Permits Issued
Since the nation is involved in a serious energy crisis, the Federal government has opened U.S. Forest Service lands to make firewood available for fuel. This decision is in effect now on a national basis, however specific woodcutting instructions vary from forest to forest. We recommend that they be contacted for information pertaining to your specific area.

FMC Builds Plant in Aiken, S.C.
FMC Corporation’s Outdoor Power Equipment Division announced plans to build an 80,000 sq. ft. manufacturing plant in Aiken, SC, to manufacture Bolens mulching lawn mowers, snow throwers and other walk-behind lawn and garden products. Negotiations are underway with Aiken city officials to purchase a site for the plant.

Training Courses From OSHA
Two job safety and health training packages — one designed to help employers evaluate their own operations and the other aimed at reducing the number of injuries resulting from cave-ins — are now available, OSHA announced. OSHA noted that even though many of its training activities are primarily for its own compliance officers, it is preparing much material for the private sector.

One package, “A Guide to Voluntary Compliance,” consists of the same materials used in the 40-hour course taught at OSHA’s Training Institute near Chicago. Containing a student manual, instructor’s guide, and a set of 174 color slides, it provides guidelines for developing systematic self-inspection procedures to help employers correct workplace deficiencies. It is priced at $55 per set.

The other package, entitled “Safety and Health in Excavation and Trenching Operations,” is a special emphasis instructional program aimed at reducing the number of injuries and fatalities from cave-ins at construction sites.

It stresses the importance of soil support, especially shoring, in offsetting the hazards in excavation and trenching operations. Available for $21, the set includes an instructional manual, a resource supplement and set of 139 color slides.

Both courses, produced in narrative script style with slides cued in, may be purchased from the National Audiovisual Center, General Services Administration, Washington, D. C. 20409.

Golf Foundation Meets—Energy Crisis on Agenda
The nation’s golf courses must prepare for one of their busiest years in 1974 to meet the demands of activity spurred by the energy crisis, says National Golf Foundation Executive Director Don A. Rossi in summing up the Foundation’s four day winter staff meeting in Chicago earlier this month.

The current restriction on American’s great mobility in seeking their relaxation and recreation will crowd the nation’s more than 11,000 golf courses as players remain closer to home to conserve fuel, he said.

This was the theme expressed at a four-day meeting of the foundation by guest speakers too. They represented the major areas of golf. Their message: to alert the golf world to expected record player traffic and its demands for products and services related to golf. The speakers included Executive Director Mark Cox of the Professional Golfers Association of America, Executive Director Ken Emerson of the National Club Association, and Dr. James Watson, vice-president for customer relations of The Toro Company.

Rossi declared that the National Golf Foundation, as the national clearinghouse of golf information, is better able than ever before to meet the challenge of the year ahead with the largest and best equipped staff of Golf Facility Development Consultants in its history.

The semi-annual meeting, was programmed to review consultant activities and case histories of the half-year just past in order to achieve greater efficiency and effectiveness in aiding golf facility development. It also served as a forum for the presentation of papers by individual consultants on areas of special interest to the golf industry.

Chain Saws Hot Property, Says Echo Marketing Boss
The nation’s energy shortage has turned chain saws into hot property, according to Donald A. Bartelt, general sales manager of the Echo Chain Saw Division of the Kioritz Corp. of America.

“The effects of the energy shortage and the resultant fuel-saving measures have placed tremendous demands on the chain saw industry,” Bartelt says. “The demand for saws and related wood-harvesting equipment surged beyond the industry’s capacity to produce and put most saw makers in a backorder situation in the fourth quarter of the year.”
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resulted in the evolution of strict environmental criteria in many areas.

Extra Cash From Firewood Helps Tree Care Firms
If you’re faced with a takedown, don’t look to the chipper as the only means of wood disposal.

Many professional tree care firms are capitalizing on the “energy crisis” by selling the wood from takedowns as firewood.

Howard L. Eckel, vice president of Davey Tree Expert Co., Kent, Ohio, offers these suggestions about selling firewood as part of your business:

- Most customers want firewood that’s dry and well-seasoned. Hickory, oak, maple, beech and most fruit tree woods burn best. Softwoods, such as pine, fir, spruce and cedar are filled with sap and resins. They burn too fast and work better as chips for mulching.
- If the homeowner wants the wood, stack it criss-cross so the air can get at it. When logs are stacked in rows, air circulation is greatly reduced and they retain moisture and do not age properly.
- Cords and ricks are the standard measure in wood selling. A cord is 4 ft. x 4 ft. x 8 ft. or 128 cu. ft. A rick is usually 4 ft. x 8 ft. but only as deep as the length of the logs—16, 18 or 24 in. Stack your wood in a prominent place so the customer sees it.
- From a business standpoint, collect the money at the time of delivery. It saves in collection energy.

