In this industry, there is one unchangeable tradition: the annual International Turfgrass Conference and Show of the Golf Course Superintendents Association of America is always big. And for evidence to this fact, we quote the following from a report of the second conference held in Detroit in February 1928:

"About 350 greenkeepers were present throughout the week and the big auditorium of the Hotel Fort Shelby was crowded continuously during the convention sessions on Thursday and Friday." There were 27 exhibits at the 1928 show, and by 1929, at the Statler in Buffalo, this support had grown to 38 exhibits covering 10,000 square feet of convention floor.

Last year in New Orleans, 1,384 superintendents attended and some 150 exhibits covered 100,000 square feet of floor space in Rivergate exhibit hall. Attendance for a single day, including members, ladies, non-members, guests, one-day admissions and exhibitors hit a whopping 4,899. That's big.

Again this year the annual show promises to be a large success. It will be February 8-13, at the Auditorium and Convention Hall in Minneapolis, Minn.

We congratulate the GCSAA on its excellent program presentations and success with its convention and show through the years. We are a strong supporter of highlevel communication programs and any opportunity members of our industry have to exchange ideas. These are the foundations for progress and the GCSAA show has them in abundance.

Jack Quaill of Pittsburg, reporting on the 1936 convention, described these foundations well: "Where can you get such nationally known and prominent men together at one time to tell you of the problems and answers to modern golf course maintenance? Where can you get a bunch of greenkeepers together to discuss and exchange ideas with you on your particular problems?

The '76 show has quite a lineup. There will be 68 speakers at the educational sessions, including 23 university instructors, 29 member superintendents and 16 industry representatives. And the program . . . everything from dry spot to leadership. See page 37 for details. DDM

In over 20 countries throughout the world, Vicon spreaders are recognized as the most accurate built.

The reason is Vicon's exclusive pendulum action. Seed, chemicals, fertilizer, or lime are evenly broadcast in a wide rectangular pattern. "Hot" spots are eliminated. Overlapping is cut way down. You save on time and materials. At the price of fertilizer today, saving a little means a lot in dollars.

Spreader rates vary from 10 to 2500 pounds per acre. Hopper capacities range from 600 pounds to 6 tons. Years of low maintenance are assured by the use of non-corrosive polyester and heavy duty stainless steel for all parts in contact with chemicals.

In the exacting business of grounds maintenance, accuracy is critical. Around the world, that means Vicon. Write for complete details.

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### Weed control with TRIMEC

**Kills all these weeds:**

- Bedstraw
- Bindweed
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- Common Chickweed
- Mouse-Ear Chickweed
- Clover
- Dandelion
- Dichondra
- Curled Dock
- Ground Ivy
- Heal-All
- Henbit
- Knotweed
- Lambsquarter
- Milford (Yarrow)
- Wild Lettuce
- Carpet Weed
- Morning Glory
- Mustard
- Peppergrass
- Pigweed
- Plantain
- Purslane
- Ragweed
- Shepherd's Purse
- Sheep Sorrel
- Smartweed
- Sunflower
- Spotted Spurge
- Thistle
- Wild Onion
- Wild Garlic
- Yarrow

**Safety and Economy**

TRIMEC, properly applied, is harmless to grasses, trees, flowers and ornamentals because root chemical absorption is minimal. All components are biodegradable.

TRIMEC’s cost-per-acre of weed control is less than any other broadleaf herbicide for two reasons: First, a single application usually does the job, saving labor, and (2) the light chemical dosage required reduces the material cost proportionately.

TRIMEC’s efficacy results from the synergistic (more-than-additive) power of its 2,4-D, MCPA and dicamba ingredients, balanced in our exclusive, patented formulation. **NOTE:** For sensitive grasses, a Bentgrass formula is available.
No other herbicide has every TRIMEC benefit

- Controls the widest range of broadleaf weeds.
- Gets "hard-to-kill" species without repeated applications.
- Wives wide margin of safety to lawn grasses.
- Minimum hazard from root absorption to flowers and ornamentals, deciduous and coniferous.
- No vapor action after application.
- Effective weed control at wide range of temperatures.
- Sequestered to overcome water-hardness problems.
- Treated areas may be seeded within two weeks.
- Non-flammable and non-corrosive in use.
- Product stable for several years but subject to freezing at temperatures below 32° F.

Can you name another with every feature?

We used to use separate herbicides to control Nut Grass, Clover, and broadleaf weeds. Now Trimec does the entire job and, in addition, gets such tough weeds as Filaree and Mallow. Trimec saves us money and does an outstanding job... our turf has to be excellent — we supply it to the Camellia Bowl.

H. B. Michelson, owner
Michelson's Turf Grass Nursery
Elk Grove, California

We've been using Trimec on over 800 residential lawns for three years, and I'd rather take a beating than switch.

Ron Zwiebel, President
Chem-Care Lawn Service of Alabama, Inc.
Birmingham, Alabama

TRIMEC has been thoroughly field tested and proved in all parts of the United States, in all kinds of weather. Its effectiveness in cool 50°-range temperatures is firmly established, allowing early-spring and early-winter use. TRIMEC is the best available weed control for golf courses, lawns, cemeteries, along highways, on sod farms, in public parks — wherever immaculate turf must be maintained.

