

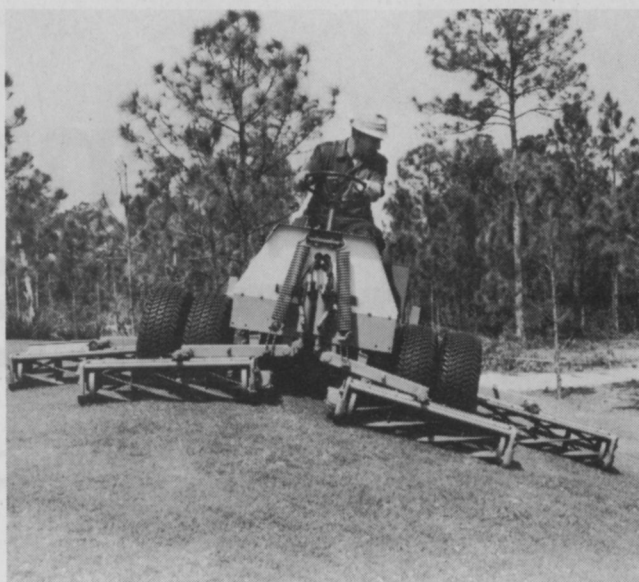
**ALGAE CHEK:** Ralston Purina Company, St. Louis, Mo.

Control algae in ponds and lakes by applying directly on surface algae or injecting below the surface. This new product contains copper in the form of chelates of copper citrate and copper gluconate to check algae during peak growing periods. Used as directed it is safe in the presence of fish and may be applied by hand sprayer or motor powered units. Water can be used in livestock feeding immediately after treatment and no harmful residues are in evidence. It is marketed in gallon containers as a liquid to be mixed with water prior to application. It will not precipitate out or become ineffective in alkaline or hard water. For more details, circle (701) on the reply card.



**BATTERY-POWERED VACUUM:** Parker Sweeper Company, Springfield, Ohio

Parker Vac-35 cleans up to 100,000 square feet before batteries require recharging. The unit features aluminum ball-bearing wheels with non-marking rubber tires, an exclusive Spin-pak air-guide which packs up to 20 percent more bulk-debris into the cotton fleecelined collector bag and accessible side-to-side batteries which provide 3½ to 4 hours of full power. The use of Cylolac color-impregnated thermoplastic for impeller housing and nose cone offers greater strength while the smoother finish of the material in conjunction with a steel liner insert allows an unobstructed air flow and increased life capability. The new battery-powered vacuum carries the Factory Mutual seal. For more details, circle (703) on the reply card.



**HYDRAULIC LIFT MOWER:** Jacobsen Manufacturing Company, Racine, Wis.

This F-133 mowing tractor has been newly modified with a rugged hydraulic lift to raise and lower the mowing units. The operator no longer has to physically lock up or let down the gangs to move to a new location. This feature is beneficial around schools, parks, cemeteries, industrial grounds and golf courses. The F-133 cuts an 11 foot swath and is capable of mowing from 40 to 50 acres per 8 hour day. It has hydrostatic, foot controlled mowing speeds with variable cutting frequencies not dependent on travel speed. For more details, circle (702) on the reply card.



**PORTABLE HI-PRESSURE SPRAY MODULE:** Wayne Engineering Corp., Cedar Falls, Ia.

Clean equipment normally found in a park system with this new truck mounted high-pressure spray module. It can be mounted between the cab and body of a pickup truck, dump or refuse body. The module consists of a high-pressure pump that delivers 5 gpm at 1000 psi, a 40 foot hose, a hand-held wand with rotating 4-jet spray pattern and a 100 gallon storage tank. Specific concentrates are automatically metered to the water line. A storage compartment is incorporated to carry pails, brooms and other equipment. Total dimensions are 22 inches deep and 84 inches in width. It is powered by the truck's hydraulic system. For more details, circle (704) on the reply card.



# **★ Pennstar**

# **Kentucky Bluegrass.**

Perhaps the best all-around turfgrass available today.

**Highly resistant to stripe smut, rust and leaf spot.** Stripe Smut (*Ustilago striiformis*) sporulates in May or June, shredding individual leaves. Field trials show that, while Merion is quite susceptible, Pennstar is highly resistant. A very strong plus.

Pennstar is also highly resistant to rust (*Puccinia* spp). Rated on a scale of 0 (best) to 10 (worst), test data give a 1.7 rating to Pennstar versus 8.7 for Merion.