Sod Service School Held
By Century Toro
An information/education session for sod growers was held in Dayton, Ohio by Century Toro Distributors in late January.

The innovative sod service school, attracted 41 persons representing growers from Cincinnati, Dayton and Columbus, according to Harry Murray.

Speakers at the one-day affair include: Jon Hering, field service representative of Briggs and Stratton Corp., Frank Busolini, Toro Co., Jim Lyne, field service representative for Ryan Equipment Co. and Paul Florence, sod grower from Marysville, Ohio.

Texas Landscape Architects Meet In San Antonio
The Texas Society of Landscape Architects held its winter meeting in San Antonio in January.

At a business session, members were reminded that only a person who has been duly registered under the laws of this state (Texas) shall be permitted to represent himself to be a “Landscape Architect”, and that violations should be reported to the Texas State Board of Landscape Architects.

New officers for 1974 are: Robert W. Caldwell, president; Gratz C. Myers, Jr., vice president and John F. Teas, secretary-treasurer.

Washington D. C. Meeting To Discuss Energy
A major national meeting which bringing together leaders from Congress, the administration, business, science, labor, the media, and environmental and consumer groups to explore today’s energy choices and tomorrow’s alternative sources, will be April 24 and 25 at the Washington Hilton Hotel, Washington, D.C.

Sponsored by the World Future Society, the meeting, “Energy: Today’s Choices, Tomorrow’s Opportunities,” will seek long-term solutions to the energy problem by focusing on: the underlying causes of the current energy crisis, the availability and applicability of alternative sources of energy, global strategies necessary to fulfill the energy needs of all nations, and individual and institutional adaptation to more appropriate utilization of energy.

Among the scheduled speakers will be Congressman Mike McCormack, the only scientist in the U.S. House of Representatives; Leonard Woodcock, President of the United Automobile Workers; Commissioner William O. Doub of the U.S. Atomic Energy Commission and Glenn T. Seaborg, former AEC Chairman; Carl Madden, Chief Economist of the U.S. Chamber of Commerce; Jack Conway, President of Common Cause; Beatrice Willard, member of the Council on Environmental Quality; Orville Freeman, former Secretary of Agriculture; W. Donham Crawford, President of the Edison Electric Institute; and many others.

Admission information, registration forms and advance reservations are available from the World Future Society, 4916 St. Elmo Avenue, Washington, D.C. 20014, telephone (301) 656-8274.
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- Eptam® 5-G herbicide for sand traps
- Captan 50-WP fungicide for turf, trees
- Dyfonate® 5-G soil insecticide for turf
- Imidan® 50-WP insecticide for trees, shrubs
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Aspon® insecticide, the quick, long-lasting control for chinch bugs, devastating destroyers of turf. Usually just one application a season in the north, two in the south.

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Eptam® herbicide is the sure control for annual weeds in sand traps. Also controls persistent perennial weeds like nutgrass and quackgrass. Excellent for flower beds and shrubs, too.

Imidan® insecticide protects trees from destructive gypsy moth, elm spanworm, spring cankerworm and birch leaf miner. (Northeast only.)

Vapam® liquid soil fumigant cleans the soil of pests so you can replant grass, trees, and shrubs. Destroys weeds and their seeds, insects, nematodes and many fungous organisms. And you can replant without a long waiting period.

Dyfonate® soil insecticide, one of the newest effective controls for chinch bugs used by commercial operators in the southeast.

Captan fungicide is the reliable control at very low cost for brown patch, leaf spot, melting out and several other turf diseases.

Try these Stauffer products, liquid, granular and wettable powder forms, to protect beautiful grounds. For full information . . . just fill out and mail the post-paid card insert above. Stauffer Chemical Company, Agricultural Chemical Division, Dept. H.D., Westport, CT 06880.
DISEASE CONTROL
(from page 10)

thiram, maneb, zineb, Dynene, Actidone and Daconil have broad activity spectra. Even though they were more effective against some pathogens then others, the materials still were toxic to a wide range of disease organisms. Neither fungicide choice nor disease diagnosis was critical. If the superintendent mis-diagnosed his fungicide choice it was still more or less effective and nothing drastic happened.

The advent of the new systemics changed all that. The benzimidazolone (Tersan 1991) compounds are extremely effective against Sclerotinia dollarpsot and worthless against Pithium blight. Attempting control of Pithium blight mis-diagnosed as dollarpsot with lots of visible white mycelium would be pure disaster.

