

on the subject. He went over the basic differences between diesel and gasoline engines, including the benefits and drawbacks of each. In reference to diesel engine maintenance, Macrae stressed filtration. "You should perform recommended maintenance at or before the manufacturer's specified intervals," noted Macrae. "Keeping dirt and water out of the injection system is the number one priority." In terms of cost efficiency, on the positive side the diesel is fuel efficient, requires less maintenance, is very reliable and produces increased power; while on the negative side it has a high purchase price, Macrae added.

Dr. John Hall III, extension turf agronomist at VPI, Blacksburg VA, delivered the keynote address, "Looking Ahead In Turf." Hall noted that these are "exciting times" due to advances in chemicals and genetics. He warned that the 1974 oil embargo showed that the green industry was on the bottom of the energy totem pole and it has to compete with other areas for the population's disposable income. With the number of new golf courses increasing at a decreasing rate, Hall predicted a trend to multiple uses of courses and an increase in maintenance efficiency. He added that the rapid expansion of the lawn care industry could lead to price wars, expansion into smaller towns and a decrease in operator turnover.

Hall's observations on the future of the green industry included a trend towards higher mowing heights, less fertilizer usage, the use of low pressure heads in irrigation, an increase in diesel equipment, a trend towards grasses with low nitrogen requirements and high drought tolerance, and an increase in the use of effluent water.

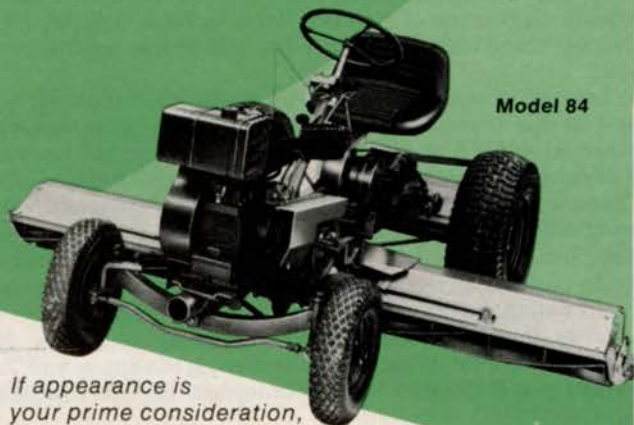


**Turf Seed** Company's Bill Meyer and Toro's Jim Watson share prespeech jitters during New Jersey Expo.

Other noteworthy educational sessions included C. Reed Funk on turf-type ryegrasses, Toro's Jim Watson on adjusting the water system, Turf-Seed's William Meyer on athletic field grasses and Henry Indyk on athletic field construction. Indyk educated the audience on the problem of contractors who purposely bid low and then cut specifications. He advocated the use of resident managers to keep the job to

*Continues on page 12*

# Ugly, but Economical!



Model 84

*If appearance is your prime consideration, better think about another mower.*

**If economy and quality is what you want — you want a National Mower!**

In today's economy, one of the most difficult engineering tasks is to produce a completely functional and easily maintainable machine with a minimum number of components. *We've been doing just that since 1919.*

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# GOLF

## UPDATE

### Four receive Distinguished Service award

Superintendents Sherwood Moore and Milton Bauman, USGA Green Section National Director Alexander Radko and turf nurseryman Ben Warren received Distinguished Service awards at the Golf Course Superintendents Association of America Show in New Orleans, LA. The award denotes "outstanding service to the golf course superintendent's profession."

Milton Bauman is superintendent of the Seattle Golf Club. He was instrumental in the founding of the Northwest Turfgrass Association. Bauman served as NTA president for three terms and has been on the board of directors for over 20 years. Since coming to the Seattle Golf Club in 1970, Bauman has worked with Washington State University researchers on using sulfur to control soil pH and inhibit *Poa annua* growth.

Al Radko has spent the last 34 years with the USGA Green Section spanning the positions of research assistant, agronomist, eastern regional director and national director. Additionally, Radko was involved in research studies that developed Merion Kentucky bluegrass, Meyer zoysiagrass, U-3 bermudagrass, C-strain creeping bluegrass, and Touch-down, RAM I and Bellevue Kentucky bluegrass. He was also editor of the USGA Green Section Record.

Sherwood Moore is currently superintendent of Winged Foot Golf Club, Mamaroneck, NY. A golf course superintendent since 1939, Moore has worked at various clubs in New York, New Jersey and Connecticut. He has also been president of the New Jersey GCSA and the Metropolitan GCSA.

