Get rid of unwanted green growth before it cuts into your profits.

The weed onslaught is just about universal.
An expensive headache.
For utilities, railroads, highway departments, the petroleum industry and industry in general.
But there is a way to control that costly green tide with Tandex® herbicide.
It's a urea-carbamate compound that gives outstanding extended control over a range of weeds and grasses.
But it's more than weed control.

It's brush control, too. If you've got to get rid of really tough brush and woody vines, Tandex gets the job done.
You can spray Tandex or apply it in dry granular form.
Either way you use it, you'll control that costly green tide.

Agricultural Chemical Division
FMC Corporation, Middleport, N.Y.

Tandex® is a registered trademark of FMC Corporation

For More Details Circle (134) on Reply Card

and no dust or exhaust fumes.”

The classic dilemma of poa annua was revived when two speakers presented opposing opinions of the plant. Len Hazlett Jr., superintendent of the Country Club, Inc. in Cleveland, described the heartaches, ulcers and sleepless nights caused by the plant.

“Most members of any given club do not know poa annua when they are walking on it. Its incessant demands for water at some of the most undesirable times increase the number of player complaints on the soggy course,” Hazlett said.

Bruce A. Sering, superintendent of (continued on page 28)
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-44.

CHEMICALS DIVISION
UNITED STATES GYPSUM
BUILDING AMERICA
One of the most frequent questions asked of me is, "Why does the Navy need an entomologist?" or, more specifically, Special Assistant for Applied Biology. I have found that the relationship is best explained by pointing out that the Navy shore stations, including reserve centers, directly support the fleet. Being autonomous and military, with biology problems unique to the military and with security problems at most stations, requires experts who are thoroughly familiar with the military way to solve the problems, well versed in the entire field of applied biology, and able to communicate with the cognizant personnel.

The photos above and at left look like the scenes around an average city. All these areas need chemical weed control. Yet they are also typical of the needs of the Navy. All photos here are "OFFICIAL PHOTOGRAPH U.S. NAVY".

These shore stations range in size from one-building-on-an-acre reserve centers to large public works centers, air stations and ammunition depots. An example of the size involved in one of the larger activities is the following inventory: 44,967 acres (72 sq. miles); 2,206 buildings (9,055,651 sq. ft. floor space); a 625 acre lake and 69 stocked ponds; 51.2 miles of electrical lines; 194 miles of standard gauge railroad; 404 miles of road system; 33.6 miles of boundary fence; 6.1 miles of sidewalk.

From this it can be seen that this is a good sized military "city," with all of the inherent problems of an autonomous locality.

It is my job to train and certify the on-board personnel conducting pest control operations and to advise them on pest control problems and programs in the 12 state jurisdiction. I work out of the southern division, Naval Facilities Engineering Command (continued on page 45)
FERTILIZE TREES IN ONE THIRD THE TIME AND ABOUT HALF THE COST USING JOBE'S TREE FOOD SPIKES.

Here's proof when fertilizing a 5" tree

<table>
<thead>
<tr>
<th>Drilling Method¹</th>
<th>Jobe's Tree Food Spikes Method²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulk 16-8-8 fertilizer—$90/ton (Example price throughout U.S.)</td>
<td>5 spikes 16-8-8 fertilizer—22¢/spike</td>
</tr>
<tr>
<td>2 lbs./inch of trunk diameter = 10 lbs. × 4.5¢/lb. $ .45</td>
<td>1 spike/inch of trunk diameter $1.10</td>
</tr>
<tr>
<td>½ hr. labor @ $4/hr. 2.00</td>
<td>5 min. labor @ $4/hr. 38</td>
</tr>
<tr>
<td>Labor and materials $2.45</td>
<td>Labor and materials $1.43</td>
</tr>
<tr>
<td>$2.45 ÷ 5&quot; tree = 49¢/inch of diameter</td>
<td>$1.43 ÷ 5&quot; tree = 29¢/inch of diameter, based on 20 case order.</td>
</tr>
</tbody>
</table>

¹Using electric auger.
²Based on results of university field tests and recommendations.

Professional tree and turf men using Jobe's Tree Food Spikes save 50% and more in labor and materials. Save time and money by using Jobe's Tree Food Spikes. Order from your local supplier or use the coupon below.

Jobe's®
TREE FOOD SPIKES
The instant meal for hungry trees.

To: Jobe's Tree Food Spikes
462 East High St., Lexington, Ky. 40508

Please send:

☐ 3 cases Tree Food Spikes @ $30 per case, freight prepaid. Continental U.S.A. (105 spikes—40 lbs. per case)

☐ 12 cases Tree Food Spikes @ $25 per case, freight prepaid.

Name________________________ (Please print)
Organization____________________
Street__________________________
City________________ State_________ Zip Code__________

For More Details Circle (136) on Reply Card
Sprinkler Irrigation Association Report

The energy situation and the irrigation industry shared the spotlight in February during the two-day meeting of the Sprinkler Irrigation Technical Conference.

