

GO MECHANICAL!





Patent Applied For

Here's a mechanical sod harvesting machine that is setting the standards for the sod industry! The reason? Years of commercial field performance has proven its ability to handle all types of turf, to do it quickly, efficiently and at a low cost!

An important feature is the choice the grower has as to harvesting sod in rolls or slabs. The rolling and slabbing unit is interchangable, and can be changed quickly and easily.

The NUnes Sod Harvester and 3 men can lift, roll or slab and palletize up to 1200 sq. yds. of sod per hour. The harvester travels alongside, never on top of the turf, during harvesting. The machine is adaptable to all regions taking into consideration terrain, soil and sod conditions. Operator has clear visibility of all operations at all times, field grading of sod is done on the move, field conditions are easily and quickly adjusted for, while in operation, with hydraulic controls.

The NUnes Sod Harvester is the solution for growers looking for a proven way to quickly and economically harvest sod. If you can cut turf with any standard sod cutter... our machine can pick up and harvest it!

For more information please contact:

THE JOHN NUNES MECHANICAL HARVESTING CO. 2006 Loquot Ave., Patterson, California 95363, Phone (209) 892-8776



Special for This Issue

How to Kill Cattails
Effectiveness of four chemicals are documented by Prof. Bordewick of Del Mar College on a Corpus Christi, Tex., golf course.
Chemical Pruning Shows Promise
Ohio State University research report by Dr. P. C. Kozel reports effects of Off-Shoot-O, the "morphactins," and giberellic acid.
Golf Course Maintenance Headed Toward Turfgrass Perfection
Which 2,4-D to Use?
A technical report on formulations of 2,4-D from J. S. Coartney and A. H. Kates at Virginia Polytechnic Institute.
Sand-Based Greens and Grid Renovation
A report from the Central Plains Turfgrass Field Day about research

Wayne Jenicke tells how he and his family have applied new tech-

Power Equipment, Chemicals Save Cemeteries from Weeds

niques to improve efficiency of maintaining five cemeteries.

Regular Features

Editorial: A Price-Fixing Conspiracy on Money?	4
Meeting Dates	25
Sod Industry Section: Cissels Employ Turf Bird	26
New Products	20
Industry People on the Move	32
Insect Report	36
Classifieds	37
Advertisers' Index	37
Trimmings: Who has moved the biggest tree?	38

The Cover

High costs of maintenance are helping push the trend in cemetery design to the memorial park garden type. The cover picture is of Resurrection Cemetery, Lenexa, Kans., maintained by the Wayne Jenicke family and other employees. By clustering design elements and using ground-level markers, bigger power equipment for mowing and applying chemicals can be used. Darrell Huntington, operating an 88-inch Heckendorn rotary, is getting instructions from Wayne Jenicke, superintendent. A story about Jenicke's maintenance practices begins on page 6.



WEEDS TREES AND TURF is published monthly by The Harvest Publishing Company. Executive, editorial: 9800 Detroit Ave., Cleveland, Ohio 44102.

Single Copy Price: 50 cents for current issue; all back issues 75 cents each. Foreign \$1.00.

Subscription Rates: WEEDS TREES AND TURF is mailed free, within the U.S. and possessions and Canada, to qualified persons engaged in the vegetation care industry and related fields in controlled circulation categories. Non-qualified subscriptions in the U.S. are \$7.00 per year; Canada and other countries, \$10.00 per year. Controlled circulation postage paid at Fostoria, Ohio 44830.

© The Harvest Publishing Company, 1969



WEEDS TREES and TURF

Volume 8, No. 7

July, 1969

Gene Ingalsbe Editor

Alis Anthony Editorial Assistant

Arthur V. Edwards Editorial Director

A. J. Michel Advertising Production

Hugh Chronister President and Publisher

Dan M. Humphrey Vice-President, Advertising

> Roy Bever Director of Circulation

ADVERTISING SALES OFFICES

Cleveland, Ohio 44102 9800 Detroit Ave./216+631-6468 William Schmunk, Mgr.

Chicago, Illinois 60601 333 N. Michigan Ave./312+236-9425 Richard Scrymiger, Mgr.

