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DECEMBER 1975

(R)

NEW DEAL(from page 20)

cuts to construction. "Drainage is the most important factor in building greens," Holmes said, "if you don't do it right the first time, you simply have to go back and do it again later. There are no ways to cut corners."

Holmes said of his specialty, greens, "It would be nice to just heap up a pile of dirt and grow grass and start putting, but we can't do that any more; we have raised standards so high that now we have to have superior drainage to satisfy." Holmes' formula for greens includes about 16 inches of top mix that will compact down to about 12 inches. He said the top mix should be any material that will infiltrate four to 12 inches per hour. He then recommends a two-inch sand layer. four inches of pea gravel and then perforated drainage tile surrounded by gravel for the best green drainage.

Herschel Martin, superin-

tendent at Ridgeway Country Club, Memphis, Tenn., explained when the greens at his club were first built, compaction figures and percolation rates were explained informally to course owners, not held to, and the greens were not good enough when built. He said his greens were so hard he needed a sledgehammer to pound his cup-cutter into the green, and that golf spikes would not penetrate the green. "The club's golf committee paid off the architect, cancelled his bond, then started to complain to me." The architect later had to rebuild the greens when it was proved they did not meet United States Green Section specifications.

Martin, Stewart and James L. Johns, superintendent at Lake Park Country Club, Germantown, Wis., agreed that it is important to have definite specifications spelled out in black-and-white before work begins. Johns is currently embroiled in a lawsuit between the owner and architect of Lake Park. He has been called as a witness in the lawsuit, and said it is very hard to defend the owner's position when "you only have two pages of loose specifications to work from in court." Johns said the specifications contract is an insurance policy to the club and should lay out in detail exactly what is to be done, what materials should be used and when the responsibility of the architect, contractor, superintendent and owner begins and ends.

"Many owners and architects think the superintendent is not needed until grass begins to grow on the course, but this is not true any more," Johns said. "Today's superintendent is aware of the pitfalls that can result from faulty construction and is intelligent enough to head off future maintenance problems at the design and construction phase." And that was one of the reasons for the turf symposium in the first place.

JUNK YARD(from page 18)

"In the past, we've spent lots of time and money just cutting through the vines and brambles so employees could remove needed parts from cars in the yard," he says. "Herbicides have helped us minimize that problem."

Nolan faces many of the same problems but he has more land (60 acres) for his "rose garden" near Effingham. He points out, "This large tract allows me to organize my 1,500 cars in a 20-acre section. However, it also increases my need for excellent weed and grass control. I'm convinced an annual program of herbicides is the best way to go."

Herbicides are available in farm supply stores and most areas have custom applicators who will put them on. However, Palmer and Nolan elected to handle the application themselves. Palmer borrowed a neighbor's sprayer and gun, while Nolan built a sprayer from pieces of "junk".

If Nolan has his way, his dream of a "rose garden" will become a reality to lots of people in the near future.



Clean yard results from use of bromacil weeds killer around and under salvage autos. Mike Nolan's yard is laid out by row according to automobile make.



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of service on other Myers sprayer models – components like Myers Du-All pump (10 GPM, 500 PSI), 300 gallon epoxy coated steel tank, builtin suction strainer, hinged 21' spray boom, arc welded box frame and many more – plus a choice of optional accessories. For more facts, call your Myers distributor. You'll find there's nothing else around like the TL10E3. That's a fact you should consider too.



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Commercial Sod Industry

Slumping Economy, Rising Costs Put Pinch on Nation's Sod Growers

Flat economic conditions and rising costs have put the pinch on almost everyone. And at the head of the list of determining factors contributing to the slump, at least for sod growers, is the nationwide decline in home building.

Leonard DeLalio, one of the largest sod growers on Long Island, New York, says it's been a downright bad year. He is part of a \$7million-a-year industry there, and an estimated \$225-million industry nationally. For more than two decades it has been a booming business, largely because home building in the nation, stimulated by an expanding economy, was on the rise.

But the economy has stopped expanding.