More than 320 members and guests met in Denver, the mile high city, to discuss head on the potential problems facing an industry dependent on energy to move water. Despite a few Aggie jokes and the usual razzmatazz of meeting old friends and acquaintances, it was a deadly serious meeting. This energy situation has started the wheels rolling in the creative minds of men. Concern about the present and more so about the future has fueled the inventive fires to develop conservation practices and/or new energy sources.

This was put in better perspective by Dr. David Pimental of Cornell University. Speaking on "food production and world energy supplies," the entomologist said that it "wasn't until man tapped the fossil energy did growth really take place." He reported that there are currently roughly 3.6 billion humans on Earth. "With the current rate of increase (continued on page 34)"

The energy situation and the irrigation industry...
Parks weren’t designed for trucks. So we designed a truck for parks.

One that could tip-toe in and out of scenic areas where an ordinary truck would have to bull its way. In other words, the Otis® Turf-Aul. It’s compact, it’s light, and its 4-wheel stability lets you travel the toughest terrain with sure-footed safety.

The Otis Turf-Aul’s big half-ton payload capacity saves time, fuel and manpower. In parks, on golf courses, in refuse collections and in industry, the Otis Turf-Aul’s strong transmission and powerful engine make tough jobs easy. A wide range of options, including several axle ratios, underscores the versatility of the Otis Turf-Aul.

Call your local Otis Dealer for a demonstration of the Otis Turf-Aul. It’s the best way to do a beautiful job beautifully.

Otis Elevator Company
Special Vehicle Division, Stockton, California
P.O. Box 8600, Stockton, CA 95208
More than $8 million in equipment, fertilizers, insecticides and other supplies were exhibited.

Table 1. Conference attendance continues high for the national turf conference staged by the GCSAA. Statistics for the past five years are:

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Members</td>
<td>1250</td>
<td>1198</td>
<td>1309</td>
<td>1076</td>
<td>1182</td>
</tr>
<tr>
<td>Ladies</td>
<td>848</td>
<td>487</td>
<td>455</td>
<td>564</td>
<td>592</td>
</tr>
<tr>
<td>Guests</td>
<td>431</td>
<td>473</td>
<td>226</td>
<td>234</td>
<td>189</td>
</tr>
<tr>
<td>Greens Choirmen</td>
<td>62</td>
<td>87</td>
<td>250</td>
<td>214</td>
<td>211</td>
</tr>
<tr>
<td>One Day Admission</td>
<td>586</td>
<td>735</td>
<td>609</td>
<td>333</td>
<td>419</td>
</tr>
<tr>
<td>Turf Students</td>
<td>147</td>
<td>122</td>
<td>219</td>
<td>142</td>
<td>52</td>
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<tr>
<td>Exhibitors</td>
<td>1762</td>
<td>1114</td>
<td>985</td>
<td>922</td>
<td>975</td>
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<tr>
<td>Total Registration</td>
<td>5086</td>
<td>4216</td>
<td>4053</td>
<td>3485</td>
<td>3620</td>
</tr>
</tbody>
</table>

GCSSA REPORT
(from page 22)

Glen View Golf Course in Evanston, Ill., presented an opposing view of poa and how he lived with it. Sering related a personal experiment at his Evanston club to test the water needs of the plant. He concluded that his members would rather play on a green, wet fairway than one that's dry and brown.

Dutch Elm disease (DED) controls were brought up to date by Dr. Eugene B. Smalley of the department of plant pathology at the University of Wisconsin. He pointed out that the big stumbling block to better control at this point has been available to the tree. He also discussed research work conducted at the university and other tests conducted by J. J. Maugé Co.

Previsual detection of plant disease or stress on leaf tissues by using infrared photography was discussed by two speakers at the conference. Dr. William Wildman, department of soils and plant nutrition at the University of California at Davis, and Gerald L. Faubel, superintendent of Saginaw Country Club, Saginaw, Mich., agreed on the unlimited uses of disease detection with infrared.

The organization's 46th International Turfgrass Conference and Show will be February 16-21, 1975 at the Rivergate, New Orleans, La., making the chemical benomyl more

A workhorse won’t win a beauty contest

You won’t find fancy shrouds, shiny hubcaps or chrome accent strips on a NATIONAL “workhorse.”

Our 84” and 68” Triplex Mowers are not designed for beauty...Just performance and durability!

FAST! With an 84 and 68-inch cut, NATIONAL Triplex mowers cut grooming time in half around greens and traps.

EFFICIENT! National’s Triplex maneuvers sharply, climbs banks and hillsides easily and safely. Three, power driven, free-floating reels follow ground contour. Reels do a precision job without skip or scalping. Handles the clubhouse lawn and practice areas, too!

DURABLE! Timken bearings; automotive-type transmissions; heavy duty, tubular steel tie rods and bed knife frame; and cutter lip bar...all add up to more years of use!

SERVICEABLE! No-nonsense design makes normal service faster than any mower on today’s market!