Now, the one best way to be convinced is to test it yourself. TRIMEC... the king of broadleaf herbicides.

This year shouldn't you at least give TRIMEC a trial?

For further information and prices, see your local authorized TRIMEC distributor.

TRIMEC is a registered trademark of PBI-GORDON Corporation, U.S. Patent No. 3,284,186.
President Ford signed a law allocating $71.5 million through March 1977 to EPA for its pesticides program. The act also contains the following provisions:

Delay through October 21, 1977 the deadlines for full registration of pesticides and applicator certification.

Require EPA to notify USDA and the public 60 days in advance of taking actions affecting pesticides.

Prevent EPA from requiring private pesticide applicators to take a test before certifying themselves as competent to use the chemicals. States could require them to pass tests, however.

Provide that educational information on integrated pest control be provided through EPA state agencies and the Extension Service.

Require EPA to assess the impact on commodities prices and production, retail food prices and other segments of the agricultural economy in changing pesticide classifications or cancellations.

D. B. Smith Company, Utica, New York, consolidated three of its manufacturing operations into new headquarters in Chadwicks, N. Y.

EPA's proposed Pesticide Policy Advisory Committee (re. Nov. WTT) was put in writing after a number of groups and individuals testified at the House Committee on Agriculture's Oversight Hearings. They testified that EPA was not considering the impact on the agricultural community to a sufficient degree as regulations governing the use of pesticides were being drawn up. The function of Train's committee when formed will be:,...'to advise, consult with, and make recommendations (to Train) on matters of policy relating to his activities and functions under FIFRA. The Committee provides practical and independent advice to the Agency on matters and policies relating to pesticides and maintains an awareness of developing issues and problems in the pesticides area. It reviews and advises (Train) on regulations and guidelines that are required by FIFRA; makes recommendations concerning necessary special studies; recommends policies with respect to the promulgation of pesticide standards and regulations; and assists in identifying emergency problems relating to the use and control of pesticides. It proposes actions to encourage cooperation and communication between the Agency and other Federal governmental agencies, State agencies, user groups, the chemical industry, the research community and the general public.'

Agricultural Laboratory of United States Testing Company, Inc., recently moved its headquarters. The new facility is especially designed for processing large volumes of soil, plant tissue samples and other related work.

Ransomes, Sims and Jefferies, Ipswich, England, appointed Pen-Gro Corp. as exclusive master distributor of its grass machinery and replacement parts in California, Nevada and Arizona.
Here's the one tractor you need to do almost any grounds maintenance job and do it right... the Gravely Convertible tractor. Rugged attachments convert it from a mower that handles both rough areas and smooth lawns to almost a dozen different pieces of equipment.

It'll plow and cultivate gardens and plantings... spray shrubbery and trees... grind leaves and branches for mulch or compost... haul heavy loads... do light dozer work and roll snow off drives and sidewalks... power-sweep parking lots of dirt or light snow... blow snow up to 60 feet away... and more. Then, Gravely's steering sulky and dual wheels let you ride behind for the big grounds.

Choose 8, 10 or 12 HP models with Gravely's proven all-gear four-speed transmission, instant reversing action, and key-electric starting. Eight HP manual-start, two or four-speed models also available.

Nobody else makes anything else that does so many jobs so well. Look in the Yellow Pages for your nearest dealer or write for our free catalog. Gravely Division of Clarke-Gravely Corporation, 3501 Gravely Lane, Clemmons, North Carolina 27012.
TURF PEST CONTROL

THERE ARE FOUR categories of insects and other related pests often found in turf, according to Clemson University entomologist Professor D. K. Pollet. The four categories are: soil inhabiting or root feeding, leaf and stem feeding, "juice sucking" and secondary insects and nuisances.

To control any insect pest positive identification is essential, Pollet told WEEDS, TREES & TURF. "Application of the correct material the proper way to control the pest is necessary to prevent injury to the turf," he said. There are also other problems in control of pests, he said, many of them relating to Washington.

"Turf pests, like other pests, occur year after year," he said. "Effective control is getting harder. The EPA rules and regulations concerning use of chemicals affect controlling measures used by the chemical industry, grounds maintenance workers, commercial applicators, universities and golf course superintendents."

Pollet feels the EPA has made some rules and regulations concerning the use of chemicals about which there is considerable question. "They have created a situation where turf people have to use more toxic, more specific and more costly materials to control the same pests which were controlled with less toxic and less expensive materials only a few years ago.

"The EPA has taken upon itself to be judge, jury and arbitrator when it comes to determining whether a pesticide will be used or not," he said. "We have to sit up and take note and help to make the decisions more unbiased. It is necessary to be alert to what is happening and actively support a safe and effective program to help each other to assure that when pesticides are removed from the market, that they are justifiably removed."

Professor Pollet said soil infesting insects which feed on the roots include white grubs, wireworms, mole crickets and ground pearls.