Most improved bluegrass varieties are resistant to leaf spot (*Helminthosporium vagans*). However, in university tests, Pennstar was significantly *more resistant* than some improved varieties.

**Well adapted from the East Coast to California.** Pennstar's disease resistance, drought resistance and other characteristics enable it to do well wherever Kentucky Bluegrass is adapted. It establishes well and resists fadeout under a wide variation in management.

**Medium color, good density, easy to manage.** With its pleasing medium bluegrass color, Pennstar blends well with other varieties. In mixtures, it's neither too dark nor noticeably light.

Pennstar persists at moderate-to-low fertility levels. It doesn't over-react to higher fertility. Because it's decumbent (the leaf angle is closer to 90° from vertical than 45°) Pennstar can tolerate a close mowing without thinning out. And it's shown the ability to

withstand drought conditions better than some other Kentucky Bluegrass varieties.

**No excess thatch after 11 years.** Pennstar does not produce damaging quantities of thatch. In tests at Penn State, plots of Pennstar torn up after 11 years revealed no excess thatch. (No dethatching had been done in that entire period.) Normally aggressive varieties can be expected to thatch up under good management practices. Not Pennstar.

**Ideal component for turf mixtures.** Is it better to plant a single variety or a blend? This is the difficult question that confronts turf managers. A single variety planting is undeniably

beautiful. Yet a single strain can be destroyed by disease or weather. Which is why Pennstar was developed — to make available a bluegrass variety that would be highly resistant to disease and capable of surviving extreme weather conditions.

These qualities make Pennstar very suitable for a mono-culture. Or a mixture, particularly when considering its other characteristics: It's not overly aggressive. It's easy to manage. Its pleasing texture and middle-of-the-road color make it visually compatible with other varieties. Indeed, Pennstar blends so effectively, it could help convert some managers to mixtures.

## DEVELOPED AND RELEASED BY PENNSYLVANIA STATE UNIVERSITY

Pennstar Kentucky Bluegrass  
(*Poa pratensis*)

Pennstar is an improved variety that has been released by Penn State after over 15 years of testing and evaluation. Pennstar is outstanding for disease resistance and for compatibility with other improved grasses in turf mixtures. Pennstar is not overly aggressive and is compatible with other varieties. Pennstar is persistent; reasons include its ability to withstand low mowing, its high resistance to disease and its ability to compete under low fertilization.

Some expert (and unbiased) opinions.

*"Disease resistance was good, it had an attractive color, texture, and a good growth habit. The most significant item was its good performance under relatively low levels of fertility."*

*"In our trials, Pennstar has been the best variety for which seed is available."*

*"Average quality ratings (9 = best) based on density, color and uniformity placed Pennstar highest with a score of 5.6 as compared to other varieties such as Geary 5.0, Merion 4.0 and Windsor 3.8. These particular plots have been under minimum maintenance and care."*



## Turf Buyers' Checklist

### IDEAL

1. It should be able to survive periods of drought.
2. It should be able to survive with moderate fertility.
3. It should be decumbent in growth habit so it can be mowed short without thinning out.
4. It should not be overly aggressive—should not crowd out companion grasses.
5. Its color should not be so dark or so light as to give a mixture a mottled appearance.
6. It should not "go wild" when fertilized. Emergence and growth rates should be moderate.
7. It should not produce excess thatch, even after years of establishment.
8. It should be highly resistant to common diseases, and particularly to "killer types" such as stripe smut and leaf spot.
9. It should be widely adapted throughout the zone of species adaptation.
10. It should be well tested for a period of years over many locations so that its characteristics are well understood.

### Pennstar

1. In field tests, Pennstar has survived extended periods of drought.
2. Pennstar requires only the moderate management typical of most bluegrasses.
3. Pennstar's decumbent growth habit permits it to be mowed very short without thinning out.
4. Pennstar will hold its own against overly-aggressive varieties, but does not crowd out less aggressive types.
5. Pennstar has a pleasing medium blue-green color that blends well with all other varieties.
6. Pennstar's rate of growth is not overly affected by increased use of fertilizers; its emergence and growth patterns are moderate.
7. Pennstar produced practically no thatch in 11 years of testing.
8. Pennstar is practically immune to leaf spot, highly resistant to stripe smut.
9. Pennstar is widely adapted from California to the East Coast, in all the normal bluegrass areas.
10. Pennstar has been tested for 15 years in locations from coast to coast.