> Shawnee Mission (Kansas City), Kansas 66202 6811 W. 63rd St./913+722-5900 Austin Schnacke, Mgr.

New York, New York 10017 757 Third Ave./212+421-1350 Herbert Laager, Mgr.

Columbus, Ohio 43212 1350 W. Fifth Ave./614+486-9638 Gilman Calkins, Mgr.

Lansing, Michigan 48906 4415 N. Grand River/517+372-5254 Paul Bundschu, Mgr.

Los Angeles, California 90005
The Eschen Company
3142 Wilshire Blvd./213+382-8391
Henry Eschen

San Francisco, California 94104 The Eschen Company 57 Post St./415+781-7440 Al Pierce

Price-Fixing Conspiracy on Money?

Let's take a non-banker's view of the recent hike in the prime interest rate to 81/2%. Take a dollar bill from your pocket. At the top, it reads: Federal Reserve Note. That's the brand name of the product we're going to talk about. That's right, we said product.

That brand name denotes that the Federal Reserve System is the organization licensed by Uncle Sam to create, sell, and regulate the supply of this product that's dear to us all.

More often than you would like, no doubt, you have to "buy" money (get a loan, normally speaking), either for your business or for personal reasons.

The price of "buying" money has gone up 70% in the past four years. Since 1965, the prime rate-(that's the rate to banks' biggest and best purchasers; smaller businesses and individuals may pay more) has gone from 5% to 81/2%.

We ask you: What would your customers say if you had raised the price of your product or service 70% in four years?

"Tight money" is supposed to stop inflation. When has it?

As the price of money goes up, the cost of operating your business goes up. If you want to stay in business, you react the same as when any other costs go up. You increase prices. Spiraling costs; spiraling prices. But isn't that the cause of inflation?

If limiting the amount of credit really does slow inflation, then why not put a volume limit and a priority on the amount of money that's availableand leave the price at a reasonable level.

In other words, why should pricing smaller and poorer businesses and individuals out of the money market be the method of making money tight?

You notice that even in a "tight money" period when credit is supposed to be limited, if you're still willing to pay that high interest rate, the lenders usually can scrape up enough to sell to you.

Maybe that's why the top 50 commercial banks can expect to make a profit of better than \$1.6 billion* this year, a 62% increase over 1965. In

(Continued on Page 7)

WEED & BRUSH CONTROL PLANNER



Timing Is Everything

In August, leaves have developed a tough outer coating. This coating serves a double purpose. It helps the leaves retain water

and resist the absorbing of waterbased chemicals. Result: even most dependable herbicides do only a spotty-and uneconomical-killing job when mixed with water and applied at this time of year.

What to Do?

Add oil in August. Oil added to an Amchem stem-foliage brushkiller spray will give a thorough kill. Check how dry the area is and how hardened off the leaves are, then add 10 to 20 gallons of oil per one hundred gallons of solution. Tip: For best results, use 6 pounds of active ingredient rather than 4 pounds per one hundred gallons.

What Chemicals

You will want a brushkiller that can emulsify 10 to 20 gallons of oil. You will want a brushkiller that penetrates stems and bark as well as the leaves. You will want a brushkiller that gives a thorough kill on species of brush that are resistant to conventional 2, 4-D and 2,4,5-T formula-tions. Brushkiller 170 and Weedone® Industrial Brushkiller satisfy all of these requirements. Tip: Either of these chemicals mixed with oil and water can save you money. Concentrate your spray on stems and root collars more than the foliage and you use less chemicals.

First name in herbicide research

See your Amchem representative for an individualized, month by month prescription for your weed control problems.

AMCHEM PRODUCTS, INC., AMBLER, PA.

Chinch bugs don't stand a chance when you hit them with Ethion. Ounce-for-ounce, no other pesticide can match its Chinch-killing power.

Spray lawns with Ethion, and grass is safe for six weeks or more. You'll be safe, too. Ethion isn't a dangerous chemical. Just use normal precautions. See your favorite supplier for a selection of Ethion-based sprays.

They make Chinch-killing a cinch.

Ethion[®] It's a cinch to kill Chinch.





