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It's easy to buy a tractor. You go to a dealer. Pay him some money. He gives you a tractor.

Buying the right tractor is another matter. It's not hard to do. But there are a couple of important things to keep in mind.

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GREEN INDUSTRY NEWS

TURF

Sod producers set for field days in Spokane

The American Sod Producers Association will hold its summer meeting and field days for the first time in Northwest seed country, July 19-21 in

Spokane, Washington.

"Between 350 and 400 sod producers and suppliers will be attending," according to ASPA President Glenn Rehbein. The convention will be hosted by seed producers and processors at the Sheraton Spokane. Doyle Jacklin, marketing manager for Jacklin Seed Co., is the convention chairman.

A tour of seed production areas and idea exchanges with seed growers and processors is planned. Field demonstrations will take place at the Schneidmiller Sod Farm in Liberty Lake, Washington, and the George Thayer facilities in northern Idaho.

A salmon bake and a special ladies program are planned.

Persons interested in attending should contact the American Sod Producers Association, 9th & Minnesota, Hastings, Ne. 68901. (402) 463-5691. Broader experiences with netting in sod planting and increased uses of sludge as a fertilizer were among topics highlighting the Midwinter Conference of the American Sod Producers Association held Feb. 12 to 15 at the Nassau Beach Hotel in the Bahamas.

Over 300 delegates attended the seminars, which this winter focussed not only on sod production but also included discussions of the economics of farming, from tax matters to wage and hour laws and application

of insurance programs.

A diversified group of speakers ranged from Dr. Paul Hall, of Virginia Polytechnic Institute and State University, who spoke on uses of sewage sludge in sod production, to L. S. Wilson, of the E.I. DuPont Company, who gave a stimulating talk on the importance of communications in business and home life.

Other speakers were Doyle Jacklin, of the Jacklin Seed Co., Spokane, Wa.; ASPA legal counsel William A. Harding; Paul Smith, CLU, of Fringe Benefits Design in Kansas City, Mo.; John Hope, of Manderley Turf Farms, North Gower, Ontario, Canada; Charles Lain of Pine Island Turf Nursery, Sussex, N.J., and Allen McDowell, of Alexander & Alexander, Lincoln, Neb.

Against a detailed scientific outline by Dr. Hall on the application of sludge in sod growing, Tom Thornton, of Thornton's Turf Nursery, Elgin, Ill., reported fine practical results after a year's use of "digested sludge."

"Once it catches on, it will benefit just about everybody," Thornton said. "We get the sludge free from Chicago's Metropolitan Sanitary Department, and its immediately recognized advantages are the low cost and its existing values in nitrogen, phosphates, potash and trace elements."



The picturesque jagged peaks of the Cascade Range located between Seattle and Spokane.

RECLAMATION

Grants from coal tax to be distributed soon

Landscape contractors may be able to cash in on a federal government program to reclaim abandoned coal mines when an estimated \$98 million is distributed starting this summer.

Officials from the Office of Surface Mining, a new agency in the U.S. Department of the Interior, said it would decide by mid-May on project sites.

Almost \$34 million was collected from October through December



View of the Spokane convention area.

from a tax on coal mined by operators to support the reclamation program. Surface mining officials hope to collect \$140 million during the program's first year.

The abandoned mine reclamation fund is part of the Surface Mining Control and Reclamation Act of 1977. In November, Joan Davenport, assistant secretary for Energy and Minerals in the Interior Department, asked the 50 governors to submit a list of sites in need of reclamation. About 300 proposals were made, and the Office of Surface Mining has narrowed that list to between 20-30 sites as of late April.

Potentially hazardous mines, such as those near school buildings or others that could cause personal injury, will be the first projects

chosen for reclamation.

About \$70 million will be returned to the states during this first year so they can administer their own programs. The federal government will keep 20 percent of the money and finance its own projects.

Ray Booker, a division chief for the abandoned mine program, said the federal government will be "working as closely as we can with the states." He said contractors should contact departments in their state governments most likely to handle a reclmation project for information on bidding procedures and other details about the program.

Many states will administer the program through their Department of Natural Resources. Others may have agencies for mining or, as in Oklahoma, a Conservation Com-

mission.

NURSERY

AAN offers advice on loss deductions

The American Association of Nurserymen's legal counsel has offered the following thoughts as to the availability of federal income tax casualty loss deductions arising out of the recent extraordinarily cold winter conditions in the North and East and drought conditions in the West.

The IRS takes the position that damage caused by drought cannot be a deductible casualty loss, since it does not occur suddenly. Nevertheless, some courts have allowed such deductions, and taxpayers may wish to seek legal or accounting advice on such cases.