"The virtually zero growth of home building on Long Island has led to at least a 12 percent decline in our revenues," said DeLalio. His farm on the island's North Shore, is one of three that take in a total 800 acres that DeLalio owns. His sod is a combination of the Merion and Fylking varieties as well as three other blends and two mixtures. His other two farms are in Eastport and Farmingdale.

But DeLalio had more problems this year than just the stagnant economy. "Sod requires as much tender-loving care as a marriage," he said. "You can imagine how much it hurt us, then, when we discovered Fusarium blight on our crop this year." DeLalio estimates the blight resulted in at least an additional 4 percent decline in his revenues this year.

Indeed, the combination of the blight and the national economic downswing worked so adversely for the sod industry in 1975 that several sod farms in southern New Jersey, Washington State and Nebraska had shut down, according to American Sod Producer's Association statistics.

The New York Times reported that besides the blight, several areas in Nebraska and elsewhere in the country where sod is grown also suffered from a mixture of extreme rainfall and drought.

Bob O'Knefski, an agricultural extension agent with the Nassau Cooperative Extension Service in West Hempstead, New York, said that Long Island sod farms have been invaded this year by a variety of insects, most notably the "dung beetle."

"It was a disastrous year for sod," said O'Knefski. Most growers in the New York area had to turn to the experts at Cornell University.

Still, the mood among many sod growers continues to be one of concern.

"You see, it's not just all the natural causes that hit our business this year," says Dick McGovern, owner of the McGovern Sod Farms in Melville, Long Island. "The cost of our seeds, equipment and fertilizers has jumped between 100 and 150 percent. We have no choice but to absorb these things."

The McGovern enterprise, which comprises 600 acres of sod farms spread over four sites on Long Island — Melville, St. James, Mount Sinai, and Wading River is considered the oldest sod business in the area. It was established 75 years ago.

Now McGovern, an energetic 38-year-old businessman who drives Continental Mark IV's and helicopters, supplies sod to the United Nations, West Point and Shea Stadium, as well as home owners.

Varieties of Bermuda Grass Tested for NPK Response

New varieties of bermuda grass are being tested for their responses to fertilizer.

Dr. Warren B. Anderson, Texas Agricultural Experiment Station soil chemist, is studying the responses of grasses which were recently developed by grass breeders and are not as yet on the open market. He is trying to determine both the production potential of the new varieties as well as the plant nutrient requirements for maximum forage production.

The research program has been underway for two years. The grass, which is planted in plots, requires a year to establish a good stand, says Anderson. During this time, the plots are tended and just enough fertilizer is added to ensure adequate coverage by the grass.

Three of the new varieties are under current testing. They are being compared with coastal bermuda, which is used as the standard reference for this research.

Fertilizer treatments are initiated in the spring. The treatments vary in the levels of the elements nitrogen, phosphorus, and potassium used. Anderson says one or two of the new varieties tested so far may be superior to coastal bermuda, the standard reference.

Once a really outstanding variety is found, more detailed research into its nutrient requirements and production potentials may be undertaken.

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Damaged Trees, Shrubs May Be Tax Deduction

In recent weeks severe wind and rain storms throughout the country have damaged a great number of trees and shrubs. Many persons are not aware destruction and loss of trees, shrubs and evergreens by storms are deductible from taxable income.

According to R. E. Abbott, vice president of Davey Tree Expert Co., Kent, Ohio, expenses involved in repairing or replacing damaged landscape plants and trees are exempt from taxable income, under conditions outlined in U.S. Internal Revenue Publication 547. These losses are deductible only in the tax year in which damage occurred.

A formula to determine the value of landscape trees, specimen shrubs and evergreens was developed by the International Society of Arboriculture, American Society of Consulting Arborists, National Arborists Association and American Association of Nurserymen.

"This formula should be used only by qualified professional plantsmen familiar with the characteristics of trees and plants in your particular geographic area," Abbott told WEEDS, TREES & TURF. "These men are capable of placing individual specimens in their proper classification, condition and location classes. Only a professional appraiser's value will be accepted by the IRS." He added members of the mentioned organizations are usually recognized as being qualified to appraise tree and shrub values.