After you've checked them all . . . Pennstar

# Pennstar

## Kentucky Bluegrass.

TO: Pennstar Kentucky Bluegrass

WTT-7

P.O. Box 923, Minneapolis, Minnesota 55440

Please send me prices, availability, test information, purity and germination data on Pennstar Kentucky Bluegrass.

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Club or Company \_\_\_\_\_

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City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

For More Details Circle (140) on Reply Card

# Pros and Cons of Rolled or Palletized Sod

By **ROBERT HAWKINS**  
Robert Hawkins Landscaping  
Germantown, Maryland

**W**HEN discussing the advantages and disadvantages of rolled sod versus palletized sod, you must consider how the sod is marketed and sold.

First, you have the retail market in which a business produces and harvests sod and sells it in the field loaded or delivered. The second category is the business that either produces or buys sod from a producer and harvests, loads, transports and installs practically all of it to builders, developers, home owners, etc. Make no mistake about it, this is how the largest volume of sod acreage is sold.

If I were the first category or the retail market, I too, would use mechanized harvesting equipment and palletize my sod for the simple

reason that it is easier to load and account for your sod, such as 55 square yards per pallet, etc.

But, I install most of my sod and the reasons why I prefer manually rolled sod are as follows:

- 1. Convenience**—If I have a small crew of men, I can send a few trucks to the sod field in the morning, cut, roll, and load these trucks, take them to the job with these same men and install the sod that same day.

If I have a large enough crew of men, I can have one crew cutting, rolling, and loading sod in the field all day, another crew installing the sod on the job all day, and trucks going back and forth delivering the sod. Either method is convenient in that it is easily controlled.

- 2. Time saved**—Time is money, and we all try to save time. I will concede that mechanized harvesting and palletizing of sod is as fast as a small crew of four or five men who manually roll and load sod. But there are sod businesses that cut, roll and load manually up to 2 and 3 acres per day! There is no way this can be done with a palletizing operation feasibly.

In addition, we roll our balls of sod 1½ to 2 square yards per ball whereas, palletizing, the most in one section of sod is one square yard. Now, this doesn't have much bearing on the time saved in the field. But when you are installing sod, time is saved. It is here where I find the biggest disadvantage of palletized sod.

When you lay sod off the truck of manually rolled sod, you simply

pull alongside the area to be laid, and the crew simply takes a roll off the truck, lays it down and goes back for another. Each time a man lays a roll of sod he is putting down 1½ to 2 square yards. With palletized sod, it would only be ½ to 1 square yard. You can readily see that it would take twice as many trips to the truck for a section of sod and twice as long to lay a load.

Don't get me wrong, I am not talking about slapping down the sod any way at all, but doing a neat job, with square ends.

If you use a fork lift to spot your pallets when laying palletized sod, you often run over finished grade causing compaction and tracks that must be raked out. Also, you must lay sod all around the pallet. When it is empty, you have an uneven hole that must be patched in. This may not sound like much of a problem, but consider doing this for, say, 100 pallets per day and you will realize this is a lot of time lost. Another problem is gathering those 100 pallets at the end of the day and loading them on a truck to use again.

There are those that will argue that the smaller sections of palletized sod are lighter and, therefore, a man can handle them faster. This is not true because we generally cut our sod thinner when handled manually and, therefore, two square yards rolled is no heavier than a one square yard section on pallets.

Time is also saved in the transportation of manually rolled sod. A 2 or 2½-ton truck can carry approximately 6 pallets of sod, or about 330 square yards. You can carry anywhere from 400 to 600 square yards

Palletized Sod



Rolled Sod



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... and it's easy to maneuver! Digs 24" below the ground, up to 72" wide. Straight across cutting movement gives strict control next to streets, curbs, sidewalks, etc. Low silhouette design lets you operate easily in tight spots, under low objects.

Another Stump Cutter From . . .



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For More Details Circle (119) on Reply Card

on the same truck depending on soil conditions of the sod.

As an example, it would take about 15 loads on a 2-ton truck to transport an acre of sod, but you could transport an acre of manually loaded and rolled sod on about 10 loads, a 33% savings in transportation costs alone!

**3. Equipment Investment**—In order to have a mechanized and palletized operation, you must have a sod harvester, 2 fork lifts and a very good supply of pallets with an initial investment of \$30,000 or \$40,000 compared to a manually rolled operation consisting of a sodcutter with an investment of \$1,500 or \$2,000.

