaved perennial ryegrass with all the advantages of ryegrass. And none of the drawbacks. They called it Pennfine.

Now, just six years later, the success of their undertaking is evident. On golf courses and athletic fields. In parks and cemeteries. And on public grounds across the country.

Proven in tests. Among the nine perennial ryegrasses tested over a five-year period at University Park, Pennsylvania, Pennfine ranked finest in texture. Most resistant to disease. First in density and decumbency (low growth).

The University Park test results were only the beginning. Over 5,000 test kits with seed samples were distributed over the entire country in answer to requests from turf professionals wanting to test Pennfine. The results confirmed the University Park findings.

Most importantly, Pennfine established a new standard of mowability. Some other perennial ryegrasses, cut with the same mower, left ragged, fibrous tops that quickly turned brown. Pennfine's softer fibers cut smooth and clean.

Proven from coast to coast, from North to South. Pennfine's durable beauty has been demonstrated at prestigious sites all over America. From the lawns at an historic national landmark to the greens at a nationally-renowned golf course.

Besides possessing the ability to stand up under heavy traffic, Pennfine germinates rapidly. That makes it ideal for winter overseeding in the South. And, its non-competitive growth allows a smooth spring transition to bermudagrass.

Proven quality control under the Plant Variety Protection Act. You can be sure that all Pennfine Perennial Ryegrass meets the same high standards, because Pennfine is covered by the Plant Variety Protection Act.

That means every pound of Pennfine is certified. You are assured, by law, that it's produced exactly as intended by the original variety breeder.

Prove it to yourself. To learn more about how Pennfine is changing the face of America—and how it can work for you—write: Pennfine, P.O. Box 923, Minneapolis, MN 55440.

The best thing growing.
Kohler's new twin 17.
The difference is seventeen horsepower. The difference is cast iron endurance.

Seventeen horsepower. It's the difference between Kohler and all the others.

Cast iron endurance. It's the difference between a durable engine and all the others. And nowhere does that difference count more than on your equipment. It means a quieter, smoother running, longer lasting, more powerful engine that adds value to your equipment. Value that will keep your customers happy and keep them coming back to you for more of the same.

So build yourself a cast iron reputation for quality and value. Specify Kohler's new twin 17 — or any one of Kohler's full line of 4-cycle engines — singles and twins from 4 to 23 horsepower.

It'll make a difference.

For more information, contact:
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KOHLER CO. KOHLER, WISCONSIN 53044

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"I could sure use a rugged mid-sized rotary that really maneuvers."
A lot of our customers have been wanting a mid-sized mower that's built tough to take it, and that's highly maneuverable at the same time.

So our engineers came up with the amazing Turfcat 50/60.

It's amazing because it's absolutely packed with features that helps you get your medium-sized mowing jobs done faster and better than ever.

First, you have a choice of a 50" or 60" deck. (They're interchangeable.) Fully articulated, they closely follow ground contours so you get a smooth, even cut with practically no scalping.

Deck design lets you trim close, and also gives super clipping dispersion. The deck raises and lowers hydraulically for curb climbing and transport. And you can adjust cutting height from 1" to 4".

Then, the three-wheel, wide track design gives it great stability on slopes. And the foot-operated hydrostatic drive lets you steer and maneuver while changing speeds or going from forward to reverse.

How about hill climbing? It's a breeze with the power delivered by the husky 18-HP Kohler overhead valve engine. And you can expect a long engine life filled with good fuel economy,

Plus, it's quiet. All controls are within easy reach. And it might very well be the most comfortable riding rotary in the world.

Ask your Jacobsen distributor for a demonstration. And have him explain about the many fine features that customers want.

The more you listen to what he has to say, the more you'll know we've been listening.
The direction for efficient course marking

Efficient signage protects the results of good golf course maintenance. Daiono provides an easy economical and concise information system in an attractive green on white color. Write or call for a complete sign listing.

Circle 135 on free information card

Idea file

Save on distilled water for golf car batteries

Electric golf cars can consume great quantities of distilled water — which you should use in their batteries if you want the batteries to last. A large fleet — say, 100 cars — reportedly could consume 40 gallons of water in a week. If you buy distilled water for an average price of $2.50 for a 5-gallon container, that can get expensive.