Plant damage caused by freezing conditions can be a deductible casualty loss, where the freeze is unusual. It depends upon normal conditions for the area.

Inventory losses not covered by insurance do not generate a casualty loss deduction because they will automatically result in a greater deduction for cost of goods sold. Where covered by insurance, inventory losses may either be reflected in cost of goods sold based on clsing inventory, with inclusion of the insurance recovery as gross income; or alternatively, the taxpayer may ignore the insurance recovery and remove the loss from the cost of goods sold.

In the case of landscaping on a customer's business premises, the taxpayer may claim a loss based on the "before" and "after" value of the damaged plants, but the loss may not exceed the adjusted basis (depreciated cost). There is no need to consider the effect of the loss on the value of the entire property.

The legal question, where the plants represent landscaping of non-business property, is the amount of loss reflecting the "before" and "after" value of the entire premises. As a practical matter, the IRS recognizes a replacement cost invoice or estimate as reasonable evidence of the loss in value of the property, unless there is reason to believe that restoration of the particular plant is not necessary, or would enhance the value of the property above its precasualty value.

Difficult questions arise in the case of damage to trees or other specimens which are too large to replace with plants of a similar size, since it would not be possible to obtain evidence of replacement cost. The IRS takes the position that shade tree appraisal methods may not be used, and that it is necessary to obtain a "before" and "after" appraisal of the entire property by an expert real estate appraiser.

The AAN in cooperation with the Council of Tree and Landscape Appraisers and other landscape groups, was unsuccessful last year in seeking an amendment to the IRS regulations to overcome this problem. The possibility of a legislative solution is under active

consideration.



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UPDATE

Labor reform act has pro-union effect

The Chamber of Commerce of the United States says legislation currently before the Senate would make it much easier for a union

to organize a non-union work force.

The Chamber's Labor Relations Attorney G. John Tysse told WEEDS TREES & TURF, "The greatest adverse effect will be on the smaller non-union company such as the landscaper. A provision in the Act permits union organizers to come on business property to talk to non-union employees if the owner talks to employees in the same way. An outdoor situation like landscaping makes it even easier."

Under the Act a union could force an election within 21 days of petitioning the National Labor Relations Board. "An employer hasn't enough time to react to union pressure in 21 days," Tysse

stresses.

2,4,5-T RPAR involves 424 different products

A rebuttable presumption against registration issued by EPA last week against 2,4,5-T will affect more than 424 products of 122 companies and 21 products with former state registrations pending for federal registration. EPA cited "industry's apparent inability to produce 2,4,5-T without TCDD contamination" and said "TCDD must also be considered when assessing 2,4,5-T by the agency's risk criteria."

Oncogenic effects were a major factor for the RPAR. EPA summarized, "The studies indicated that 2,4,5-T containing less than 0.05 p.p.m. TCDD or TCDD alone have oncogenic effects in two mouse strains and one rat strain. Since 2,4,5-T, as currently formulated, contains TCDD (at a maximum amount of 0.099 p.p.m.), a rebuttable presumption against the registration of 2,4,5-T products has arisen because of the oncogenic effect of 2,4,5-T and its contaminant TCDD.

EPA bases none of its RPAR on bioaccumulation or other environmental effects, giving 2,4,5-T a clean bill in many studies cited in the RPAR. A National Academy of Sciences report was cited which said 2,4,5-T and TCDD have never been detected in drinking water in tests sensitive to parts per trillion. Concerning food EPA summarized, "FDA Market Basket Survey Samples from 1969 through July 1974 showed no 2,4,5-T residues (detection limit: 0.02 p.p.m.) in 155 total diet samples involving 1,869 food composites."

Rebuttals to the presumption against registration are due at the

agency by June 5.

Reregistration costs may soar 50 percent

A draft of a report by EPA's Office of Pesticide Programs indicates that guidelines change could increase the cost of reregistration from \$691 million to \$949 million. The guideline changes involve Section Three of the revised Pesticide Law (FIFRA).

Some of the figures and assessments in the draft include:

—Cost of meeting the guidelines' data requirements for new active ingredient nonfood use, \$375,000.

—Consumer costs of the guidelines, 10¢ to 35¢ per capita per year

during the 1980's.

—For a major agricultural pesticide, the one-time cost of compliance with the guidelines, including filling data gaps, would be about \$1 million.

—Some very small formulators, which, for example formulate only one product, might go out of the pesticide business if they have to meet the data requirements of the guidelines.