If you deliver sod to retail stores, you must have boom trucks to unload the pallets of sod at a cost of \$20,000 to \$40,000 compared to a truck transporting manually rolled sod at a cost of \$5,000 to \$8,000.

Pallets are a very costly part of the palletizing operation. They cost from \$2.00 to \$4.00 each and can only be used 3 or 4 times. They are often broken and lost. Figuring in detail the cost plus the time spent on transporting, loading, moving pallets, etc., you would find that pallets cost 3 or 4 cents per square yard of soil. You do not have this cost in manually rolled sod.

The time saved in installation of sod, the convenience and the equipment costs cannot be equalled by the mechanized harvesting and palletizing methods as they exist today. This is the reason that the vast

majority of sod is manually rolled. I am a firm believer in mechanization and I should hope that in the very near future we can develop a system and related equipment. The labor situation is so critical today in our industry that in the next 5 years it will be absolutely imperative to cut, roll, load and install sod with machinery, because there will be no men available to do it manually.

### DDT Degrades In Lakes Faster Than In Soil

DDT is much less persistent in most lake sediments than it is in soils on land, according to two University of Wisconsin water chemists.

"While DDT in terrestrial soils remains for many years, in lake sediments without oxygen much of the pesticide is degraded within weeks," said Ralph C. O'Connor. "This does not mean DDT in lakes is not dangerous, for it is uncertain how much is picked up by aquatic organisms before reaching the sediments."

O'Connor, a water chemistry graduate student working with Prof. David Armstrong, announced the findings at the recent 15th Conference on Great Lakes Research. The conference, which has attracted more than 600 scientists from Canada and the United States, is sponsored by the International Association for Great Lakes Research.

The two scientists investigated the rate and extent of DDT degradation in sediments from Lake Michigan's

Green Bay and three other Wisconsin lakes.

"In sediments without oxygen there are about 20 types of common bacteria able to degrade DDT," O'Connor said. "In our laboratory tests, at least 25 percent of the DDT was degraded within two weeks, and more than half degraded within two months."

The actual amounts degraded are probably even greater, he said, but since only these amounts of the breakdown product were recovered, they can be considered the minimum degraded. The fate of much of the DDT not recovered still is uncertain.

Many lake sediments are of the anerobic (without oxygen) type, particularly those found where streams empty into a lake, he noted.

Another significant difference between the degradation process in lake sediments and terrestrial soils is that the breakdown product, DDD, is often less dangerous.

"While DDD is still toxic, it does not have the same long-term effects as some of the other metabolites," he said. "For example, it is not involved in reproductive failures like the egg shell thinning caused by DDE."

This study, funded by the UW Sea Grant Program, is the first quantitative measurement of DDT degradation in anerobic lake sediments.

"Until now, sediments have often been ignored in examining the fate of DDT in the environment," O'Connor pointed out. "These results, however, indicate that sediments are important and must be considered in future research."

## Lake Bacterial Population Upset By Certain Herbicides

Indiscriminate use of herbicides could upset the balance of nature in lakes by distorting their bacterial populations.

This was the conclusion two Clemson University microbiologists reported to the American Society for Microbiology in April.

Dr. Rufus K. Guthrie and doctoral student Robert N. Ferebee said that a drastic change in number or types of bacteria in a lake could be reduced by reducing those bacteria that break organic matter down into usable nutrients, cut off vital food supplies for other forms of plant and animal life in the lake.

Reporting on one of the first research projects ever conducted to find out how different herbicides alter the balance of bacterial populations common to an actual fresh water lake Guthrie said, "We've found that some herbicides have little effect on the bacteria, while other herbicides tend to stimulate the growth of certain bacteria, depress the growth of others, or both."

It is this reduction in diversification or variety of bacterial types that poses a threat to the delicate balance

of nature in the lake environment, he said.

The Clemson scientists studied three chemicals, each representing general herbicide types that might commonly wash into local fresh water reservoirs, during their two-year project:

1. common 2,4,5,-T had little or no effect on bacteria.

2. paraquat stimulated the greatest total growth of bacteria but favored certain types of bacteria.

3. diuron caused a noticeable drop in total number and bacterial types.

"The point is that we've now shown that different kinds of herbicides might produce very different kinds of effect on the vital bacterial community of a lake," Guthrie said.

