For trees, ornamentals, and turf.
One solution versus 44 problems. Those are pretty good odds.
Especially since you can't always be sure which insects will threaten the valuable trees, turf and ornamentals you protect. And people enjoy.
This broad-spectrum control with SEVIN® carbaryl insecticide takes some of the chance out of your job.
Its versatility also lets you cut down on the need for a large chemical inventory.
Why use an array of different brands with different instructions, if you can do the job effectively with a single product? You'll enjoy less nozzle changing, chemical switching and tank flushing. All good reasons to rely on dependable SEVIN.
Use it in any of its available forms to suit your needs. Choose from wettable powders, flowables and liquid SEVIMOL® 4.
And many SEVIN formulations are compatible with most commonly used fungicides, miticides and other insecticides.
With the increased awareness and concern for protecting the environment, it's nice to know that SEVIN carbaryl is biodegradable. It does not build up in the soil or in plant and animal tissue.

Also, when compared with many other insecticides, SEVIN ranks low in toxicity to people, animals, birds and fish.

There's another advantage to using SEVIN in parks, golf courses and other recreational areas—even home yards and gardens. Short re-entry time. Treated areas can be re-entered as soon as the spray dries or dust settles.

<table>
<thead>
<tr>
<th>PLANTS</th>
<th>INSECTS CONTROLLED</th>
</tr>
</thead>
<tbody>
<tr>
<td>HERBACEOUS ANNUAL, BIENNIAL AND PERENNIAL PLANTS such as carnation, chrysanthemum, gladiolus, iris, peony, zinnia, etc</td>
<td>blister beetles, boxelder bug, flea beetles, Japanese beetle, June beetles, lace bugs, leaf-hoppers, leafrollers, mealy bugs, plant bugs, psyllids, rose aphid, thrips (exposed)</td>
</tr>
<tr>
<td>SHRUBS, TREES AND WOODY PLANTS such as ash, arborvitae, azalea, barberry, beechnut, birch, boxwood, catalpa, cedar, cypress, dogwood, elm, euonymus, fir, ginkgo, hackberry, hawthorn, holly, honeyuckle, hydrangea, juniper, lilac, magnolia, maple, oak, pine, redbud, rose, spruce, sycamore, tulip-tree, etc</td>
<td>apple aphid, bagworms, birch leaf miner, boxelder bug, boxwood leaf miner, cankerworms, catalpa sphinx, Cooley spruce galh aphid, Eastern spruce gall aphid, elm leaf aphid, elm leaf beetle, elm spanworm, eriophyid mites, gypsy moth, Japanese beetle, June beetles, lace bugs, leafhoppers, leafrollers, mealy bugs, mimosa webworm, oak leaf miner, orange-striped oakworm, orange tortrix, periodical cicada, plant bugs, puss caterpillar, rose aphid, roseslug, saw flies (exposed), scale insects, spruce needle miner, tent caterpillars, thorn bug, thrips (exposed), webworms, willow leaf beetles, yellow poplar weevil</td>
</tr>
<tr>
<td>LAWNS, TURF</td>
<td>ants, bluegrass billbug, chiggers, chinch bugs, cutworms, earwigs, European chaffer, fall armyworm, fleas, green June beetle, leafhoppers, millipedes, mosquito, sod webworm (lawn moths), ticks</td>
</tr>
</tbody>
</table>

NOTE: SEVIN will injure Boston Ivy, Virginia Creeper, and Maidenhair fern.

Make a quick check of the plants and insects for which SEVIN carbaryl is registered. See how many problems it can solve for you. In all there are over 160 pests on more than 100 plants. This broad registration minimizes the problem of drift to adjacent areas.

This year, ask your pesticide supplier for SEVIN carbaryl—the insecticide with a proven performance record in fighting plant pests.

SEVIN and SEVIMOL are registered trademarks of Union Carbide Corporation for carbaryl insecticide.
Union Carbide Corporation, Agricultural Products Division, P.O. Box 1906, Salinas, CA 93901.