TURF

Adjuvants may reduce crabgrass germination

Tests conducted under growth chamber and breenhouse conditions at the Delaware Agricultural Experiment Station has shown that several wetting agents can be effective in reducing germination of hairy crabgrass seeds, according to Dr. William H. Mitchell, University of Delaware turf specialist. Mitchell's tests have shown that both dormant and geractively germinating seed are damaged by wetting agents. However, there was rarely a complete kill in any given test.

Subjecting treated seed to subfreezing temperatures for a period of 12 hours increased the effectiveness of the wetting agent. Since crabgrass plants are easily destroyed by freezing temperatures, Dr. Mitchell speculates that using wetting agents prior to cold weather may have the effect of triggering germination, thus setting the stage for further seed

damage.

Dr. Mitchell presented information regarding his research at a recent meeting of the Northeastern Weed Science Society. Part of this research has been supported by a grant from the Delaware Turfgrass Association.

LAWN CARE

Manufacturers form lawn and garden group

An association of lawn and garden manufacturers was formed in April with the goal of establishing a cohesive force that will further the growth of the lawn and garden industries.

The Lawn and Garden Manufacturers Association is headquartered in Chicago according to LAGMA President Edward Scofield, executive vice-president of Rapid-Gro Corp., Danville, Ill.

The group's vice-president, E. Olansky of Science Products Co., Chicago, said there has been great interest in membership and that a number of working committees have already been formed. Interested persons may contact LAGMA, One Illinois Center, 111 East Wacker Drive, Chicago, Ill. 60601.

Continues on page 63

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Pictured left to right: Model 698, Model 608, Model 657, and Model 600. WEED EATER®, Inc., a subsidiary of Emerson Electric Co.

PEOPLE

The members of the National Arborist Association recently elected new officers at the annual meeting in Sarasota, Fla. Seated, from left to right, are: Larry Holkenborg, Sandusky, Ohio, 1st vicepresident; Kenneth B. Kirk, St. Louis, Mo., president; Bruce Walgren, Hartford, Conn., 2nd vice-president. Standing, from left to right are: Gerald Farrens, Jacksonville, Fla., immediate past-president; George Tyler, Amherst, N.H., director; Lee Lesh, Saratoga, Calif., director Earl Sinnamon, Denver, Colo., director; Erik Haupt, Sheffield, Mass., treasurer; Walter Money, Rockville, Md., secretary; and Neil Engledow, Indianapolis, Ind., director. Tyler, Sinnamon, and Lesh serve as directors with time remaining on their current terms of office.

The first NAA "Awards of Merit" were also presented at the meeting. Recipients included: **Dr. Paul Tilford,** Wooster, Ohio, NAA executive secretary from 1941-1966; **Ross Farrens,** Reno, Nev., charter member and past president of NAA; and **Edwin E. Irish,** Warren, Michigan, past president and chairman of the NAA Education Committee.

David Canavan took over new duties as president of the Golf Course Builders of America at the annual meeting in San Antonio. Canavan has an extensive background in the world of golf. He is currently president of Moore Golf, one of the country's largest golf course construction contractors operating throughout the nation. He has a degree in agronomy from the University of Massachusetts and is a registered landscape architect. Canavan is a past-president of the Greater Washington Golf Superintendents Association and a past director of the Mid-Atlantic Association. He succeeds Eugene Brown.

Other officers who took over new duties at the meeting include Harold E. Bishop, president elect; Carl Hedlund, secretary; and James J. Krichdorfer, treasurer. Both Hedlund and Kirchdorfer were re-elected.

Steve Gipson has been elected president of the Northern Ohio Golf Course Superintendents. He has been a member of both the Golf Course Superintendents Association of America and the northern Ohio chapter since 1968.



NAA Officers



Dr. Henry Indyk



David Canavan



Dr. Homer LeBaron

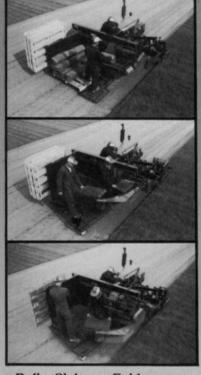
Dr. Henry W. Indyk, Cook College, Rutgers University, received the "Irrigation Man of the Year Award" at the Irrigation Association's recent conference in Cincinnati. The award is presented to university and government personnel who have made outstanding contributions toward the further acceptance of good irrigation practices. Indyk is the 21st individual to be honored since the inception of the award in 1952.

Indyk serves as Extension Specialist in Turfgrass Management at Rutgers and holds the title of full professor. He is responsible for all extension activities relating to turfgrass establishment and maintenance, as well as providing assistance in the diagnosis and solution of varied turfgrass problems. Proper soil moisture management constitutes an important area of emphasis in his work.