The immature or larval stage of several species of beetles which include June beetles, Japanese beetles, green June beetles, the Asiatic gar-

(continued on page 20)
Keep your turf in top playing condition.

Trust it to Chemagro.

*NEMACUR 15% Granular is a fast-acting nematicide that provides months of residual control of major genera of turf nematodes. Requires no injection—apply with a granular applicator and water in.

*DYRENE fungicide. DYRENE controls dollar spot, plus all Helminthosporium diseases—melting out, leaf blight, leaf spot. Also controls copper spot, stem rust and brown patch. Its small cost offsets the big cost of repairing after disease gets started.

*DEXON fungicide. Stops Pythium. This non-mercurial fungicide is also extremely effective in preventive programs to control cottony blight. It’s compatible with other turf pesticides.

*DASANIT nematicide. Broadcast DASANIT 15% Granular for control of microscopic “eel-worm” nematodes that destroy turf root systems, cause grass seedlings to wither and die. Requires no injection that makes turf unplayable for weeks during spring and summer. Easily applied with any conventional granular insecticide applicator. Thorough watering leaches it into the root zone for maximum control.

*DYLOX insecticide. This fast-acting selective insecticide gives quick cleanup of sod webworms. Dissolves readily in water for application with any type of spray equipment.

*BAYGON insecticide. This carbamate controls turf insects, including many species resistant to chlorinated hydrocarbon and organophosphate insecticides. May be used as directed on Bermuda, zoysia, rye, clover, colonial bentgrass and other common varieties.

For great turf that gives your golfers great shooting, order these Chemagro turf pesticides from your chemical distributor.

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Take the new John Deere 2040. It has a 40*-hp diesel engine, 8-speed constant-mesh transmission, and plenty of hydraulic power to handle any attachment you might need. Including a 6-foot, center-mounted rotary mower. The 2040 was designed to do the big jobs faster and easier.

For work that doesn't require a tractor as big as the 2040, there's the hydrostatic-drive John Deere 400. It's powered by a twin-cylinder, 19.9-hp engine. And there's a 5-foot, center-mounted rotary mower that's designed to match the 400.

To do small jobs economically and efficiently, John Deere offers you the 200 Series lawn and garden tractors. You can choose from 8-, 10-, 12-, and 14-hp models, all with variable-speed drive to change ground speed without stopping or shifting gears. Rotary mowers are available in either 38- or 46-inch widths.

With any size John Deere Tractor, you also get the John Deere tradition of expert service, parts availability and flexible financing.

For any job that comes along—big, small or in-between—John Deere has a way to do it. Profitably.

*Maximum PTO horsepower measured at 2,500 engine rpm (factory observed).

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It costs much less to save trees surrounded by paving than to remove the trees within months after the paving project is completed.

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The W.A.N.E. unit is made of PVC plastic, 13" in length, 4" in diameter, with a 6" collar. The surface of the unit is skid resistant and the lid locks firmly in place to make it theft proof.

Once installed, the W.A.N.E. unit provides a natural way for rainfall to get to the tree roots. Concentrated fertilizer pellets in the filter of the unit will last up to one year. The filter is an easy-to-remove heavy duty plastic screen which can be cleaned yearly as you replace the fertilizer pellets. (Note: All types of soluble or concentrated fertilizers or soil conditioners can be used through the unit.)

The W.A.N.E. unit has been purchased for use in the Capitol Mall, Washington, D.C. for the bicentennial celebration. It is in use today in many major cities throughout the U.S.

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JANUARY 1976

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den beetle and masked and rose chafer constitute the white grubs. “These C-shaped white larvae remain as little as 10 months or as long as three years in the soil,” he said. “They burrow in the soil around the roots and feed there about an inch or two below the soil surface. Irregular brown patches in the turf, presence of moles and large numbers of birds feeding in the sod are good indications of an infestation of grubs.”

Wireworms are primarily yellowish to dark brown, smooth and slender. They bore into the underground parts of the stems and feed on roots causing the grass to wither and die. Mole crickets are light brown in color and are adapted for digging. The stout and shovel-like forelegs allow them to dig rapidly. Beside feeding on the roots, their injury is twofold — burrowing of the soil uproots seedlings and the soil dries out faster. A single cricket can damage several yards of newly seeded lawn in a single night.

Pollet said ground pearls are scale insects which secrete a white waxy sac about their bodies giving them the appearance of small pearls. These pests cause irregular dead patches in the turf and are very difficult to control. Billbug larvae are similar to white grubs, but are legless and the adults are weevils or snout beetles. “The weevils lay eggs in the stems of grasses and the grub bores or feeds in the grass stems,” he said. “Small dead patches of grass easily lifted from the soil is usually observed in late summer. The dead stems contain a sawdust-like material from the boring of the grub.”

He said insect pests which feed on the leaves and stems of grasses include sod webworms, cutworms and armyworms. All are caterpillars of small moths.

Sod webworms are small grayish or whitish moths which rest during the day and fly about at night over the lawn with the females scattering eggs. The caterpillars or worms which hatch feed only at night and live in a silken tunnel in the soil during the day. They feed, line and reinforce the tunnel walls with small pieces of blades of grass. Infested