Penncross greens are known around the world for their consistent, high quality putting surface. Penncross has genetic diversity assuring disease resistance . . . germinates fast, establishes quicker . . . superbly consistent, less grain for true putts . . . greens up earlier, holds summer color better . . . great for overseeding winter greens in south.

Penneagle was developed through 18 years of research and 5 years of testing. This new variety of creeping bentgrass has these selected attributes of a great all-purpose grass for the entire course. Penneagle has a broad genetic base for greater climatic adaptability . . . is not overly aggressive, but competitive with Poa annua . . . has tight, more upright growth characteristics . . . is finer leaved than most bents . . . has excellent putting and playing qualities . . . was bred for disease resistance.
Outlook

GREEN INDUSTRY NEWS
British turf organizations launch joint effort to promote education and research... Arborists prepare for business update in Sarasota... Greenhouse energy saving technology exists Texas growers hear... Independent equipment dealers form association.

FEATURES
Low Maintenance Shrubs for Great Plains Landscape
South Dakota State University horticulturists Klett and Thoreson evaluate woody ornamentals for the Great Plains. Many plants offer attractive fruit and foliage yet require minimal maintenance.

Turf Program at Devil's Elbow Based on Continuity
Superintendent Gerry Beaman describes the challenges of maintaining turf in the midst of windy, salt marshes. The careful program from soil mix to fertilization is covered.

Disney Community Has Variety of Horticultural Challenges
Bill Tanner is responsible for 76 varieties of trees, 300 varieties of ornamentals and five different grasses in a 4,000-acre community of resort hotels, office plazas, shopping areas, and recreational centers, near Orlando, Florida.

Native Viburnum Deserve Greater Use in Landscapes
Colorful foliage, flowers, fruit, and maintenance ease are just a few reasons to justify the use of native viburnum in landscapes according to Douglass Chapman.

Tree Specialists Gather to Discuss Diagnosis
Tree experts from 11 states gathered at Ohio State University this fall to collectively discuss advances in tree problem diagnosis.

Drought-Stressed Ornamentals Face Winter Damage
The facts about winterkill after low summer and autumn rainfall. Nurserymen and extension specialists tell how to diagnose drought-related winterkill.

Winter Tractor Precautions
Electrical, fuel, hydraulic and other critical aspects of winter care of tractors as provided by John Deere service experts.

Vegetation Management

Sod Producer News

Events

Products

Classifieds

Cover: Devil's Elbow Golf Course, adjacent to Hilton Head.
If you're serious about protecting your turf against diseases, give it your best shot. Spray Chipco 26019 fungicide. Thousands of superintendents have switched to Chipco 26019 in the past two years. And no wonder. Chipco 26019 gives you the longest residual. You can cut the number of sprays in your program, and that cuts your costs. And Chipco 26019 prevents the major turf diseases with unsurpassed effectiveness. You'll get good results with Chipco.
26019 against dollar spot (including benomyl-resistant dollar spot), Helminthosporium (leaf spot and melting out), brown patch, Fusarium blight and Fusarium patch ('west of the Cascade Mountains'). Chipco 26019 also suppresses grey and pink snow molds. Ask your Chipco distributor or Rhône Poulenc representative about effective, long-lasting Chipco 26019...the strong medicine in turf disease prevention. Rhône Poulenc Chemical Co., Agrochemical Div., Rhône Poulenc Inc. Monmouth Junction, NJ 08852.
The importance of industry conferences to the landscape businessman should be clear this winter. Dealing with inflation is no simple matter. Conferences and industry publications have become as necessary as a good accountant in today's challenging business climate.

Prices, inventories, salaries, insurance rates, marketing, depreciation, and many other business facts of life must be watched daily, not just at budget review time. The importance of these items is obvious. What may not be obvious is the waste caused by improper use of materials and methods. Conferences, although sometimes repetitious in subject matter, refresh our memories in both areas of savings.

It might be a good idea for those lucky enough to attend conferences to pass on what they have learned to all others in their company. It is the person who performs these functions that needs the refresher most, and they probably aren’t the ones you took with you to the show. Going to conferences is not cheap and the real economy comes from spreading the information from the one who attended to those who did not.

In case you miss a good session at any particular conference that you feel would help your company, write me and we’ll contact the author for publication. We can also get other experts on the same subject to contribute to a comprehensive article. Conferences bring out the best. It’s up to magazines to capture the best for more permanent reference. Write me with your request at Weeds Trees & Turf, 757 Third Ave., New York, NY 10017.

Beginning in March, some of you will have the chance to critique an issue of Weeds Trees & Turf for its interest to you. Called Readex, this research is designed to gauge the reader interest of both advertising and editorial. All departments and features will be graded by readers for their interest, attention holding, and usefulness. Twice a year we will perform this research to check the value of Weeds Trees & Turf to you.