THE JENICKES - David, George, Marcella, Wayne, Janice, Alberta.

Power Equipment, Chemicals Save Cemeteries from Weeds

PEOPLE have come to accept the irreverent roar of power mowers and the dousing of weed-killing chemicals on grave sites.

Well, almost everyone has, qualifies Wayne Jenicke, who directs the maintenance of five Catholic cemeteries in the Kansas City, Kan., archdiocese.

"Those who seldom visit the cemeteries complain most. Regular visitors understand what work is necessary to keep a cemetery looking nice."

The shortage of qualified labor and the increasing cost of maintenance are bringing about a change in cemetery design, Jenicke said.

The upkeep factor is strong in his mind as he develops the newest of the five, the 80-acre Resurrection Cemetery near Lenexa. Blueprints for a sixth, 123-acre cemetery to be opened this fall also reflect the sensitive compromises a cemetery su-



perintendent has to make. He must please the people he serves, usually under most difficult circumstances, without unduly sacrificing upkeep efficiency.

"People prefer a shady, cool-looking atmosphere," Jenicke said. "That's why you may see an evergreen planted on either side of the monument in many of the older cemeteries."

As relatives move away, however, the upkeep of so many grave sites, particularly ones with the evergreens, becomes a costly burden for the cemetery to bear. "So now we have a regulation against that type of planting." he said.

Natural Look Is Design Trend

Mt. Calvary and St. John's cemeteries in Kansas City, St. John's in Lenexa, and St. Joseph's in Shawnee all are monument cemeteries. Resurrection and the new one will be

mostly memorial park garden type with the ground-level markers, but will have monument sections.

To achieve the cool-looking atmosphere, Jenicke plans to develop a "natural look" with random plantings of large shade trees.

There still will be evergreens and ornamentals, but plantings will be clustered in a way that beautifies the grounds yet permits easy management.

Jenicke maintains present cemeteries and develops the design of new ones with the advice of a personal friend who is a professional arborist and nurseryman, Harry Balthasar, owner of Nashua Nurseries, Nashua, Mo.

"If I have a disease problem on shrubs, he'll drop in and take a look at it," Jenicke said. "He takes the landscaper's blueprint for the new cemetery grounds and tells me what trees and shrubs to plant."

Jenicke began working in the cemeteries, in Wyandotte and Johnson Counties, after he returned from the Army in 1958. He began as assistant superintendent to his predecessor, W. J. Anderson. He became superintendent when Anderson retired in 1966.

Family Operation

Maintaining the cemeteries has since become a family operation.

Wayne was laid up several weeks with a hip ailment in 1961. His brother, David, then just out of the Army, took over for him. Then David stayed on as foreman.

His sister, Janice, began working summers during high school, then became the receptionist after graduation. Another sister, Marcella, still in high school, works on the grounds during the summer. His mother, Alberta, began working in 1967 and is in charge of grounds maintenance. Another brother, George, decided a few months ago he preferred to work outdoors rather than in a potato chip plant.

About six other full-time employees round out the staff.

The era of the parish cemetery — when family members assumed the responsibility for caring for the graves of relatives — is over, Jenicke said. St. Joseph's, a parish cemetery until 1960, has monuments dating in the 1860s.

What this means is that in the mobile society of today, more and more graves are being left for fewer cemetery employees to maintain. And there is the constant wage competition from other industries.

Chemicals and power equipment

Price-Fixing Conspiracy On Money?

(Continued from page 4)

four years, a 70% increase in interest rates and a 62% increase in profits . . . interesting coincidence, isn't it?

Treasury Secretary David Kennedy has said wage and price controls are one way to stop inflation. If it comes to that, let's be sure to establish price control for all industries and all products, including the banking industry and the price of money.

Isn't the Federal Reserve Board that runs the money show responsible to the President, since he appoints the members? Hardly. The maximum number any one President can appoint is four. Twelve decide the Fed's, and consequently our, money policy.

Not even the U.S. Secretary of the Treasury sits on the Federal Reserve Board. He used to, but was lobbied off in the late 1930s.

On occasion, the Fed actually brags about its independence from the Federal Government. That translates to independence from you and me—John Doe, interest-rate payer.