Ben Warren founded Warren's Turf Nurseries in 1938 and it grew to become one of the largest of its kind in the world. Warren's turf is grown and sold in five midwest states, New York and California. He has been instrumental in the founding of the Sod Growers of Illinois, the Midwest Regional Turf Foundation, and Illinois Turf Foundation and the American Sod Producers Association. Additionally, Warren is well known for the innovations (both mechanical and research) that he has contributed to the green industry.

### GCSAA consolidates committee functions

The Golf Course Superintendents Association of America have consolidated their 19 standing committees into nine. In the process committee functions were merged to make the association's administrative duties more workable.

The nominating and election committees and the President's Council were left unchanged by the redistribution. The nine new committees will be chaired by executive committee members. The consolidation was structured so that subcommittees could be established under the new committees but no committee vice chairmen will be appointed.

### Fream Group to design three new courses

The Ronald Fream Design Group, Santa Rosa, CA, have been awarded three new contracts. The golf course architect/resort master planning consulting firm will design and prepare working drawings for the 27-hole Chaguaramas Public Golf Course to be constructed near Port of Spain, Trinidad, West Indies. A 36-hole resort course is being master planned for Nongsa Beach, offshore from Singapore. Preparation of a master plan for the remodeling of the Jockey Club Golf Course in Buenos Aires, Argentina is also underway.

The Fream Group is currently involved in three other projects under construction. They are the Genting Highlands Golf Course in Malaysia, the Pantai Mentiri Golf Club in Brunei and The Serapong Course in Singapore. At the Serapong site over one-half of the course is being built on land dredged from the sea which involves more than two million cubic yards of earthmoving.

specifications and having each phase of construction approved before the start of the next phase. Indyk cautioned the listeners about "file-dipping" architects. He noted that some architects use standard specifications for many different sites in an effort to cut costs.

One session which seemed to sparkle, although the topic could have appeared weak, was a two-hour session on bunkers. Golf course architect Geoffrey Cornish, USGA Green Section's Carl Schwartzkopf, Rich Valentine of Merion Country Club, Stan Helstowski of Wheatley Hills Country Club, Dave Canavan of Moore Golf Inc., and Byron Phoebe of Farmstead Golf and Country Club gave all sides of the bunker issue. The benefits have too often been overlooked for maintenance considerations. Bunkers can and do help golfers and the course. They have special problems such as drainage, an sand composition, and improper location, but they also save the golfer from worse hazards and add challenge to the course.

One of the highlights of the show was the annual banquet. Peter Loft of Lofts Seed Co., Bound Brook, NJ, was the recipient of the New Jersey Turfgrass Hall of Fame Award for 1981.

### LAWN CARE

### PLCAA elects 1982 slate of officers

At the annual business meeting of the Professional Lawn Care Association of America in Louisville, KY, the following officers and directors were elected to serve during the coming year.

For the office of president, J. Martin Erbaugh, Lawnmark, Division, Erbaugh Corporation, Peninsula, OH; vice president, Ronnie L. Zwiebel, Green Care Lawn Service (formerly Chem-Care Lawn Service of Alabama, Inc.) Birmingham, AL; and secretary-treasurer, Donald Burton, Lawn Medic, Inc., Rochester, NY. These newly elected officers will serve one-year terms.

New directors are Paul Bizon, Pro-Grass Lawn Service, Inc., Hubbard, OR; Des Rice, the Weed Man Ltd., Mississauga, Ontario; William Fischer, Spring Green Lawn Care Corp., Plainfield, IL; and John Kenny, Turf Doctor, Framingham, MA. All will serve a three-year term.

Remaining on the board to complete their terms are: Richard L. White, Village Green Ltd., West Chicago, IL; John A. Latting, Lawn Groomer, Normal, IL; Douglas Baker, Leisure Lawn, Inc.,

*Continues on page 14*

The new Ditch Witch 1420:

# DON'T SETTLE FOR LESS IN A STEERABLE, WALK-ALONG TRENCHER.

If you're investing in a 14-HP-class steerable walk-along trencher don't compromise. You deserve the best; the Ditch Witch 1420. The only steerable trencher in its class with a diesel option that goes through a 36-inch gate.

The 1420 can dig trench 5 feet deep\*. Its hydrostatic ground drive can be fine tuned for slow trenching speeds, or stepped up to 2 MPH for movement around the job site. The digging boom is raised and lowered hydraulically, while the digging chain drive is mechanical for efficient use of power.

The 1420 is easy to operate. All controls are accessible from one location, including a single lever that operates steering, ground drive direction and speed. And since the drive wheels are steered, limited direction control during trenching is possible. There's even an optional boring attachment, and an optional outboard bearing support for extra strength in tough digging conditions.