Circle 134 on free information card
More than 120 years of manufacturing experience goes into every Mitts & Merrill Brush Chipper

For 30 years Mitts & Merrill Brush Chippers have been considered the standard of the industry by many buyers. That's because, over 120 years of engineering and manufacturing experience goes into each unit. This reputation for excellence has won for our Brush Chippers international recognition ... has helped us maintain and build our market position.

And, over the years, we have modified and improved our chippers. Some of our design features and available options are given below.

For further information on the various models of M&M Brush Chippers, write: Mitts & Merrill, Inc., 109 McCoskry, Saginaw, MI 48601 or Phone 517-752-6191.

Other standard features ...  
- Safety-lock pin helps prevent the accidental throw-out of knives not properly tightened.
- All steel rotor made in segments from steel plate and supported by ball bearings.
- Double-edged knives provide twice the cutting time between sharpenings.
- Easy loading is provided by the wide-angle feed chute which is free of obstructions.
- Tubular steel frame and torsion spring axle assure excellent roadability ... rigidity.
- Integral rotor blower forces chips through discharge chute.

Optional features ...  
- "Sound Conditioning"* to reduce noise level  
- Torque converter reduces shock loads on engine  
- Engine tachometer to determine optimum rpm  
- Engine hour meter for positive maintenance schedules  
- Electric wheel brakes for towing at highway speeds  
- Flasher warning lights for increased visibility  
- Engine side panels  
- Fuel gauge  
- Ignition cut-off switch from feed chute  
- Solinoid idle control at feed chute

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Double-edged knives staggered around the large 16-in. diameter solid steel rotor provide smooth, efficient cutting without an external flywheel. Easily accessible.

Telescoping discharge chute rotates to give maximum flexibility to fill dump boxes. An adjustable bonnet at end of the chute controls direction of discharge.

Feed chute folds to enclose the cutter chamber during storage or transportation. It is side hinged so it may be swung away for easy access to cutter chamber.
Wholesale Nursery Growers of America, The Olympic Hotel, Seattle, Wash., July 16.

The Aquatic Plant Management Society Annual Meeting, L’hotel Sofitel, Minneapolis, Minn., July 17-20.


N.C. Landscape Contractors Association, Summer Meeting, Wrightsville Beach, N.C., July 22-23.

National Turf Management Clinic and Trade Show, O’Hare Inn, Chicago, Ill., July 25-26.

Penn Allied Nursery Trade Show, Hershey Motor Lodge and Convention Center, West Chocolate Ave. and University Dr., Hershey, Pa., July 26-28.


ANN/Garden Centers of America Professional Effectiveness Program, Chase Park Plaza, St. Louis, Mo., Sept. 12-14.


AAN/Garden Centers of America Professional Effectiveness Program, Bradley Ramada Inn, Hartford, Conn., Sept. 19-21


Professional Grounds Management Society Annual Conference, Stouffers Hotel, Greenway Plaza, Houston, Tex., Oct. 30-Nov. 3.

Bob-Cat mowers are revolutionizing the commercial and residential mowing industry. Why? Outstanding maneuverability and unmatched durability are only two of several reasons. These cats are guaranteed to live up to their mean reputations. Put them to work for you. Call or write us today and discover why Bob-Cat is One Mean Cat! Complete dealer packages are now available!
WHY YOU SHOULD MAKE A CORPORATE CONTRIBUTION TO THE AD COUNCIL

The Advertising Council is the biggest advertiser in the world. Last year, with the cooperation of all media, the Council placed almost six hundred million dollars of public service advertising. Yet its total operating expense budget was only $914,683, which makes its advertising programs one of America's greatest bargains...for every $1 cash outlay the Council is generating over $600 of advertising.

U.S. business and associated groups contributed the dollars the Ad Council needs to create and manage this remarkable program. Advertisers, advertising agencies, and the media contributed the space and time.

The Advertising Council is a voluntary organization that promotes the public good by conducting information and action campaigns in such areas as support for higher education, drug abuse prevention, rehabilitation of the handicapped, traffic safety and many others. Recently, it added an exciting new campaign to its list: one to encourage Americans to learn more about our economic system.