NATIONAL...our reputation is your guarantee of quality! Our start in 1919 makes us one of the (if not the) oldest power mower manufacturers in the U.S.A.

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24 years ago we weren't thinking about energy crises, material shortages, and long deliveries.

We did build the very best aerial lifts that engineering skill and manufacturing technology made possible. Today we are gratified that HI-RANGERS' inherent qualities make it possible for owners of the many thousands of our older units now in service to still function with uncommon safety and productivity.

Be glad that your aerial lift equipment is HI-RANGER! Even your oldest unit(s) have the quality and functional values that enable you to adequately service and maintain them; and your HI-RANGER Dealer, or the factory, to update, overhaul or rebuild them "better than new".

Now is the time to critically inspect your aerial lift equipment, or ask your HI-RANGER Dealer to inspect, and determine if your unit(s) will meet today's (and tomorrow's) most demanding requirements, and provide you with a written report on each unit. If your HI-RANGER(s) do need extensive (1) updating, (2) overhauling or (3) rebuilding, your problems will be minimal. Good equipment conservation mandates that you think about one or more of the three available services if any unit is three years or older, or has logged 6,000 or more hours of work.

If you would like specific helpful information about your HI-RANGER(s), advise us the Serial Number(s), and we'll promptly provide factory recommendations as to how best to assure your unit(s) optimum productive capability and safe functional condition; and to meet definitive regulatory requirements. We urge that you do this, especially in view of current conditions which demand exercise of unusual foresight.

With that thought in mind, your service-minded HI-RANGER Dealer, and the Factory Service Department are instituting expanded service capabilities and increasing shelf stocks of parts and kits to make your present and future HI-RANGER(s) continue to meet and exceed all regulatory standards, and to serve you beyond expectations with most productive capability and optimum safety... longer.

**MOBILE AERIAL TOWERS, INC.**  
2314 Bowser Avenue  
Fort Wayne, Indiana 46803  
Dept. N

DATE_________________  

Yes, please do provide data covering UPDATING and REBUILDING our HI-RANGER(s) identified below

<table>
<thead>
<tr>
<th>HI-RANGER MODEL</th>
<th>SERIAL NO.</th>
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<tbody>
<tr>
<td>PLACED IN SERVICE</td>
<td>NUMBER OF HOURS USED</td>
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<tr>
<td>OWNED BY</td>
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<tr>
<td>GARAGED AT</td>
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<tr>
<td>ADDRESS</td>
<td></td>
</tr>
<tr>
<td>CITY</td>
<td>STATE</td>
</tr>
</tbody>
</table>

(If more than one unit, attach additional listing.)
Families are golfing more.

This statement has all sorts of implications for psychologists, sociologists, and other "ists", but it's having a more direct impact on golf course superintendents. James MacDonald, superintendent at the New Haven Country Club, Hamden, Conn., has noted the increase in families golfing.

"During 1973 I noticed an increase in junior golfers," he says, "and the course is getting pressure seven days a week. The club membership is the same as it was in 1905 — 600, some of which are third and fourth generations of founding families, but all the family members are doing more golfing.

This increased golfing pressure puts a premium on turf management and organization of maintenance work. MacDonald utilizes his eight years of superintendent's knowhow, yet almost daily is learning new ways to get the job done.

As with most superintendents, he gives turf management top priority and blends fertilization, disease control, mowing and irrigation into an integrated program. Because he has a six-man migrant summer crew that returns every summer and two full-time men, labor hasn't been a problem for him.

"Thus far our labor situation has been good," he adds, "and we've been able to handle our seasonal tasks, which means the March to December time span. As expected, the tees have borne the brunt of most of the increase in traffic in recent years."

Tees on the 18-hole course consist of a mixture of Merion bluegrass, Poa annua, Manhattan rye and Fylking. Fairways have been overseeded with Fylking and Kentucky bluegrasses for the past four years.

New Haven Country Club greens consist of a mixture of Seaside, Poa annua and C1-C19 bentgrass, while the fairways contain Poa, Kentucky bluegrass, and some bentgrasses. The greens are built on soil brought from mushroom beds in New Jersey.

"My fertilization program isn't any different from anyone else's," MacDonald points out, "but we do topdress our own mix on the greens five times a year. With the spring and fall topdressing, we aerate the greens."

Herbicide treatments of Banvel D and 2,4-D are made every other year, with spot applications of MCPP used to control particular problems like clover. Disease control involves a combination of preventive and curative measures.

"Acti-dione has been a part of my disease control program since I've worked in turf management," MacDonald says. "I use it in a preventive program on the greens and haven't had any disease outbreaks in the five years I've been here."

He sprays Thiram, Cleary's 3336 and Acti-dione once a week on the greens from the middle of May into the month of October. When the spraying stops depends on the weather.

The fairway preventive treatments usually begin in April after the first mowing and go on twice a month through September. Until two years ago, he had just used a curative program on the fairways, but "diseases present in the spring must be controlled as they start to incubate,"