## Spruce Budworm Attractant Discovered by Scientist

Sex attractants, a technique of prominence in the fashion and cosmetic world, are finding a place in controlling the spruce budworm, one of the most destructive forest pests in North America.

Dr. Iain Weatherston of the Insect Pathology Research Institute, Dr. Christopher Sanders of the Great

Lakes Forest Research Centre—both located in Sault Ste. Marie, and Dr. Wendell Roelofs and Dr. Andre Comeau of the entomology department at Cornell University have isolated and identified a sex attractant given off by the female moths to attract the males for mating.

Now that it is identified, the sex attractant of the spruce budworm can be manufactured in large quantities. Applied over an area where spruce budworm inhabit, the chemical can be used to disrupt mating habits.

These scientists have also discovered two chemicals which inhibit the male budworm's reaction to the attractant. These are substances which are very close in molecular structure to the sex attractant. The way in which they act is not fully understood, but they probably block the receptor sites on the males' antennae, so that the attractant given off by the females cannot be perceived by the males.

Future widespread use of these chemicals is anticipated as these substances are naturally occurring and are readily broken down in nature. Preliminary estimates indicate that only 100 milligrams would be needed to treat an acre of forest at a cost of about 30 cents.



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# — insect report —

## INSECTS OF ORNAMENTALS

### SPIDER MITE

(*Platytranychus thujae*)

PENNSYLVANIA: Adults collected on arborvitae, 4 miles west of Camp Hill, Cumberland County, May 17, 1971. This is a new State record. This mite also collected on various dates and at several locations in State in 1971 on juniper.

### TREE INSECTS

#### COOLEY SPRUCE GALL APHID

(*Adelges cooleyi*)

COLORADO: Abundant, 5 galls per 40 twigs, at Fort Collins, Larimer County. Most numerous in 4 to 5 years.

#### DOUGLAS FIR BEETLE

(*Dendroctonus pseudotsugae*)

ARIZONA: Increased on north rim of Grand Canyon National Park; 400 mature and over mature Douglas fir trees attacked over 600-acre area.

#### ELM LEAF BEETLE

(*Pyrrhalta luteola*)

KANSAS: Some pupation reported in Manhattan, Riley County, and in Topeka, Shawnee County. Siberian elms in Topeka up to 50 percent damaged. OKLAHOMA: Damage increased in most areas of State; defoliation ranged up to 60 percent in Payne County. Heavy in Bryan, moderate in Okmulgee, Murray and Ponotoc Counties. NEW MEXICO: Light to heavy on elms at Albuquerque, Bernalillo County, and at Tularosa, Otero County. COLORADO: Egg hatch about complete in Arkansas Valley; larval damage appearing on elm trees.

#### PINE SPITTLEBUG

(*Aphrophora parallela*)

MISSISSIPPI: Light to moderate on loblolly pine statewide. Ranged 2-3 per tree in Grenada and Montgomery Counties.

#### LARGE ASPEN TORTRIX

(*Choristoneura conflictana*)

MINNESOTA: Aerial survey conducted in St. Louis, Lake, and Cook Counties to determine gross defoliation area. Defoliation generally light immediately northeast of Duluth; may be due to unseasonable cool spring weather retarding development. Areas farther north and northeast to Canadian border showed large areas of moderate defoliation with some heavy defoliation in Finland and Tofte areas and adjacent to the Sawbill Trail. Spotty, light to moderate defoliation noted in Carlton County.

#### LEAFMINING WEEVIL

(*Odontopus calceatus*)

WEST VIRGINIA: Adult damage heavy to 90 percent of foliage of most yellow-poplar in Clay County.

#### SPRING CANKERWORM

(*Paleacrita vernata*)

NORTH DAKOTA: Larvae in last larval stage defoliated single row Siberian elm shelter-belt trees in Burleigh and McLean Counties. Up to 100 percent of trees in some plantings totally defoliated.

#### BOXELDER LEAFROLLER

(*Gracillaria negundella*)

UTAH: Foliage damage severe on several thousand boxelder trees in Davis, Salt Lake, Utah, Box Elder, and Cache Counties. Many hundreds of these trees show no leaf color.

#### PINE TUSSOCK MOTH

(*Dasychira plagiata*)

MINNESOTA: Overwintering second-instar larvae feeding on jack pine needles in east-central area. Winter survey collections, as well as early larval checks, indicate populations reduced in Pine County from 1971. At this time, no controls expected in 1972.