Abbott said many insurance policies provide for the payment of up to \$250 for the removal of trees and branches which fall on a house during a storm. In most cases, casualty from wind, tornado or hurricane is not covered unless the casualty tree damages a building or other construction.

Abbott said IRS rules for deducting casualty losses are different for business and residential properties.

• An individual who suffers a non-business casualty loss is entitled to a deduction for tax purposes to the extent the claim exceeds \$100, similar to a casualty loss to any part of his residence.

• IRS regulations provide the cost or repairs are "acceptable as evidence of the loss of value," if the taxpayer shows the repairs to be necessary, reasonable in amount, do not go beyond damage suffered, and do not raise the property value above its pre-casualty level.



Shade trees can add thousands of dollars to the value of residential property, but severe seasonal storms take a constant toll of trees every year. Expenses involved in repairing or replacing damaged landscape plants and trees are exempt from taxable income.

• Deductions are allowable for expenditures in the following areas: removing destroyed or damaged trees and shrubbery, minus value of any salvage recovered; pruning and other measures taken to preserve damaged trees and shrubs; replanting necessary to restore property to its approximate value before casualty.

• A business casualty loss is the difference in value of trees and shrubs only before the storm damage, and after, as determined by competent appraisers.

More Irrigation, Fertilization With Sewage Water is Seen

Increasing pressures to conserve energy will lead to widespread use of sewage water for irrigation and fertilization, according to James W. Adams, vice president and general manager of the Irrigation Group of Toro Company.

Adams said golf courses will be among the first to make extensive use of recycled sewage water but the practice will spread to all types of turf and vegetation management, including agriculture.

"The advantages of on-land disposal of sewage water have been well-known for years," Adams told WEEDS, TREES & TURF. "But interest in on-land disposal systems is now accelerating because of the combined effects of water shortages and the energy crisis."

He said the energy crisis has increased costs for pumping water and for fertilizers derived from oil and natural gas.

With state and federal laws now requiring sewage water disposed into lakes or streams be virtually pure, alternative systems for disposal are becoming more attractive, he said.

"And when you consider that the principal pollutants in sewage water are nitrogen and phosphorous — which all plants must have in order to grow — it doesn't make much sense to be wasting both water and nutrients, as well as the energy to dispose of them, when it isn't necessary," he said.



Don't let a snow job determine which blade you buy.

In this part of the country, clearing snow from farm roads, feedlots and other areas is a necessity.

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So before you let a snow job determine which blade you buy, see your Servis dealer and ask for a demonstration. Then buy a blade you can use all year 'round. A dependable Rhino blade.

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Proper Turf Fertilization Increases Wear Tolerance

Proper fertilization can increase the ability of turfgrass to withstand daily trampling such as that on a golf course, according to a University of Nebraska-Lincoln horticulturist.

Dr. R. C. Shearman reported to a session of the annual meeting of the American Society of Agronomy recently on studies done with the Toronto variety of creeping bentgrass. He and James Beard of Texas A & M University found that adding nitrogen up to 12 pounds per thousand square feet per season increased the wear tolerance of the turf. Fertilizing beyond that point reduced wear tolerance significantly.

Added potassium also increased the wear tolerance of the grass, with the greatest increase resulting from six to eight pounds pf of potassium per thousand square feet per season. This was on Nebraska soils, which are relatively high in potassium. Dr. Shearman recommends metering out the potassium with two or more applications during the season.

Manganese Stays Soluble In New Patent Fertilizer Use

A government patent has been granted to an inventor — Richard J. Windgassen of East Chicago, Ill. outlining the use of manganese sulfate in conjunction with aqueous NPK fertilizers, in such a fashion that the manganese remains in the soluble state.

The importance of this invention is that it allows manganese to be readily available when applied in liquid form along with NPK fertilizers.

Windgassen said that as a result of the examples presented in his patent, it is apparent that his invention provides a simple and effective means for forming stable manganese solution that can be used as liquid concentrates to furnish liquid manganese in mixed NPK liquid fertilizers.