These or similar types of crises happened far too often this past summer. In one instance with which we were familiar, greens received four applications of different fungicides in one week, all at maximum label dosage. At the end of the week, the greens were yellow, partially scorched and diagnosis of the original problem would have taken the wisdom of 16 Solomons. The cure was indeed worse than the ailment.

Successful disease control is built on good planning and taking advantage of accumulated experience. Cultural management comes first, chemical fungicides second. For greens especially, a good, deep, vigorous root system is essential. Disease damage to a bentgrass green surviving on $\frac{1}{4}$ inch of root depth clinging to bricklike compacted soil will be far worse than on a deep rooted healthy turf. Far too many people are substituting the chemical pill for spring and fall aerification, monthly topdressing, and light verticutting at regular intervals. Topdressing plays a big roll in decaying surface debris and thatch; thus, minimizing the survival base for disease organisms.

Various fungicide programs can be used to accomplish the same goal. Experience plays a big part in fungicide choice and successful use. New fungicides should be introduced gradually, first in the nursery, then on a green or fairway, and finally incorporated into the total program. This may take an entire season or several seasons to accomplish.

There are no miracle fungicides. Often what is gained towards one disease is lost in another. The replacement of mercury with benzimidazoles (systemics) in a fungicide program gains better dollarpsot and brown patch control but loses all Helminthosporium and Pythium suppression, thus requiring additional different fungicides integrated at appropriate intervals.

Last, successful control requires accurate disease diagnosis and estimation of problem severity. Is the disease truly going to result in severe turf loss or is it merely a curiosity? Will it get better in a week whether you spray or not? With rising costs everywhere the turf manager must make hard decisions. Treatment costs must be viewed in terms of real benefits, not imagined or whimsical improvement.

Reprinted from THE KEYNOTER, a publication of the Pennsylvania Turfgrass Council, Inc.

Fine Fescues Right For Roadside Uses

Fine fescues are important components of grass mixtures to use for keeping roadsides green and beautiful with a minimum of maintenance, according to Dr. Robert W. Duell of Rutgers University.

"Research has shown that several of the fine fescues thrive in acid soils, such as are frequently found along roadsides where there is less opportunity to correct soil acidity with applications of lime," he said.

An associate research professor in the department of soils and crops at Cook College, New Brunswick, N.J., Dr. Duell reported the result of his research on turfgrass varieties and soil acidity to the American Society of Agronomy.

The field work involved the development of different levels of acidity in field plots through 4 years of surface applications of ammonium nitrate and lime.

Once the desired acid levels were reached, 19 varieties of grasses and legumes were sown in the plots. All plants tested, except the fine fescues, did best in the less acid soils that had had lime treatments. The fine fescues, however, did better in the more acid soils of the research area.

In addition to the paper, Dr. Duell is senior author of a monograph and slide series, sponsored by the Turfgrass Division of the ASA, which he previewed at the meeting. The slides portray the problems, materials, and methods involved in the development of a superior vegetative cover for roadsides and will be available through the ASA.
How to put a million tiny hoes to work aerating.

Just apply GRAND PRIZE® Lawn & Garden Gypsum to grassy areas and shrub beds. GRAND PRIZE will work down—like a million tiny hoes—to create a loose, porous soil structure where air and water can move . . . roots can freely feed and grow.

It supplies soluble calcium and sulfur in a readily absorbed form. Won't affect the pH of the soil. Helps fertilizers to be more effective, and organic matter to decay faster. In addition, GRAND PRIZE helps neutralize pet and deicing salt damage.

GRAND PRIZE is inexpensive and easy to use. While excellent for lawns, use it for flowers, vegetables and shrubs. If you want richer, greener lawns with less work, write for more information to 101 S. Wacker Drive, Chicago, Ill. 60606. Dept. WTT-34.

CHEMICALS DIVISION
UNITED STATES GYPSUM
BUILDING AMERICA
MARGARET HERBST, appointed executive secretary of the New York State Arborists Association.

ROBERT HINDES, joins Thompson-Hayward Chemical Company as an agricultural sales representative. He will be working in the Yakima, Wash. area.

WILLIAM J. WILKINSON, appointed manager, materials management for the agricultural and veterinary products division of Abbott Laboratories.

HERBERT A. JESPERSEN, named assistant division manager of OMC-Lincoln, a division of Outboard Marine Corporation. He has been chief engineer of Lawn-Boy.

GEORGE MOORE, appointed assistant sales director of Municipal & Industrial Service equipment Division of FMC Corp. Before joining FMC, Moore was general manager of Bridgestone Tire Co.

CLIFF BURD, joins the staff of Thompson-Hayward Chemical Co. as an agricultural sales representative. His territory will include central Texas.

DANIEL WEIGEL, joins the Outdoor Power Equipment Division of FMC Corp. in Port Washington, Wis. as personnel manager. He will be responsible for the division’s personnel administration and employee relations.