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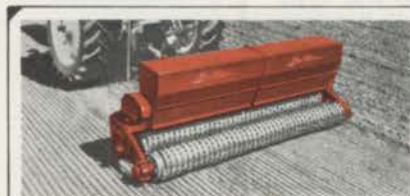
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LS-135R

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BLUEGRASS**

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**MAN-CONTROLLED BREEDING  
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**HOW WE REDUCED DRIFT** (from page 16)

ran some special tests earlier this year to evaluate the Directa-Spra as an aquatic herbicide applicator. It had been used successfully on most every formulation of herbicide for brush and weed control, but we wanted a close look ourselves over water hyacinth.

The applicator, which weighs only a few pounds, has a small motor that operates from the 12-volt battery of whatever spray vehicle it's attached to.

A hollow shaft passing through the control box carries the herbicide to the hub below where 8 tubes radiate like wheel spokes. Each tube can be tipped with a nozzle that has 5 openings, and you can spray with or without the nozzle tips depending on the desired pattern or mixture being used.

The "wheel" revolves at 70 rpm, throwing the spray in a circular pattern. To set up for the correct volume, the size of the opening at the shaft base is adjusted. Arc of the spray pattern can also be adjusted to 90, 180 or 360 degrees.

Our tests, which took place at the Tenoroc Mine near Lakeland, compared various phenoxy formulations: esters, amines, oil soluble amines, and invert emulsions. We had two booms, one on each side of the airboat acting as arms to

hold the Directa-Spra units. Running through heavy infestations of water hyacinth, we were able to put spray right on top of the plants.

Figure 1 shows the various commercial and experimental treatments used in these tests. Although data from actual evaluation is not yet compiled we have shown a visual estimate on the percent of control. Skips were evident in all plots. This can be expected with any type of spray equipment because of wind, weed movement and other factors.

One interesting point to note is that a great number of chemicals, used both conventionally and as an invert, can be sprayed through the Directa-Spra system. Because of its compact size, it was easy to clean and prepare for different chemical tests.

When it was all over, the oil soluble amine, E-3, looked superior for controlling water hyacinth. To more completely solve the drift problem, we added Lo-Drift spray additive to the E-3. The thickening agent, which makes spray adhere to the plants, also kept us from having any washoff due to propblast.

Even though I plan to run more tests, I have to say that putting Lo-Drift with E-3 through the Direct-Spra applicator looks like a good—essentially drift-free—spray system.

**Figure 1. Directa-Spra Trials on Water Hyacinth — Florida**

Commercial or Experimental Treatment used <sup>4</sup>	Rate lbs. a.i. <sup>3</sup>	Carrier Used <sup>1</sup> (gallons)	Visual estimate of percent Brown-out (evaluation <sup>2</sup> )
Weedone 170	4	89 H <sub>2</sub> O	No evaluation. Hyacinths washed out of plot area
LV-4	4	70 H <sub>2</sub> O	65 - 70 percent
2, 4-DP	4	70 H <sub>2</sub> O	60 percent
MCPA	4	70 H <sub>2</sub> O	80 percent, Plot looks very good, excellent burn
W-170	4	70 H <sub>2</sub> O	25-30 percent
71-44	4	70 H <sub>2</sub> O	40-50 percent
W-64	4	70 H <sub>2</sub> O	65 percent
Emul. E-3	4	70 H <sub>2</sub> O	40 percent
Brominal Ind.	1	70 H <sub>2</sub> O	Very small amount of burn evident
Emul. E-3	5	70 H <sub>2</sub> O	No evaluation, Plot too scattered to evaluate
Emul. E-3	4	70 H <sub>2</sub> O	75 percent, Hyacinths that were sprayed 95% skips knock down
Emul. E-3 + Lo-Drift	4	70 H <sub>2</sub> O	85 percent, Lo-Drift plots are best looking.
Emul. E-3 + Lo-Drift	4 + 1 qt.	35 H <sub>2</sub> O	90 percent
Emul. D.	4	2 Chemicals 12 Oil 56 H <sub>2</sub> O	35 percent
Weedone BK-171 <sup>5</sup>	4	2 Chemicals 13 Oil 56 H <sub>2</sub> O	50 percent, Coverage very uniform, but very little brown-out.

<sup>1</sup>Applications were made to one acre plots in mid-and late-March. No nozzle tips were used.