**Ditch Witch.  
Don't settle for less!**

These are just the highlights. Get the whole story on the 1420 from your Ditch Witch dealer. He'll explain why you can't afford to settle for less than Ditch Witch quality. Or call toll-free for literature: (800) 654-6481. The Charles Machine Works, Inc., P.O. Box 66, Perry, Oklahoma 73077, Phone (405) 336-4402.

\*Trench width and depth depends on boom and chain set up.



# Ditch Witch

### ASLA annual meeting posts record

More than 2300 landscape architects traveled to Washington, DC to participate in the 1981 Annual Meeting of the American Society of Landscape Architects.

Under the theme, "Action by Design," delegates witnessed four major presentations and more than twenty specialized education sessions geared to help make them active participants in society's decision-making process. The expanded educational exhibit was sold out with over 100 exhibitors participating. Ambassador Elliot Richardson delivered the keynote address on becoming active societal participants at the global level. Other speakers included former Secretary of the Interior Stewart Udall, Executive Director of the Greater Cleveland Roundtable Sarah Short Austin, and Charleston, SC Mayor Joseph Riley Jr.

At the meeting, Calvin Bishop, Bishop & Walker, Houston, TX, was installed as president. Other officers installed include: Theodore Wirth, president-elect; Cameron Man, vice president; and Donald Fox and Brian Kubota, vice presidents (continuation of their two-year terms). Past President William Behnke will continue on the ASLA Executive Committee for one year.

Sir Geoffrey Jellicoe, a British landscape architect, was awarded the ASLA Medal, the society's highest and most prestigious award. Past President Lane Marshall, head of Texas A&M University's department of landscape architecture, was awarded the ASLA President's Medal. This award is offered in recognition of unselfish and devoted service to the Society at the national level over a period of five years or more. The 1982 Annual Meeting will be held in Honolulu, Hawaii in November.

### AAN publishes computer guide

The *AAN Computer Directory*, published by the American Association of Nurserymen, was conceived and designed to assist nursery business firms contemplating installation of a computer.

The 28-page directory lists 153 firms—retail, landscape, mailorder and grower—which have computers plus eight others which use service or accounting firms or which use time-sharing. The directory gives complete name, address and phone number of the nursery firm by state; business classification (i.e. retail, etc.); manufacturer, model and language of the computer and what type programs are being handled (i.e. personnel, payroll, inventory, billing receivables, payables, general ledger, bookings, other).

Many of the firms in this directory have indicated they are willing to share their experiences and/or information about their computer operations. In addition, many firms are willing to sell and/or rent their company-owned programs.

A single free copy is available to AAN members on receipt of a self-addressed business size envelope. Non-members may obtain a copy for \$3 each. Send pre-paid order to American Association of Nurserymen, 230 Southern Building, Washington, D.C. 20005.

### NMC to publish landscaping research

The Nursery Marketing Council is compiling statistics on landscaping that it has isolated from consumer research within its all-industry marketing program. A detailed analysis of the home building industry and related landscape services will be the subject of an NMC "white paper" due out in the next few months. A few preliminary details currently available are: 70.5% of all homeowners strongly agree that you plant to increase property value; 50.7% strongly agree that the main reason to plant is to help sell house at the asking price; and 43.9% strongly agree that one of the main reasons to plant is to sell a house faster.

Dayton, OH; Larry Brandt, Spray-A-Lawn, Cincinnati, OH; Gordon Ober, Davey Lawnscape, Kent, OH; and Robert W. Miller, ChemLawn Corporation, Columbus, OH. Jerome R. Faulring, Professional Turf Corp./Hydro Lawn, Gaithersburg, MD, remains on the Board as immediate past president.

Serving as the associate member representative for the year 1982 is William Stinson III, O.M. Scott & Sons, Marysville, OH.

### GYPSY MOTH

#### Gypsy moth spreading out of Northeast

Gypsy moth caterpillars, which defoliated about 13 million acres of trees during 1981, appear to be hitchhiking out of the Northeast, according to the U.S. Department of Agriculture.

In 1981, traps turned up new infestations of gypsy moths in Arkansas, California, North Carolina, Oregon, Virginia, West Virginia and Wisconsin. "We're also concerned about small concentrations of male gypsy moths that were trapped in Alabama, Indiana, Minnesota, Ohio and South Carolina," said Harvey Ford, deputy administrator of the USDA's Animal and Plant Health Inspection Service. "These moths had human help in traveling so far from home. The female moths lay eggs in any protected spot out-of-doors, and some of the favorite spots are on vehicles, lawn furniture and camping gear."