Dr. Homer M. LeBaron, senior scientist in environmental investigations for Ciba-Geigy Corp., has been elected a Fellow of the Weed Science Society of America. He was honored for his assistance and relationship with more than 100 graduate students, plus scientists from universities and government. He was also saluted for coordinating and distributing more than \$1 million in grants to university faculty and graduate students for weed control and other studies.

Dr. LeBaron is past president of the Northeastern Weed Science Society and is a member of the American Society of Agronomy and American Chemical Society. He received his B.S. and M.S. degrees from Utah State University and his Ph.D. from Cornell University.

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UPDATE: UTILITY RIGHTS OF WAY LITTLE HAS CHANGED SINCE 1972

Special Report by the editors of WEEDS TREES & TURF

In 1972, WEEDS TREES & TURF published the opinions of three individuals concerning utility rights-of-way clearance and maintenance; an ecologist, a member of the National Audubon Society, and the superintendent of operations for a utility company. Six years later, we find the market even more polarized than in 1972.

Increased public concern about utility prices has added to the confusion and still no single, objective organization has studied the situation and made recommendations for the most practical and safest combination of methods to provide vege-

tation control for utility rights-of-way.

Utility companies have had to make their own decisions as to practicality. When you are talking \$66,000 for a single brush cutter or \$90,000 for a bulldozer, it is extremely important to have the best, most scientific data from which to judge. That type of information doesn't seem to exist. Utilities are at the mercy of chemical and equipment sales people.

Manufacturers of mechanical devices and environmental groups voice suspicions that chemicals are overused on utility rights-of-way. Chemical manufacturers question the practicality and cost of complete mechanical control. Both sides stress costs to the utility and that utilities are

under the gun to hold costs down.

Environmentalists recognize the benefit to wildlife from the "edge effect" created by the more than 50 million acres of rights-of-way in the United States, but at the same time fear, often blindly, the residual effects of herbicides. A recent RPAR against 2,4,5-T, a chemical tainted by stories of massive kill-off in Viet Nam forests, indicates that these fear groups can be powerful.

Dioxin, a product created in the manufacturing process of 2,4,5-T, is very toxic, but in what quantities? In order to substantiate adverse levels, measurements must be made in parts per trillion. Laboratory methods already used in trying to substantiate these levels are in question because of the minute measurements necessary. The cost to the chemical companies must ultimately be passed on to the consumer, who passes it to the utilities, who passes it to the public.

It is doubtful that rights-of-way can be totally maintained mechanically. Chemicals are necessary in areas where machinery cannot maneuver. Evidence of root sprouting supports the need for spot use of chemicals. However, the public disapproves of total kill chemical application after all

they have heard.

With these points in mind, one would think the most acceptable combination of rights-of-way control is mechanical clearance initially, followed by spot chemical applications to stumps, and maintenance on a regular basis, either mechanically, or with selective chemical applications.

Past experience with the Environmental Protection Agency would indicate pressure from environmental groups is not to be ignored. Anticipating a similar response by EPA to rights of way vegetation control, the industry would do well to adjust now and avoid expensive confrontations with EPA.

As in 1972, we publish the opinions of three individuals involved in rights-of-way management from different viewpoints. Each person makes pertinent points for consideration by utility companies. In 1972, Gordon Mundrane, then operations superintendent for New Jersey Power and Light Co. said, "The art of right-of-way maintenance is retrogressing." Since then we have seen little improvement.

The Ecologist

Frank Egler has been an ecologist since 1947. He has written over 80 articles and a book on right-of-way management. "Plight of the Right-of-Way Domain" is a two-volume work with the second volume documenting the first.

"I would consider the situation bad for the slogan that I have long used: The lowest cost for the most years with the highest environmental value," says Dr. Egler. "On those grounds I see very little,

if any, improvement.'

"The situation has become highly polarized, according to Dr. Egler. "In the first case, I would say that there are very few basic scientists in this field, the field of right-of-way vegetation management. And some of those who are, are employed by industry and some of them are excellent examples of converted 'biostitutes'.

"Then the basic science itself leaves much to be desired. The field of plant ecology and the field of vegetation management go back through 60 years

of problems.

"Thirdly, there are pro-herbicide groups that are applying it as a technology. Most of their trouble is because of aerial uses of herbicides. They do not consider, or consider very inadequately, selec-

tive spot application.