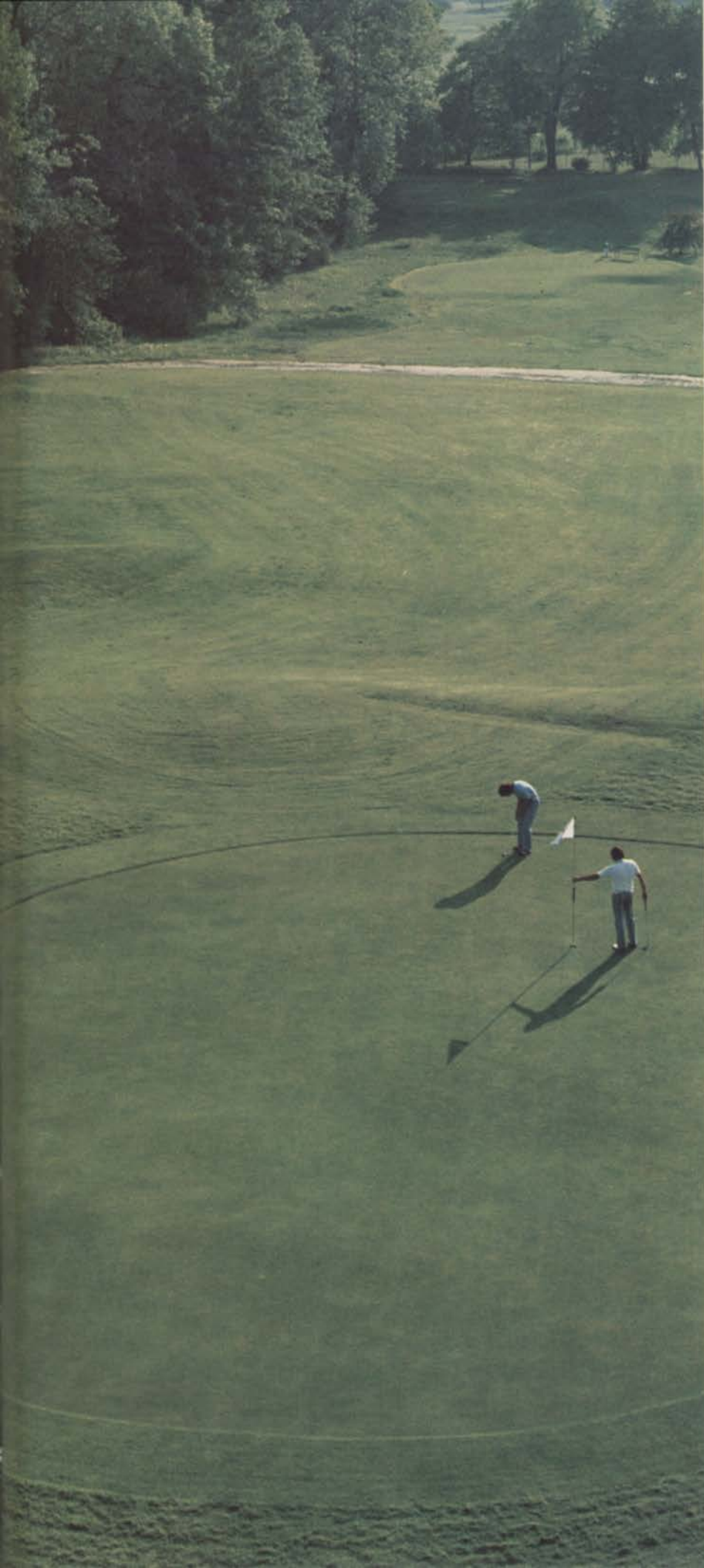
<sup>2</sup>Evaluation was conducted by John Gallagher and Richard Messinger, Amchem Products, Inc.

<sup>3</sup>The purpose was to evaluate various formulations of 2,4-D, 2,4-DP and Brominal applied with Directa-Spra. A John Bean piston pump (10 gpm—7 Hp) was mounted on an airboat.

<sup>4</sup>Application was made by the Florida Game & Fish Commission.

<sup>5</sup>Would not invert.



An aerial photograph of a golf course green. Two people are on the green; one is bent over, possibly raking or marking, and the other stands nearby. The green is surrounded by a sand trap and a line of trees in the background.

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URAMITE®  
UREAFORM FERTILIZER

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healthiest  
turf  
on greens,  
tees, and  
fairways.