Yet this donated creative effort, time, and space are not enough to do the job. Money is necessary to operate. Money to service thousands of mass media outlets with the materials needed to publish or broadcast the advertising message.

Your company can play a role. If you believe in supporting public service efforts to help meet the challenges which face our nation today, then your company can do as many hundreds of others—large and small—have done. You can make a tax-deductible contribution to the Advertising Council.

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The Advertising Council, Inc.
825 Third Avenue, New York, New York 10022
☐ Please send us your material

Name
Company
Address
City/State/Zip

The cost of preparation of this advertisement was paid for by the American Business Press, the association of specialized business publications. The space was donated by this magazine.
Did somebody once believe in you?

Think about it. Would you be where you are right now—professionally, financially, physically, mentally, you name it—if at some strategic point in your development there wasn't someone who "believed in you?" Somebody who came forth and said, "Hey man, you can do it—I know you can do it."

Chances are good that there was. And, as you think back you realize that it was a selfless act on his part, probably requiring only a minimum of time and energy. But look at the impact it had. On you. Because you went out and did it. And kept on doing it to get where you are today.

Right now, there is at least one person within your sphere of influence who needs his or her "believer." Needs someone to say, "Hey friend, this is one great way to go—and I believe you can get there."

You can help this individual right now by advising him or her to write to the address below. The person you believe in will then receive an audio-visual program produced by the U.S. Office of Education which expounds on the most wide-open opportunity available in the country today. Technical schools.

Entitled "You Can Be More Than You Are," the program includes a record and color brochure featuring Tony Orlando and Dawn, who convey the technical school phenomenon in an unbiased and entertaining manner. They talk about facts. Like the fact that millions of lives have already been improved as a result of technical schools. And the fact that there are still an estimated one million challenging and rewarding technical job opportunities available in the country right now. Our TV stars even talk with real life "stars" who actually became much more than they were as a result of technical school training.

So give our address to someone you believe in—today. After all, you really owe it to "yourself."

"CAREERS"

Box 111
Washington, D.C. 20044
Effluent water

Continued from page 48

Continends not only a soil survey, but a complete water analysis as well. Local test laboratories are available for this purpose. With these data, knowing the rate of soil infiltration and the chemical contents of waste effluent, the golf course superintendent can decide upon a proper precipitation or irrigation rate. This will be less than the rate of infiltration, and low enough (or applied intermittently) so as to prevent run-off. Younger also recommends use of automatic controllers, to regulate flow rate and application time. “There are many on the market,” he comments, and mentions Toro Manufacturing, Rain Bird, Royal Coach and Moody Sprinklers as typical California suppliers.

Continuing use of soil, water and plant tissue testing is recommended by Younger, to identify effects of accumulated salts, and to insure proper fertility practices for plant nutrition, color and vigor. Using the “living filter” system, all clippings should be removed, to prevent recycling of impurities from decomposition.

Government regulations slow development

One fly in the ointment of waste water usage in general is the increasingly strict regulation by various governmental agencies. In California, the State Water Resources Board and Department of Public Health set and administer standards (through regional water quality control boards) which some users consider “too tight.” This has held up reclamation. Originally scheduled to double from 1974 to 1976 in Southern California, water recovery is today almost unchanged (at only about 6 percent of over 700 M.G.D. discharged to the ocean), according to William Garber of Los Angeles City’s Bureau of Sanitation.

“With the present state of knowledge,” according to John N. English of EPA’s Cincinnati labs, “the greatest potential health hazard appears to be that associated with trace organic materials, and the composition of the organics and their toxicity must be defined. The second most significant problem,” he continues, “is that of pathogenic organisms, especially viruses, and heavy metals that contribute to the health hazard.” It appears likely that standards applied to potable water recovery may not be strictly applicable or applied to golf course irrigation.