Corning Science Products, however, sells a line of stills that produce from 1/3 gallon to 3 gallons of distilled water per hour from ordinary tap water at a cost as low as 11¢ per gallon. Prices for the stills begin at $425.

For further details, contact Corning Science Products, Corning Glass Works, Corning, NY 14830 (phone 607/974-9000).

Leaflets combat slow play on Canadian public course

Jack Bell, president of Greenacres Golf Course, reports, "We are one of the busiest golf courses in British Columbia, with 350 golfers a day as a fairly frequent occurrence. "We use course marshalls all through the summer, who are most effective in keeping the play steady. In addition, we distribute two pamphlets to new golfers, and this too has its effect."

Both leaflets are pocket-size, inexpensively done. The longer one is 6 pages, "for golfers to read at leisure," and spells out standard suggestions for playing more quickly — plus expanding upon the idea outlined on the shorter, single-page piece: the "play when ready rule."

This rule suggests that on the tee, whoever is ready first should hit first, regardless of whose "honour" it may be. On the fairway and the green, a player should hit or putt as soon as ready, as long as he or she will not interfere with another player.

If a group still falls behind, each player should, as soon as he puts out on one hole, walk to the next tee and hit his drive. "Do this for two or three holes," the leaflet suggests, "and you’ll be caught right up."

Everything’s Already There — Naturally

The Sewerage Commission, 8500 S. 5th Ave., Oak Creek, Wis. 53154

Circle 106 on free information card
News

FERTILIZER

Canadian firm to raise urea output

Canadian Industries Ltd., London, Ontario-based manufacturer of CIL sulphur-coated urea, reported recently that it will spend $18 million (Canadian) to double the production of urea at its Limboldt Works plant. The new facility is scheduled to be in operation early in 1980 in order to meet projected demand for high-nitrogen fertilizer.

TURFGRASS SEED

Figures updated for record ryegrass year

Poundage of ryegrass seed on which assessments were collected set a record in fiscal year 1977-78, as reported in GOLF BUSINESS last month. Last-minute additions to the tabulations, however, made after we went to press, have now brought the record total up to 268,772,086 pounds.

Assessments of 7¢ per 100 pounds of cleaned seed are collected on ryegrass as the seed moves from the grower to the first handler of the seed. These funds pay for advertising and promotional programs designed to increase markets and usage of ryegrass. According to Oregon Ryegrass Commission Promotional and Advertising Director Wally Hunter, "While [assessment collection] is not an exact measurement of usage, it does fairly represent the amount of seed which entered the marketplace during the year."

RESEARCH

Golf courses surveyed on pesticide use

Drs. Philip O. Larsen, David P. Martin, and Richard L. Miller from the departments of plant pathology, agronomy, and entomology (respectively) at the Ohio Agricultural Research and Development Center have initiated a program to assess pesticide use on Ohio golf courses. The project is funded by the federal government through the Pesticide Impact Assessment Program. Questionnaires were sent in early August to all golf courses in Ohio, asking pertinent questions to determine the type and quantity of pesticides used. Budgetary information was also requested, in order to determine how financial restrictions influence pesticide use.

Dr. Martin told GOLF BUSINESS in mid-September that the researchers had received almost 100 completed questionnaires at that point, and that final tabulations would probably be done sometime this month.

The tabulated information will be summarized and submitted to the federal Environmental Protection Agency to express the importance or need of various pesticides being scrutinized through the Rebuttable Presumption Against Registration process.

EPA's RPAR program is supposed to weigh the benefits of using currently registered pesticides against possible environmental damage that may occur through their application, but EPA emphasis is usually on the latter. According to Martin, pesticides used in Ohio and now being investigated include Tersan 1991, Tersan LSR, Fore, Sevin, and Nemagon. If use of these products is important to you, it is vital to let EPA know, through this survey and the Pesticide Impact Assessment Program.