Ford said several hundred moths were trapped in Florida campgrounds, possibly the result of northeastern campers who vacationed there during Easter, when gypsy moth egg masses on their camping equipment were hatching.

USDA researchers have been making progress in their studies of natural enemies of the gypsy moth. In laboratory tests two species of parasitic wasps brought by U.S. scientists from India attacked and destroyed the gypsy moth caterpillars. The researchers now plan field tests to determine the overall effectiveness of the wasps as biological controls to help curb gypsy moth infestations. According to Joan Wallace, administrator of the USDA's Office of International Cooperation and Development, the wasps will cause no disruption to the U.S. environment and pose no threat to other animal species or to humans. Research on the two species of wasp, *Apanteles flavicoxis* and *Apanteles indiensis*, is being conducted at the USDA's Beneficial Insects

*Continues on page 16*

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For a limited time your participating Arbor-Plex dealer will give you, free, 100 feet of throwing line with ball attached, for each and every Arbor-Plex rope you purchase.

The throwing ball has an outer layer of soft rubber for a firm and comfortable grip. It throws easily because it's perfectly sized, weighted and balanced. The braided line won't rotate or hockle when thrown. So getting into valuable or difficult access trees is as easy as falling off a log.

Packaged in a convenient, re-usable storage pail.

And they're free, with the best tree rope money can buy—Arbor-Plex by Samson.

Arbor-Plex Bull and Climbing Ropes weigh less than equivalent diameter 3-strand manila or polyester ropes... *yet they are stronger.*

Parallay® parallel orientation of polyester and polyolefin fibers and our unique "Dura Tite" construction technique result in unsurpassed performance characteristics: • Excellent knot holding ability • Non-hockling, flexible, easy to rig • Excellent resistance to abrasion, snagging, and sudden loading • High strength to weight ratio • Rot and mildew resistant.

Look for this display at your local Arbor-Plex dealer, or contact Samson for his name and address. Samson Braided Ropes, Industrial Division, 99 High Street, Boston, Massachusetts 02110, Telephone (617) 426-6550.



Arbor-Plex rope is available in the following sizes:

Climbing Rope	Bull Rope
1/2" x 100 FT. (Bucket)	5/8" x 100 FT. (Bucket)
1/2" x 120 FT. (Bucket)	5/8" x 120 FT. (Bucket)
1/2" x 600 FT. (Reel)	5/8" x 150 FT. (Bucket)
9/16" x 100 FT. (Bucket)	5/8" x 600 FT. (Reel)
9/16" x 120 FT. (Bucket)	3/4" x 100 FT. (Bucket)
9/16" x 600 FT. (Reel)	3/4" x 120 FT. (Bucket)
	3/4" x 150 FT. (Bucket)
	3/4" x 600 FT. (Reel)
	7/8" x 600 FT. (Reel)



# SAMSON®

**DEALER INQUIRIES INVITED.** Although we've been supplying braided rope to the utility industry for over 20 years, we're relatively new in the arborist field. And we're looking for some new qualified distributors.

If you'd like to sell the best arborist's rope money can buy call Dick Hildebrand, collect, at (617) 426-6550.

## UPDATE

BY WILLIAM HOFFMAN

### New nematode threatening pines

The U. S. Department of Agriculture reported that the pine wood nematode has been identified in pine species in 38 states. Ornamental pines seem to be the most susceptible with the Japanese black pines in the ocean beach areas from Long Island to North Carolina especially hard hit in the last two years. Some damage to Scots pine Christmas trees have been found especially in areas where dry summers and falls have placed added stress on the trees. The nematode is carried by long-horned beetles. Pest management is based on control of the beetles and by direct tree injection of a nematicide. The pine knot nematode, probably native to the United States, was first identified with pine tree deaths in Missouri in 1979.

### Floraboard attached to Farm Bill

Proponents of Floraboard were able to add the "Floral Research and Consumer Information Act" to the U. S. Senate Farm bill. The Senate version differs slightly from the bill originally introduced in the House in that the Floraboard shall convene an advisory panel drawn from the wholesale and retail segments of the flower and plant industry and shall consult it frequently on all marketing, promotion and research programs.

This new legislation was adopted by the Farm Bill conferees with no serious adverse comments since the costs to the Federal government will be minimal. Floraboard came into effect when President Reagan signed the 1981 Farm bill.