Harold LeSieur is the principal of his own management consulting firm in Santa Maria, Calif. He holds an M.S. degree in engineering from the University of Southern California and an MBA degree from Stanford University.
Tested on grass plots under scientifically controlled conditions, CIL Sulphur Coated Urea outperformed all conventional slow release nitrogen fertilizers tested, in both the appearance and growth of grass obtained.

CIL Sulphur Coated Urea releases nutrients as soon as it is applied and continues to do so evenly over 4 to 5 months. Result is more complete utilization of nitrogen applied, and no build up of nitrates in the soil.

Economical
- High WIN; low cost per unit of nitrogen compared to other WIN sources.
- Available in bulk or in 44 lb plastic bags.

Effective
- Tested on grass plots under scientifically controlled conditions, CIL Sulphur Coated Urea outperformed all conventional slow release nitrogen fertilizers tested, in both the appearance and growth of grass obtained.
- CIL Sulphur Coated Urea releases nutrients as soon as it is applied and continues to do so evenly over 4 to 5 months. Result is more complete utilization of nitrogen applied, and no build up of nitrates in the soil.

Efficient
- Release of nitrogen is controlled by moisture. Temperature and bacterial activity are not important factors. Excess moisture however, does not markedly speed up the release of the nitrogen.
- Soil pH does not alter pattern of release.

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We revolutionize tradition with innovation.

1977 will be the year of the greatest advancement the sod industry has ever known. Princeton is the reason. We're moving . . . bigger in every way. Moving to a bigger, brand new manufacturing plant . . . a production facility that will help us meet your overwhelming demand for Princeton Manufacturing Sod Harvesters and Nursery Equipment. Moving into an even wider selection of revolutionary sod and nursery products.

Princeton experience and the quality of our products has made us the most trusted name in the Sod Harvesting and Nursery industries. Our unique technical skill has enabled us to tackle the many challenges of our industry . . . finding solutions to the problems of inefficiency . . . excessive, costly down-time . . . inadequate production and soaring labor costs. We did it! Now, we're doing much more!

We are proud of the reputation that Princeton has earned. We are grateful for your trust and acceptance. We will continue to live up to this trust.

The first, and finest, low-priced, high-output, cost and labor saving harvester, 108,000 square feet of sod harvested per day with three man crew. The PRINCETON "TOW BOY" Sod Harvester.

Reduced costs and increased production mean bigger profits. Three man crew can harvest up to 180,000 square feet of sod per day with the PRINCETON SELF-PROPELLED Sod Harvester.

The only sod harvester that does it all . . . with just one man! Harvest up to 216,000 square feet of sod per day, with a crew of one. The PRINCETON AUTOMATIC Sod Harvester.

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| 141 | 142 | 143 | 144 | 145 | 146 | 147 | 148 | 149 | 150 | 151 | 152 | 153 | 154 | 155 | 156 | 157 | 158 | 159 | 160 |
| 161 | 162 | 163 | 164 | 165 | 166 | 167 | 168 | 169 | 170 | 171 | 172 | 173 | 174 | 175 | 176 | 177 | 178 | 179 | 180 |
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| 221 | 222 | 223 | 224 | 225 | 226 | 227 | 228 | 229 | 230 | 231 | 232 | 233 | 234 | 235 | 236 | 237 | 238 | 239 | 240 |
| 241 | 242 | 243 | 244 | 245 | 246 | 247 | 248 | 249 | 250 | 700 | 701 | 702 | 703 | 704 | 705 | 706 | 707 | 708 | 709 |
| 710 | 711 | 712 | 713 | 714 | 715 | 716 | 717 | 718 | 719 | 720 | 721 | 722 | 723 | 724 | 725 | 726 | 727 | 728 | 729 |

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**TITLE**

**COMPANY**

**ADDRESS**

**CITY**

**STATE**

**ZIP**

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Are you interested in receiving or continuing to receive WEEDS TREES & TURF? If you are, complete all the information on this card and mail today.