Repeating an earlier question: What would your customers say if you increased prices 70% in four years? We suggest you say the same thing to your senators and congressmen.

The idea of a banking system that proclaims it's "saving us all" as it uses a method that puts money in its till doesn't ring true. It smacks of the label attached to it by Cong. Wright Patman, chairman of the House Banking Committee. He called it a "conspiracy," and it appears to be a greedy one at that.

* Based on a continuation of profit performance of the past three years.



have been the deciding factors in keeping the cemeteries from literally disappearing in weeds.

Jenicke Formula for Neatness

Wayne Jenicke is establishing an enviable reputation in cemetery neatness. His formula is this:

In early spring, he applies Dacthal W-75 pre-emergence crabgrass killer with a 150-gal. Kim Manufacturing Co. P-800 trailer tank sprayer hitched to the PTO of an International Cub tractor.

"We try to get started soon after March 1 and finish before Apr. 15."

At the present time, plots that are for sale get 10 lbs. per 1000 sq. ft. of Armour Vertagreen Turf and Tree Fertilizer (10-6-4). "In the future, we hope to fertilize all areas of the cemeteries," said Jenicke. Application is with a Maumee seeder broadcast-type spreader behind the IH cub.

"No one likes the idea of loved ones being buried in a weed patch," Jenicke said.

So about May 1, Weedone, a granular lawn weed killer made by Amchem Products, Inc., Ambler, Pa., is applied with a Scotts drop-type

Wayne Jenicke and his mother show how simple the task is to apply a soil sterilant that lasts an entire growing season and thus eliminate the need to trim every other week. Using the chemical cut labor costs nearly 70%. That's a significant accomplishment when you're talking about trimming 20,000 monuments. Acme Weed Killer is applied in a three-to four-inch band.

spreader behind the riding tractor.

"We tried the liquid spray, but had to worry too much about the drift hitting trees and shrubs."

Two men, working eight-hour days, mow the five cemeteries in a five-day period. Since each cemetery is mowed once a week, the job is practically continuous.

"Seven years ago, it was taking 10-12 men to mow just two cemeteries," Jenicke said, "and they weren't trimming. Now we have 100 acres (in the five cemeteries) handled by two men."

The difference is power equipment — 88-inch, 62-inch and 36-inch Heckendorn rotary mowers and three 21-inch Lawnboys.

Chemicals Cut Labor Cost

The thought of trimming around 20,000 monuments every week during the grass-growing season is stag-





The striking difference in cemetery neatness is evident here. The picture in which markers are nearly covered with grass and weeds is in a cemetery not under Wayne Jenicke's direction. At left, Marcella Jenicke is applying Amchem's granular Weedone to kill the remaining dandelions and other broadleaf weeds. The warehouse and maintenance shop is in the background.

gering. Jenicke used to do it by hiring eight or nine high school students for the summer.

He still hires extra student help in the summer, but he figures that two persons working two to three weeks applying a soil sterilant that lasts all season saves the labor of five students trimming for three months during the summer.

A simple flower-watering can is filled with Acme Weed Killer, made by Acme Quality Paints, Inc., Detriot, Mich., diluted to one part chemical to 32 parts water. A threeto four-inch band is sterilized around each marker

Jenicke calculates that the use of the soil sterilant has reduced the annual cost of this extra measure of cemetery neatness from about \$6,500 to less than \$2,000.

The Acme product, said Jenicke, doesn't have an oil base so it doesn't affect the markers. "We're trying Casoron granules, also," he said.

At present, Jenicke's tree-spraying is limited to spraying for disease or insects after discovery. "We're working toward a preventive program," he added.

Grave-digging is now done with an IH backhoe rather than with hand shovels. New graves are covered with sod.

Bermudagrass is one variety that's taboo with Jenicke. Markers flush with the ground are soon covered because of the way Bermudagrass grows, he explained.

"What I need most is a chemical to keep the grass from growing."

But until a retardant comes, Jenicke will continue his search for further efficiencies as new graves to tend are added at the rate of 500 a year.