Also, twice a year advertisers get the opportunity to see how effective their advertising is. This lets them know what you think of their product and their advertising. It is feedback needed for magazines, advertisers, and readers to communicate and react to changes in the market.

We welcome your participation in the Readex program.

Now You Can Grade Weeds Trees & Turf

Snowco Utility Trailers

Ideal for hauling grounds maintenance equipment, golf cars and other bulky, hard-to-handle items, the proven Snowco line includes eight flatbed trailers with loading ramps or tilt decks, plus a box bed trailer with tailgate.

The design of the popular ramp loading trailers—with perforated steel decks—has been improved for increased versatility. Three models are offered with capacities of 1,150 and 2,100 pounds.

Five tilt trailers with perforated steel decks are offered with capacities of 1,000 to 3,500 pounds.

The steel box bed trailer—capacity 1,200 pounds, is available with an optional canvas or fiberglass cover.

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- Five-year New Jersey trial — Merit out-ranked Baron, Nugget, Kenblue, Park, Delft, Windsor and Geronimo.
- New York trial — Merit ranked above Baron, Kenblue and Park.
- Three-year Ohio trial (two locations) — Location #1, Merit rated above Nugget, Fylking and Kenblue. Location #2, Merit's ratings superior to Baron, Nugget, Kenblue and Fylking.
- Four-year Missouri trial — in season-long turf-quality ratings, Merit highest in a field which included Baron, Bristol, Fylking, Nugget, and Bonnieblue.

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GREENHOUSE

Texas growers hear cost, energy ideas

The technology exists to save greatly on energy and labor of greenhouse production, according to Dr. Raymond Hasek, environmental horticulturist with the University of California, Davis, who spoke to more than 200 growers at the Texas Greenhouse Growers conference in November.

Efficient use of space through movable benches, increased mechanization, and joining units together with a common wall is already practiced in West Germany and Holland, said Hasek. Different forms of insulation can cut heat loss in half. Double poly covering can save 30 percent on energy costs. Removable blankets can save more than 50 percent. Extra insulation of northern walls, wind breaks, and sealing air leaks can save from 3 to 10 percent each. Regular maintenance of heating units can save up to 20 percent.

Tiers of benches will be common in the future Hasek said. Automation of all material handling will reduce labor costs.

James Irwin, Irwin’s Greenhouses, Inc., of Canyon, Texas, told the growers that quality should be emphasized more than price. Since labor represents nearly 60 percent of production cost, any method of efficiency for labor will make the biggest difference. Irwin suggested in-state buying of plants over out-of-state. Space should be considered in terms of cubic feet of production with total utilization of floor and ceiling space. Irwin predicted great innovation in the greenhouse industry within the next few years.

INSECTS

Turfgrass symposium hosts 19 entomologists

The latest research from industry, government, and universities on turfgrass insects and their control was presented to a group of 175 turf management specialists in Columbus, OH, in October. This was the second seminar sponsored by the ChemLawn Corporation. The 1979 seminar covered turfgrass pathology.

Nineteen experts discussed up-to-date information on the primary turf pests. Special emphasis was placed on integrated pest management. Proceedings of the seminar will be published as were those of the first symposium, soon available from Weeds Trees & Turf.

ChemLawn has planned the 1981 symposium around turfgrass weed control. This seminar will be held in October. A portion of the program will be devoted to Alternatives to Phenoxy Herbicides. For more information, contact Dr. B.G. Joyner, Plant Diagnostic Lab, 6969 Worthington-Galena Road, Suite L, Worthington, OH 43085.

ARBORISTS

NAA prepares agenda for Sarasota winterfest

A broad variety of topics is planned for the 1981 Annual Meeting of the National Arborist Association, Feb. 15-19, Sarasota Hyatt. The five-day program includes sessions on the spread of the Gypsy moth, use of alternate fuels for vehicles, phermone traps, integrated pest management, and business concerns such as selling and collection, hiring a computer consultant, labor relations, estate planning, and offering lawn care in addition to tree care.

Persons interested in attending the meeting should contact Executive Vice President Bob Felix, National Arborist Association, 3537 Stratford Rd., Wantagh, NY 11793, 516-221-3082.

INTERNATIONAL

British turf groups create national council

Eleven British turfgrass organizations have approved a constitution for the National Turfgrass Council. The new council has as its objectives to provide a central forum to discuss turfgrass matters, to represent the views of the industry to government departments and other groups, to reinforce training and education within the industry, to help generate new research, and to promote the industry in general.

Organizations participating in the council are the Association of Playing Fields Officers and Landscape Managers; British Agrochemicals Association; British Association of Golf Course Architects; British Golf Greenkeepers’ Association; British Lawnmower Manufacturers’ Federation; British Turf Irrigation Association; Institute of Groundsmanship; Institute of Park and Recreation Administration; Joint Council for Landscape Industries; Sports Research Institute; and the United Kingdom Agricultural Supply Trade Association Ltd.