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Please check the one item which best describes your primary type of business:

1. Rights-of-Way Maintenance
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   - c. Railroad
2. Chemical Applications (vegetation and structural)
   - a. Commercial/Industrial ground applicators
   - b. Aerial Applicators
3. Extension Services; Forestry; Federal and State Regulatory Agencies
4. Parks and Grounds Maintenance — Federal, State, Municipal (does not include Forestry)
5. Golf Courses
6. Cemeteries
7. Industrial Parks
8. Shopping Centers
9. Hospitals, Nursing Homes, Schools, Colleges and Universities (Grounds maintenance personnel only)
10. Athletic Fields
11. Race Tracks
12. Airports
13. Military Installations
14. Grounds or Landscape personnel in businesses not specified above.
15. Mine Field Reclamation
16. Chemical lawn care companies
17. Landscape contractors
18. Landscape architects
19. Sod Growers
20. Seed Growers
21. Tree Service Companies/Arborists
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23. Irrigation and Water Drilling Contractors/Consultants
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Hustler Turf Products at Excel Industries, Inc. has added two regional sales managers. William “Pat” Patton will be responsible for covering sales in a 15-state Central USA region. He has been sales and marketing manager for Deines Corp. for the past two years. Jack Parker will cover a similar region in the Western U.S. He moves to Excel from the Hesston Lawn Equipment Division.

Howard Cooper has been named marketing research manager of the Turf Products Division, Jacobsen Manufacturing Co. He will be responsible for marketing analysis and forecasts, including field studies for new turf product developments. Cooper holds an MBA degree from the University of Michigan, Ann Arbor.

Great Lakes Biochemical Co., Inc. has announced two new salesmen. Bob Rothacker will cover California, Oregon, Washington, Arizona, Nevada, Idaho and Utah upon the retirement of Bob Flowers. Rothacker has been manager of the institutional industrial division of Drackett Products Co. for the past 10 years. Doyle W. Head will cover Ohio, Kentucky, Indiana, Michigan, West Virginia and Western Pennsylvania. He has over 13 years of experience in sales, plus university courses and seminars on business administration and sales management.

Richard J. Ditloe has been named domestic sales manager of the Turf Products division, Jacobsen Manufacturing Co. He will be responsible for North American and government sales, advertising and sales promotion, sales training and demonstrations, and customer order service.

Herb Cole has been promoted to area manager for the Northern Midwest region of Lakeshore Equipment and Supply Co. Formerly a sales representative in the northwest Ohio-southwest Michigan area, Cole has been with Lakeshore over 14 years.

William “Butch” Cauthen has been promoted to field product manager at Thompson-Hayward Chemical Co. He will be responsible for sales, training and determining product lines for pest control and fumigation products. He has been with Thompson-Hayward for 8 years and has been a pesticide sales representative in Birmingham, Ala.

When your job is grounds maintenance year around, you need a mower for all seasons.

With one VERSATILE Mott mower, you can mow fine lawns, shred high grass and weeds, mulch leaves and renovate.

Flail type mowers have a reputation for being SAFER than rotary type mowers. Mott mowers... with their lightweight knives... are the safest of the flails.

Mott mowers also offer COST EFFECTIVE PERFORMANCE because they last longer and are more reliable to operate.

Write or call for information about YOUR MOWING REQUIREMENTS. This season and every season, mow Flail Safe... with Mott mowers.

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Circle 139 on free information card

JULY 1977/WEEDS TREES & TURF 59
Ford hydraulic lift system offers precision control for landscaping and soil preparation. Equipment responds smoothly and accurately with fine increments of adjustment. With 8.5 gpm hydraulic pump, you get fast, positive action for remote hydraulics, side-mounted cutterbar mowers, utility loaders and other equipment. Count on your Ford tractor and equipment dealer for sales and service. He's listed in the Yellow Pages under "Tractor Dealers".

Versatile twin-lever control system allows three types of response:
1. Position control. 2. Draft control. 3. Position and draft control working together to limit maximum depth of equipment in widely varying soil conditions.

8.5-gpm pump and twin-lever hydraulic control are standard on Ford 32-52 PTO horsepower all-purpose tractors; optional on other Ford 3-cylinder tractors (except orchard, vineyard).