Gravely Names Jim Fischer Marketing Vice President

The Gravely division of the Clark-Gravely Corp. has appointed James A. Fischer as vice president of marketing. Fischer comes to Gravely from the Toro Company where he



Fischer

was director of marketing for its Turf Products Div. Prior to that, he was district sales manager and then product manager for Toro.

He is a graduate of Purdue University with a B.S. in agronomy. He received his M.S. in turfgrass management from Michigan State University and M.B.A. from the Harvard Business School.



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WEEDS TREES and TURF

Meeting Dates

Fourth National Legislative Conference, Fairmont Hotel, New Orleans, Louisiana, Dec. 16-17.

Western Association of Nurserymen, 86th annual meeting and trade show, Plaza Inn, Kansas City, Mo., Jan. 4-6.

Tennessee Turfgrass Association, annual conference, Rodeway Inn, Nashville, Tennessee, Jan. 5-6.

Mid-Atlantic Assocation of Golf Course Superintendents, annual conference, Holiday Inn Belmont, Chevy Chase, Md., Jan. 5-6.

Indiana Chapter, Internatonal Society of Arboriculture, Stauffer's Indianapolis Inn, Indianapolis, Ind., Jan. 6-8.

Northeastern Weed Science Society, 30th annual meeting, Statler Hilton Hotel, Boston, Mass., Jan. 6-8.

10 Week Winter Turfgrass Course, Cook College Campus, New Brunswick, New Jersey, Jan. 6-Mar. 13.

Pennsylvania-Delaware Chapter, International Society of Arboriculture, Marriott Hotel, Philadelphia, Pa., Jan. 7-9.

California Weed Conference, 29th annual meeting, El Cortez Hotel, San Diego, Calif., Jan. 19-21.

Kentucky Chapter, International Society of Arboriculture, Stauffer's Inn, Louisville, Ky., Jan. 20.

Michigan State University Turfgrass Conference, Kellogg Center, East Lansing, Michigan, Jan. 21-22.

Ohio Chapter, International Society of Arboriculture, Sheraton Columbus Hotel, Columbus, Ohio, Jan. 25-29.

Southern Weed Science Society, 29th annual meeting, Statler Hilton, Dallas, Texas, Jan. 26-29.

One Week Winter Short Course, Turfgrass Management, West Tennessee Experiment Station, Jackson, Tenn., Jan. 26-30.

Virginia Turfgrass Conference, Sheraton Motor Inn, Fredericksburg, Virginia, Jan. 28-29.

California Plant and Soil Conference, Quality Inn, Sacramento, Calif., Jan. 28-30.

Connecticut Tree Protective Association, annual meeting, New Haven Plaza Hotel, Jan. 29.

Turf and Landscape Conference, annual meeting, Tappan Zee Inn, Nyack, N.Y., Feb. 4.

American Sod Producers Association, mid-winter conference, Sheraton Sand Key, Clearwater, Fla., Feb, 5-6.

Golf Course Superintendent's Association of Americaa, 47th international conference and show, Auditorium and Convention Hall, Minneapolis, Minn. Feb. 8-13.

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Midwestern Chapter, International Society of Arboriculture, Sheraton-O'Hare Motor Hotel, Rosemont-Chicago, Ill., Feb. 10-12.

Illinois Landscape Contractors Assoc., annual seminar, Villa Olivia Country Club, Feb. 12-13.

Canada Chapter, International Society of Arboriculture, Chateau Frontenac Hotel, Quebec City, Quebec, Feb. 12-14.

National Arborist Assoc., annual meeting, Vacation Village, Mission Bay, San Diego, Calif., Feb. 15-19.

Wisconsin Arborist Association, annual convention, Midway Motor Lodge, LaCrosse, Wisconsin, Feb. 18-19.

Southern Chapter, International Society of Arboriculture, Myrtle Beach Hilton, Myrtle Beach, S. Carolina, Feb. 22-25.

Shade Tree Short Course, 19th annual, Scheman Continuing Education Center, Iowa State University, Ames, Iowa. Feb. 25-27.