"Fourthly, there are the anti-all herbicides groups, which are fretting about human health. I admit that there are hazards and accidents, so are there on the highways. Even as Rachael Carson pointed out in "Silent Spring", it's not that these things should be banned, but that they should be used wisely. I might finally say that they are not being used intelligently. In short, we need wise use of them yet for long term vegetation management.

"The story is a sad social problem. The anti-all herbicide people I run into belong to the organizations that should be helping. I'm thinking of two leading organizations that are taking the human health anti-all herbicides approach that I feel is the equivalent of banning drugs from hospitals. I've worked in a lot of them, I'm for them, but they don't have the scientific basis they should."

The Chemical Manufacturer

Wayne Wright is a Product Technical Specialist

with Dow Chemical Company.

"It is generally true that chemical applications, especially in the East and Northeast coast area, are becoming more and more selective. It's well-established that selective treatment is the cheapest and most effective way to go, rather than using herbicides indiscriminately.

"Normally, a broadcast treatment over the entire rights-of-way is needed only once to establish an initial clearing. What everyone is trying to do is to put the rights-of-way on a maintenance type program, where you only go in and spot treat as

needed.

"The initial clearing is becoming of more and more interest. After the initial clearing, they'll go in, cut the tree down, and stump treat it. Then what you need is one broadcast spray in two to three years. After that, you've basically established grasses, forbes and low growing desirable brush and shrubs.

Then all you do is selectively treat, either with injection or a basic treatment of some type. And you treat only the undesirable ones that will cause problems. You do that every two, four or five

years, just depending on the lot.

"One of the problems with just mowing the rights of way is root sprouting. Most trees will do this. You end up getting anywhere from two to ten stems coming out of every stem that you cut off. Then, if you go in and try to control those chemicals you have the problem of a massive root system that is feeding all these small individual stems. You just cannot get enough chemical into that root system to kill it. You can burn it off or kill it to ground level, but it will just resprout again.

"A lot of the managers that I know will treat areas and then plant grass to establish a plant community that will crowd out and compete with un-

desirable brush that grows in.

Bramble and Burns, at Purdue University, did a lot of work with this. It shows, basically, that with broadcast treatment, and then selective treatments a community of low growing grasses, forbes and desirable low growing shrubs become established. The wildlife use of these areas has increased several fold over what it is in any of the surrounding area.

Continues on page 20



A questionable point about total mechanical rights of way clearance and maintenance is that machines cannot stop root sprouting (above).











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The Equipment Manufacturer

William J. Mahoney III is the manager of the Special Products Division of Kershaw Manufacturing Company in Montgomery, Alabama.

"Basically, as the legislatures in various states become more involved in the environment, which is obvious from their record of the last five years, chemical spraying and any type of burning are simply going to be outlawed. That leaves two alternatives: clearing by hand or clearing by mechanical means.

"Clearing by hand is exorbitantly expensive and the chain saw and the bush axe don't fit the hand quite as easily today as they did a decade ago. I am confident that the future is for mechanical brush cutting.

"Right-of-way maintenance programs set up by the public utilities and the electric cooperatives, which are very large in the south, have risen to an outrageous cost where hand labor is extensively used. A tractor with a rotary mower following it can't negotiate much of the terrain and leaves it up to hand crews to get in any damp areas or very hilly terrain.

"Chemical spraying and any type of burning are simply going to be outlawed."

"We're seeing more and more use of large fourwheel-drive brush cutters because they can penetrate areas a tractor cannot. One of these selfcontained units can take the place of a multitude of tractors pulling rotary mowers — which obviously means fewer operators and less machinery to maintain.

"We can see the need for spraying in deep swamps and other surfaces that you can't get into with machinery. There are areas that you have to resort to those means which are becoming less and less popular with the public.

Utilities often run into budget problems. And one of the first things to go, according to Mahoney, is the right-of-way maintenance program. "Particularly when it is in relatively good shape," he adds. "From there what happens, obviously, is that the right-of-way gets out of control. And once the trees grow close to the power line, all it takes is an ice storm or high winds to cause a power outage. All of a sudden the budget is quickly rearranged.

"Where before they could utilize farm-type equipment and occasional hand crews, they now have an average of three to four inch diameter growth, or more — too much to cut with a mower. They get into a situation where they have no choice. They simply have to go to a self-contained mechanical brush cutting machine that's designed to cut it. The only other alternative is paying the high price of cutting it by hand.

"We say we cut anything up to eight inches in diameter, which would certainly take care of 95 percent of anybody's right-of-way. Our machine cuts a tree and mulches it in one operation. The result is far better and is more efficient because it leaves a biodegradeable mulch which holds moisture and retards erosion."