It took a steering committee less than a year to draft the constitution and less than six months to have it approved by the organizations. The first full working meeting of the council will be in late February. The idea was raised at a meeting of the Sports Turf Research Institute in June 1979.

Officers of the new group are Chairman M.J. Chance, Vice-Chairman W.N. Gilmour, Treasurer W.R. Royle, and Secretary J.P. Shildrick. Information on the group can be obtained from...
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ALCA focuses on modern management

Sessions at the 1981 ALCA Annual Meeting and Trade Exhibit in New Orleans, Feb. 8-13, will stress managing a business in a computerized, highly technical world. Approximately 1,000 landscape contracting firms are expected to be represented at the meeting.

Here is a sketchy outline of the event:

**Sunday, Feb. 8**
- Registration and Mardi Gras party

**Monday, Feb. 9**
- Estate planning
- Concurrent workshops: marketing design/build, personnel development in maintenance firms, land reclamation.

**Tuesday, Feb. 10**
- Trade exhibit opens
- Al Hirt party in French Quarter

**Wednesday, Feb. 11**
- Equipment demonstrations
- Interior landscape seminar
- ABC's of computer applications
- Awards reception and luncheon

**Thursday, Feb. 12**
- Learning to live with the computer
- Computer display and demonstration
- Banquet

**Friday, Feb. 13**
- Financial management
- Adjourn at noon

Complete registration information for the show is available from Associated Landscape Contractors of America, 1750 Old Meadow Rd., McLean, VA 22101.

Tenth tropical foliage course January 13th

Orlando, Florida, becomes the foliage center of the country when the National Tropical Foliage Short Course is offered for the tenth time, in addition to major national displays of foliage and equipment at the Orlando Expo Centre. This is the biggest event in the interior plant field to date.

The workshop is divided into three sections: production, interiorscape, and marketing. Production topics include soil mixes, plant pest diagnosis, nutrition, irrigation, and production of specific plants. Interiorscape topics include bidding, transportation, acclimatization, installation, delivery, and selling. The marketing sessions will cover working with wholesalers, supplying the mass merchandiser, and working with super markets. Additional sessions on asset management, tissue culture, and inventory management are planned.

Florida's foliage growers and equipment suppliers will display their material at the Orlando Expo Centre beginning Tuesday, Jan. 13. The four-day event will be headquartered at the Orlando Howard Johnson's Downtown Hotel. For more information, contact the Foliage Education and Research Foundation, Inc., 305-886-1036.

ASLA offer health coverage at lower rates

Landscape architectural firms with at least 50 percent of the employees eligible for membership in the American Society of Landscape Architects will soon be able to take advantage of a group health/life insurance program that could lower premiums and raise coverage. Firms with less than ten employees may benefit the most from the program, according to ASLA President Robert Woerner. The plan is underwritten by Sentry Life Insurance Co., selected over other companies by the National Executive Committee. Contact ASLA, 1900 M Street, N.W., Suite 750, Washington, D.C. 20036 for more information.

J.P. Shildrick, Sports Turf Research Institute, Bingley, West Yorkshire, BD16 1AU.

United States turf specialists have been attempting to form a similar group for the last three years without approval of a constitution.

SOILS

Computer data bank established by Scotts

Results from more than 100,000 soil tests made on U.S. golf courses have been stored on computer by the Pro-Turf Division of O.M. Scott & Co., Marysville, Ohio. With the information, Scotts hopes to produce summaries of soil characteristics for particular regions of the country. Superintendents in the regions can then find out what nutritional deficiencies need to be corrected.

Scott technical representatives will help analyze and interpret the soil test data for the superintendent. The desired result is more effective fertilization programs and perhaps lower costs.

The company reports that more than 90 percent of the nation's golf courses were tested for the information system.

OFFICERS

PGMS members cast ballots in Kansas City

John Van Vorst, supervisor of parks to Tenafly, NJ, is the new president of the Professional Grounds Management Society following elections during the group's latest meeting in Kansas City.

The president-elect for 1981 is Earl Wilson, vice president of Thornton-Wilson Inc., Maineville, OH. Wilson is a charter member of PGMS Southern Ohio Branch. Fred Rigger, grounds manager for the Padonia Swim Club in Cockeysville, MD, is the new vice president. Elected to a second term is Treasurer Robert Fisher, a past PGMS president and consulting horticulturist in Virginia.

LAW

Patent case decided in favor of Textron

A federal district court has ruled that a suit for patent infringement against the Jacobsen Division of Textron Inc. by Toro Company is invalid.

The Delaware court said that Jacobsen's manufacture of the Sno-Burst Continues on page 12