When the EPA has finished reviewing the pesticides, one of several things may happen to them:
1. The pesticide would be returned to registration.
2. It would be registered, but have some restricted uses.
3. It would be severely restricted in its uses.
4. It would be taken off the market and all its uses cancelled.

SEED PRODUCTION

Fine fescue crop down in Oregon, Canada

Rain at the wrong time and hot weather at the wrong time combined to reduce the fine fescue crop in Oregon this summer, according to the Oregon Fine Fescue Commission.

Fred Kaser, chairman of the commission, said weather conditions in Canada have also diminished the crop of Canadian red fescue. He said the shortage in the two production areas could bring on higher prices for the 1978 crop and encouraged buyers to order now if they plan to have fine fescue for their mixes or for straight plantings.

Kaser said this is the first time in his memory that the fine fescue production areas were hit so hard by weather conditions. Ordinarily if one production area is down, the other has a fair crop.

This year production in Oregon's Willamette Valley, where much of the fine fescue is grown, is in the area of a half crop. Oregon's Willamette Valley, where much of the fine fescue is grown, is in the area of a half crop. Oregon production — which ordinarily runs about 14 million pounds — is being estimated at 6 to 8 million pounds. Canadian production, which has reached as much as 20 million pounds in recent years, is also estimated at 6 to 8 million pounds.

FOUNDAIONS

OTF donates $16,500 for turf research

President John Fitzgerald of the Ohio Turf Foundation recently announced the 1978 donation of $16,500 to fund turfgrass research in agronomy, entomology, and plant pathology at Ohio State University and the Ohio Agricultural Research and Development Center.

Most of the funds will be channeled to research projects directed by Drs. Keith Karnok, Philip Larsen, and Harry Niemczyk. Results will be shared with the turfgrass industry.

This marks the ninth consecutive year that OTF donations have exceeded $13,000 and brings total research donations to more than $170,000 since 1968.

TURFGRASS VARIETIES

Penn State releases seeded bentgrass

After 20 years of development work, Dr. Joseph M. Duich of Penn State University has released a new creeping bentgrass which can be planted on golf greens from seed rather than vegetatively. Designated as PBCB during development (see "New grasses for golf courses," GOLF BUSINESS, March 1978), the new creeping bent grass has been named Penneagle. It is being grown by the Penncross Bentgrass Growers Association and will be marketed by Tee-2-Green Corp.

Penneagle's attributes are listed as a tighter, more upright growing

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Dutch: 20 years' work
habit; finer leaves; and a broad genetic base for greater disease resistance under varied climatic conditions. Dr. Duich said the new variety will grow "a little less vigorously" than Pennine, but will still be competitive with Poa annua. Courses which have planted Pennine report it has excellent putting and playing qualities.

Development of the new bentgrass began in 1958 with 156 vegetatively propagated bent species, according to Dr. Duich. From that broad base, 21 plants were selected for turf performance. These were selected in combinations of threes and through turf screening and other testing, were narrowed down to four parents. Dr. Duich reports that more than a ton of seed was involved in the testing program. Pennine has been tested in Canada and in a seven-state area with broad climatic conditions.

GOLF CARS

E-Z-Go predicts "banner year" in '79

Distributors of E-Z-Go golf cars placed record-breaking orders for the new 1979 models introduced at the company's annual three-day sales convention held in August in Minneapolis, headquarters city for the division of Textron Inc.

Some 55 distributors from 36 states and U.S. territories viewed three- and four-wheeled gas and electric golf cars with a completely redesigned front end. Said E-Z-Go President David F. (Fritz) Myers, "The most visible benefit to our customers is an improved, more comfortable ride and long-term reliability."

He added, "The streamlined suspension that led to the weight loss also paves the way for easier servicing and maintenance, in addition to extending battery life and improving efficiency in the electric models." The 1979 gasoline-powered golf cars weigh 50 to 77 pounds less than their 1978 counterparts, the three-wheel electric model shows a 55-pound weight difference, and the four-wheel electric shed a whopping 100 pounds.

With the introduction of the 1979 line, the golf car firm celebrates its 25th year in the industry.