Just two applications of Du Pont URAMITE—one in the spring and one in the fall—gives your turf grasses the steady nitrogen diet they need for uniform rich color and sturdy growth. This high-quality ureaform fertilizer has a high content (38-0-0) of long-lasting, gradual release nitrogen. Feeds turf continuously without leaching or burning.

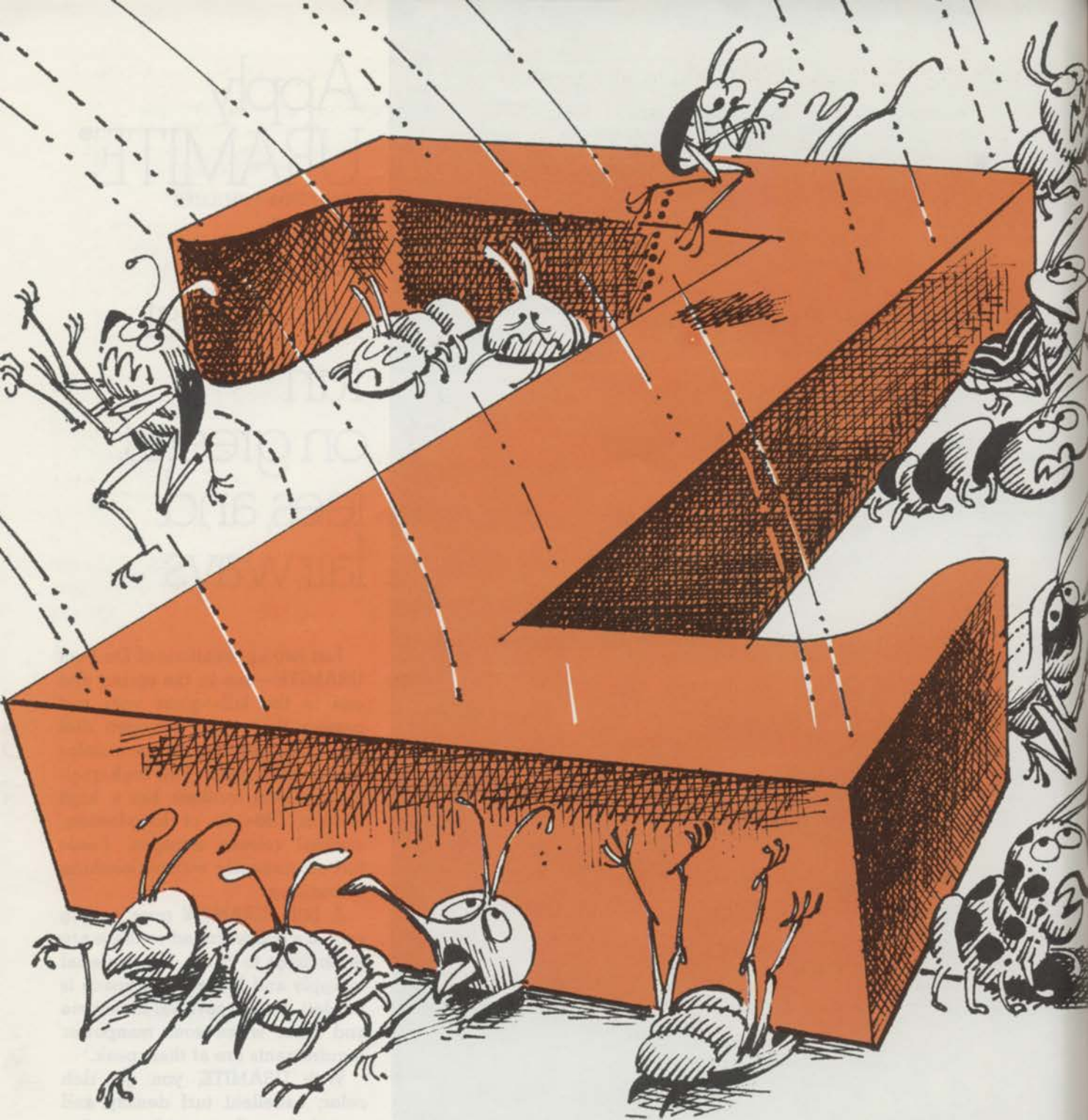
A little URAMITE goes a long way. It's concentrated so there are fewer bags to carry, less material to apply and less storage space is needed. So you save valuable time and labor when your manpower requirements are at their peak.

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*With any chemical, follow labeling instructions and warnings carefully.*





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