### EPA relaxes pesticide advertising

The 1978 amendments to the Federal Insecticide Fungicide and Rodenticide Act (FIFRA) defined "use of a registered pesticide in a manner inconsistent with its labeling" so that the following are not misuses: (1) applying a pesticide at any dosage, concentration, or frequency less than specified on the label; (2) applying a pesticide against any target pest not specified on the labeling if the application is to the site named on the labeling and not specifically forbidden by the labeling; (3) using any method of application not prohibited by the labeling and (4) mixing a pesticide or pesticides with a fertilizer unless labeling prohibits such mixtures.

### Not All MH Products Cancelled

Government Update in *Weeds, Trees & Turf*, December, 1981, implied that all MH registrations were suspended. This is not the case.

On August 14, 1980, EPA issued a 3 (c) (2) (B) notice to maleic hydrazide (MH) registrants requesting them to arrange for the submission of additional data. Registrants who did not respond to that notice would have both their diethanolamine (DEA) and potassium salt (K) registrations suspended. EPA issued their follow up notice of an Intent to Suspend Registrations on September 16, 1981. (Please find a copy of the Federal Register notice attached to this letter.)

Since one company has made a commitment to produce and submit the necessary toxicological studies on the potassium salt formulation of MH, that formulation *will not be suspended*. (Only those companies who did not respond in any way to EPA's notice will have their potassium salt formulations suspended.)

Since no registrant agreed to initiate studies for the DEA salt, all registrations were suspended. Registrants, however, will be allowed to sell or distribute existing stocks until they are exhausted.

Willard Cummings  
Product Registration Specialist  
Uniroyal Chemical  
Bethany, CN

Research Laboratory, Newark, DE.

In other gypsy moth news, both Maryland and Delaware are gearing up to combat the defoliating caterpillars. The University of Maryland Cooperative Extension Service is no longer recommending the use of oak, particularly white oak, as a tree for home plantings. "White oak is the preferred food plant of the gypsy moth," explains Extension entomologist John Davidson. "Unfortunately, oak trees are among the most widely planted ornamental species." Davidson suggests planting tree varieties which gypsy moth caterpillars will not eat. He lists tulip poplar, sycamore, ash, catalpa, dogwood, hackberry, honey locust, horse chestnut, persimmon, walnut, osage orange and mulberry (all deciduous); and holly, arborvitae and juniper (evergreen) as food plants the insects avoid.

The Delaware Cooperative Extension Service and Department of Agriculture is currently planning meetings in New Castle and Kent counties to coordinate its 1982 control efforts. With Delaware having its first sizable outbreak of gypsy moths last spring, it is being especially vigilant. "One defoliation usually doesn't kill most trees," said University of Delaware extension pesticide specialists John McDaniel. "But if it occurs two years in a row, some may die."

### EQUIPMENT

#### Lawn and garden shipments show decline

Twelve-month shipments by reporting members of the Outdoor Power Equipment Institute (OPEI) statistical program declined 20.6% when compared with the same period in 1980.

The 4.6 million walk-behind power mowers shipped in 1981 compares with 5.7 million units in the 1980 model year. Factory values declined from \$701 million to \$606 million, or 13.6%.

Shipments of riding garden tractors

*Continues on page 74*



**Incoming ASLA** President Calvin Bishop (left) is congratulated by outgoing President William Behnke at the ASLA Annual Meeting in Washington, DC. (For information on the meeting turn to this issue's Landscape Update column.)

# The rumors you've been hearing about Jacobsen stop here.

There've been some changes made at the Jacobsen Division of Textron. And everybody in the industry seems to have a different story on what those changes are. So we thought we'd set the record straight, once and for all.

#### **These are the facts.**

In April of 1981, all Jacobsen consumer products were merged into the Homelite Division of Textron and moved to Charlotte, North Carolina.

As of that date, the Jacobsen Division became a company devoted exclusively to the development, manufacturing, distributing and servicing of the world's finest turf care equipment.

#### **What does it all mean?**

It means a better Jacobsen. It means that all our energies and expertise can now be totally committed to an area we've been excelling in for over sixty years. And it means that we've got some very exciting new products scheduled for introduction within the next year. We're planning to make it our most exciting year ever.

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**20<sup>th</sup>  
ANNIVERSARY**



The first location of K&N Machine works, later to be Ryan, of OMC Lincoln.



Commercial production of improved turfgrasses took hold in the Northwest in the 60's.

# RECOGNIZING A MARKET READY TO BOOM

By BRUCE F. SHANK, executive editor

While the golf market in the United States first boomed between 1920 and 1930, the other markets composing the Green Industry didn't really begin to boom until the late 50's. Postwar industrialization, chemical progress during the war, and the baby boom provided the impetus for the landscape nurseryman, sod grower, and commercial arborist, as well as the magazine publisher to create a magazine to cover all aspects of landscape management.

*Continues on page 23*