The Jenicke family conducts its

operations from a modern-design office at Mt. Calvary, 38th and State Streets in Kansas City, Kan. The rows upon rows of monuments stretching up the hill behind the office attest to Jenicke's working philosophy that he should take care of the many grave sites as he would want others to take care of the graves of his relatives and friends.

He knows the kind of care he wants. His father and predecessor are both buried at Mt. Calvary.

LETTER TO THE EDITOR-

Australian Seeks Aquatometer

an article dealing with the Aqua- wooden fork. tometer — an appliance to detect underground water streams.

Will you please put us in touch with the manufacturer?

ognized as being the driest state lies buried. of the driest continent on Earth. abundant. Any method or appliance which assists in accurate loa "Godsend."

ing underground water is to walk article by Mr. Jamieson. slowly over the surface of the in front, and each hand firmly Thebarton, South Australia.

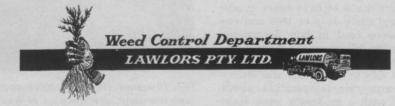
Your issue of March, 1969, has grasping one of the prongs of the

The claim is that when the "diviner" suddenly walks on to land beneath which an underground stream is hidden, the forked stick is just as suddenly pulled down The country wherein we are by some unexplained force, so located, South Australia, is rec- that it points to where the water

Some "diviners" use a piece of But underground water is fairly fencing wire, suitably bent in the shape of a very large wishbone.

Laymen, farmers and scientists cation of the subterranean have, for a century or so, argued streams and reservoirs would be about whether it is "all bulltripe" or not. Apparently the We have people who call them- term "water-divining" is not used selves "water-diviners," here in in the U.S.A., else it would have Australia. Their method of locat- been used at least once in the

Anyhow, we are very interested land with a small, forked branch in the Aquatometer.-L. W. LAWfrom a tree, arms outstretched LOR, director, Lawlors Pty, Ltd.,



All Nine Lives ...

How to Kill Cattails

By BERT BORDEWICK
Associate Professor,
Biology Department
Del Mar College, Corpus Christi, Tex.

Cattails cause a number of problems in many ditches and ponds in the Corpus Christi, Tex., area.

They can prevent proper water movement and during heavy, infrequent, rains common to South Texas, often bring about considerable flooding. They are a major nuisance on some golf courses, where their tall growth may interfere with the proper execution of a golf shot.

Various eradication means have been tried, but none with permanent success. Among the weed-killers which had been used are: 2,4-D; 2,4-D in fuel oil; and sodium arsenite. The following experiment was instituted in an effort to find an herbicide which would give long-lasting control.

Four standard, but locally untried, weed-killers were employed: Dalapon, MSMA, Calar, and Amitrole. Two different dilutions of each chemical were tested.

The experiment was set up at the Oso Beach Municipal Golf Course* in Corpus Christi along the edge of a large pond paralleling No. 10 fairway.

Each experimental plot was 6 feet wide, about 5 feet deep, and contained between 100 and 200 plants. The plants in each plot were sprayed to run-off. No wilting agents were used. Two applications of each chemical were made 14 days apart in late June and early July of 1968 and results were read in late September (3 months following the first application).

Each day of treatment was sunny and warm (air temperature about 85° F) with a moderate wind from the southeast. Time of treatment was

between 4:30 and 6:30 p.m. There were three replications of each treatment and six untreated control plots.

Results (see accompanying table) show that both Dalapon and MSMA gave good control. After the applications, all plants in the Dalapon tests at both dilutions were dead, brown and fallen over. In the MSMA tests, nearly all plants were dead and brown and most of them were fallen over.

Several healthy plants remained in three MSMA plots but it was assumed that these were missed accidentally by the spray material.

Calar and Amitrole at both dilutions caused considerable brown flecking of the leaf and stem with the edges of the leaves turning brown. However, all plants remained alive. Control plants stayed healthy and vigorous.

It would appear from these tests that both Dalapon and MSMA will give adequate control of cattails in this area in the summer. Moreover, the author noted that one treatment with these chemicals seemed sufficient although in this experiment



Tom Lawrence, right, manager and club professional and Frank Knesek, superintendent, are standing in front of the new club house at Oso Beach Municipal Golf Course.