S.E. (STU) AINSWORTH, appointed manager of agricultural chemicals for Abbott Laboratories.

ROBERT L. HUTCHINGS, named manager-marketing services and DENZLE Q. WHITEHAIR, appointed manager-field sales of Hays Mfg., a division of Zurn Industries, Inc.


CLAUDE CRUSE, becomes executive secretary for the Weed Science Society of America (WSSA). He will handle most of the duties formerly assigned to DR. FRED SLIFE, previous exec. sec.

DR. JOHN E. KAUFMANN, appointed assistant professor of turfgrass management for Cornell University. He fills the position vacated by Professor Emeritus JOHN F. CORNMAN.

DR. MICHAEL TYSOWSKY, named entomologist for the agricultural chemicals division of ICI America, Inc. DR. DAVID H. BROOKS, appointed research supervisor. He is on a two-year leave from the London based parent company.

EDGAR E. FEHNEL to vice president of agricultural marketing planning for Elanco Products Company. He will be responsible for products planning and coordination of agricultural products on a worldwide basis.
Dacthal drives 20 annual weeds off the course with one easy swing.

One application early in the spring. That's all it takes. Dacthal preemergence herbicide prevents 20 annual weeds from sprouting all season long. Problem weeds like carpetweed, chickweed, purslane and others. So you can devote time and manpower to more important work.

Dacthal doesn't stop there. It also drives out troublesome crabgrass and Poa annua. Hit 'em in the spring. And follow through with Dacthal in late summer for control of Poa annua and other late-germinating weeds.

Over the years, Dacthal has proven to be the closest thing to worry-free weed control. It won't harm new grass when used as directed. Won't leach out with frequent waterings. And there's no problem of residue buildup in the soil.

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This year, drive out weeds with Dacthal... the all-around favorite preemergence herbicide. Available in wettable powder or granules. Ask your supplier for more information or write: Agricultural Chemicals Division, Diamond Shamrock Chemical Company, 1100 Superior Avenue, Cleveland OH 44114.
Help Engines Start Easier In Cold Weather

Hard to start trucks or tractors, can be a real aggravation during winter months. There are several things you can do, though, to prevent this irritation, and doing them early in winter can make the next few months a lot more pleasant.

Three main problems cause winter starting problems with gasoline engines, according to Sam Huber, extension agricultural engineer at Ohio State University. Fuel doesn’t vaporize as readily at low temperatures, making it more difficult to obtain a mixture of air and fuel that will burn. Electric spark at the spark plugs may not be intense enough to ignite the air-fuel mixture, because of lower output of the battery at low temperatures. Cold oil in the crankcase causes the engine to crank harder, thus requiring more battery power.

Huber’s suggestions for overcoming starting difficulties with gasoline engines includes having each engine tuned up by installing new spark plugs, breaker points and condenser, have batteries tested to be sure they are fully charged. Battery capacity drops from 100 percent at 80 degrees to 68 percent at 32 degrees, 46 percent at 0 degrees, and 30 percent at -20 degrees. The power required for cranking an engine increases from 100 percent at 80 degrees to 165 percent at 32, 250 percent at 0, and to 350 percent at -20, Huber points out.

With diesel engines, it’s difficult to raise the temperature of the compressed air to the required ignition temperature of the fuel. To remedy this, the engineer suggests checking the batteries, using electric heating built-in starting aids, using ether starting fluid, and using a higher octane number fuel if necessary.

National Arbor Day Support Sought

By Harry Banker

The executive secretary of the National Arbor Day Committee has urged members of the International Shade Tree Conference and more than 35 state chairman of the Nat. Ark Day committee to seek legislative support of the day.

Harry J. Banker has solicited help from the Green Industry to urge legislators to support passage of the National Arbor Day bills, S.J. Res. 162 and H.J. Res. 789. The legislation, introduced by Sen. Harrison A. Williams (Dem-N.J.) and Con. Joseph G. Minish (Dem-N.J.), would authorize the President to proclaim the last Friday in April 1974 as National Arbor Day.

Many trees are still disappearing at an alarming rate due to the continued expansion of highway systems as well as the industrial and commercial building growth in our spreading suburban sprawl, says Banker. This decimation of our trees, coupled with additional heavy losses inflicted by gypsy moths, various diseases, forest fires, etc. runs our annual tree losses into the millions. Only fractional amounts of replacements are taking place.

Banker says the passage of the National Arbor Day measures provide a much needed method for awakening the nation to these alarming statistics. It could precipitate the appropriation of necessary funds and it would also encourage private citizens to gain a better appreciation of trees on their properties, he believes.