Professional Turf and Landscape Conference, sixth annual, Ramada Inn, North Haven, Conn., Mar. 3.

Pennsylvania Parks and Recreation Society, 29th annual meeting, Seven Springs Mountain Resort, Champion, Pa., Mar. 14-17.

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St. Louis' Tree Program Receives Governor's Award

The city of St. Louis, Mo. is the recipient of that state's Town Treescape Award for its community action tree planting program known as "Project Greenback."

The problem of tree loss in St. Louis has taken a vast toll due to enthracnose in sycamore and Dutch elm disease. There has been an annual mortality rate of some 4,000 trees; with only 500 to 700 trees being replaced by the city.

This loss has taken a vast toll on the city's estimated tree population of close to 170,000 trees.

A city-wide tree awareness program was needed to stimulate all citizens to financially assist in the replacement of street trees in front of their homes and businesses.

Project Greenback was initiated in 1971 by the Residential Betterment Section of the Community Development Agency.

With federal matching grants, up to two-inch caliper trees were purchased and planted by the city. A special offer of six to eight foot trees was given to neighborhood associations and organized groups who were willing to plant the trees themselves.

Trees also were planted in other public areas upon personal request of donors.

Under this program, the downtown merchants are placing redwood boulevard planters along their business fronts. They are sturdy containers, two feet high and three feet square and lined with styrofoam for insulation.

Because outdoor grooved redwood plywood was used, the cost was only \$95 per unit.

According to St. Louis area

landscape architect Robert J. Stoffel, 5,000 trees have been planted annually in S. Louis because of this program.

Royer Acquires New Line Of Land-Clearing Machines

Royer Foundry & Machine Co., Kingston, Pa. has acquired the Shred-King line of land-clearing machines previously manufactured by Triumph Machinery Co., Hackettstown, N.J. Announcing the purchase, Stanley S. Davies, Royer



New Royer Woodsman

president, said, "The Shred-King, which will be renamed the Woodsman, will expand the lines of equipment our Agricultural Products Div. is manufacturing for renovation and development of land."

Royer's Agricultural Products Div. manufactures brush chippers as well as a full range of shredders which are used for preparation of topsoil and large-scale leaf composting.

The Woodsman can clear up to three acres of land a day by cutting down and chipping trees up to six inches in diameter and brush. The chipped material falls as it is cut to blanket the site with a mulch, Royer said. The Woodsman will be manufactured in self-powered models for use with bulldozers and loaders, and PTO driven models, for tractors and Unimogs, Royer said.



30 Educational Seminars Announced by J. J. Mauget

Thirty educational seminars designed to inform commercial arborists about the use of nutrient and pesticide tree injection products have been announced for 1976 by the J. J. Mauget Co., Burbank, Calif.

Each seminar will be held in a metropolitan location accessible to area arborists. The one-day meetings scheduled for January through April are open to all arborists, foresters, tree care men, department of agriculture, and city, county, state and university personnel.

Program moderator for each seminar is Del Kennedy. His many years as an arborist and his knowledge of tree injection will be of interest to those attending.

Other highly qualified guest speakers will participate in many seminars where possible.

"We believe that there is a great amount of new information now available which will be of interest to those who have attended previous meetings during the last four years and to those who will be attending for the first time," Kennedy told WEEDS TREES & TURF.

"Our field research program headed by Dr. W. D. Thomas and Forest-Ag of Lafayette, Calif., has resulted in many new and interesting applications of Mauget Tree Injection products," he said.

Among the topics to be presented at the seminars is a discussion on the use of Inject-A-Cide (metasystox-R) and Inject-A-Cide B (bidrin). The EPA registration for these two products now allows trained applicators to inject trees to control insects in most of 50 states.

Mauget says that in a number of incidences, there is no other effective control available.

The company also plans to review the results of field trials with its new fungicide, Fungi-Sol DEBC. Four years of testing has shown that Fungi-Sol, when used with the Mauget process, is capable of controlling most *Fusarium* and *Verticillium* wilt, canker and decline diseases.

In addition, Fungi-Sol has produced data indicating it to be the most promising of the experimental