

Jack Poksay's secret weapon.

You're looking at the business end of a machine that aerates, cores, renovates, slices, spikes, and cultivates. It's the Jacobsen 595 Turf Aerator. That's the weapon.

Now about Jack Poksay. He's with JEP Sales, Inc. at Yardville, New Jersey. Like all of us Jacobsen Distributors, he knows what the secret of healthy, luxuriant turf really is.

Deep root penetration. It's as simple as that. And as difficult as that.

Turf roots need to breathe.

They need to soak up life-giving water, sunshine and fertilizer. But when the soil has become compacted, or the turf gets heavy, the nutrients have a hard time getting through. That's the difficult part.

Now here's the easy part. Jacobsen aerators break up compaction, loosen the dirt and force openings in thick turf that give the roots a better chance to grow deeper and stronger.

Whether you have a lot of turf or just a modest amount, we have the exact kind and size of aerator you need.

Our big pull-behind models

aerate a five or seven-foot wide swath. The smaller self-propelled models spike or aerate in 18", 21" and 28" wide swaths.

If your turf needs aeration, and you're not doing anything about it, you have a choice. You can worry about it after your turf starts looking under par, then try to play catch up ball.

Or you can have a chat with your Jacobsen Distributor about selecting the proper aerator.

It's no secret about which is the better choice once you get to the root of the matter.

Your Jacobsen Distributors

Before we sell it, we buy it.



For the name of the distributor near you write: Jacobsen Turf Directory, 1721 Packard Avenue, Racine, Wisconsin 53403

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Beautiful turf is no accident. Make it happen with Acti-dione® 4-season disease control

The old saying that beauty is more than skin-deep is nowhere more applicable than on a golf course. Beautiful turf will not retain its beauty unless it remains healthy. In addition to normal wear and tear from golf play and stress from variable weather conditions, fungi are an ever-present health threat to turf. There's little you can do about golf play and weather, but you can control fungal diseases. An effective, economical way to combat fungal growth all year long is to use Acti-dione® Thiram and Acti-dione TGF® in a four-season disease control program. With fungi out of the way, turf has a better chance to grow strong and healthy — to resist weed infestation, to bounce back from injury and to survive adverse weather conditions. See your TUCO distributor today for complete information and assistance in planning a four-season disease control program with Acti-dione turf fungicides.



Use Proxol* 80SP to help prevent insect damage



Division of The Upjohn Company, Kalamazoo, Michigan 49001

Dollar spot thrives on fall weather

The cooler days and nights that come with fall focus attention on dollar spot as an active threat to turf. Regular applications of Acti-dione TGF help to control dollar spot and to protect against leaf spot, rust and powdery mildew.

WEEDS TREES and TURF®

July 1974, Vol. 13, No. 7

THE COVER—The "Spider," an 11-foot wide backfiller-compactator designed by Ken Cloud of Formost Construction Company, does the work of four men in an irrigation installation job. Three tamps pack soil in the trench immediately behind backfilling augers.

MISSISSIPPI METHODS—The Mississippi State Highway Department has a running battle with broadleaf weeds and johnsongrass. A selective chemical weed control program is designed to kill weeds and leave desirable vegetation to do its job. . . . **11**

URBAN SPACE PLANNING: Room for Recreation—Booming urban populations create growing demands for recreation areas in and around big cities. Gerald L. Smith, of Utah State University, deals with the need for urban open space planning. **18**

FERTIGATION: Double Duty For Your Irrigation System — Two Floridians, Larry Weber and Max Brown, explore the potential in applying fertilizer through an irrigation system. Weber, superintendent of Inverrary Country Club, describes his fertigation system. Brown, a turfgrass agronomist, discusses injection methods and the advantages and disadvantages of fertigation. **22, 23**

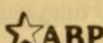

A FAMILY AFFAIR for 'Formost'—WTT cover story. The Cloud family has been installing irrigation systems for 28 years, specializing in golf course irrigation. Ken Cloud's story explains how his Formost Construction Company became one of the top installers of golf course sprinkler irrigation systems. **30**

SOD, WATER, AND A SYSTEM—Sprinkler irrigation on sod is one important cultural practice adopted by sod producers since the emergence from the "pasture stage" of production. Dr. Henry W. Indyk, of Rutgers University, discusses sod and water management, and the use of sprinkler irrigation in economic sod production. **36**

'CREATIVE' CURE FOR CHLOROSIS—Plastic capsule implantations which feed the iron compound directly into the tree's sap stream make chlorosis treatment easy and economical. Recent research has shown capsule implantation solves chlorosis problems and is less troublesome and faster to apply than soil injection. **44**

Editorial	6	New Products	47
Government News/Business	8	Meeting Dates	48
Insect Report	34	Advertisers Index	49
Sod Industry Section	36	Classifieds	49
Industry News and Newsmakers	39	Trimmings	50

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editorial

The good old days . . . if we're really honest with ourselves, couldn't match many of our modern advantages and improved standards of living. But the old days had many a custom we're beginning to miss very much indeed.

We remember fondly, for example, that competitive spirit in business which fostered a feeling of courtesy and service toward the customer. If you will, there was a courtship of the public. The drugstore delivered. Shopkeepers guaranteed satisfaction — and smiled about it as well.

It may not be gone forever — but the service attitude in business is certainly on an extended vacation. It's missing in many parts of the green industry as well.

We're disappointed and often downright irritated to find how carelessly the public is sometimes served in our industries. The trimmed branch that falls to wipe out rose bushes . . . the calls to answering services which are not returned . . . the spray drift . . . the missed appointments.

Most critically, we are disappointed to hear more often than ever: "we don't do that anymore," or . . . "I'm sorry but we

don't offer that service." Everywhere we go these days: "I'm sorry, I'm sorry."

In our view there is just no place in a service-oriented industry for the phrase: "we can't do that." To us it means — "we don't provide service, we just sell a tangible product . . . take it or leave it."

To those parts of the green industry which are not related to a service industry . . . there's still a good bit of helpful philosophy contained in the service technique.

Briefly, the service approach is solving problems. Not the obvious, tangible problems, but the very real concerns which people have on their mind. A man with disease problems in his turfgrass may really be thinking: "I wish someone would come along and take care of this entire turf project of mine."

A lady who is asking for price estimates on a tree care job may really be looking for "men I can be sure won't drive their truck across the backyard."

To solve problems, we need to begin by understanding what they really are and approach them firmly and courteously.

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Now there are 2 other loader/backhoes that give you JD401-C features.



The 50-net-hp JD302-A

With this intermediate-size unit, you get the same 17 ft. 5 in. reach and 13 ft. 10 in. digging depth as on the JD401-C. You also get the same 8-speed constant-mesh transmission with hydraulic direction reverser, the same nine backhoe buckets to choose from, and the same option of gas or diesel powerplant. There's a lighter-weight loader up front that carries the same $\frac{3}{4}$ - or 1-cu.-yd. bucket, too.



The 43-net-hp JD300-B

Buckets, backhoe, transmission, direction reverser, and front-tire options are the same as on the JD401-C and JD302-A. With remote cylinder control, 3-point hitch, swinging drawbar, and rear PTO options, each model can convert easily to different attachments. Your John Deere dealer, in the Yellow Pages, will be glad to answer your questions on parts, service, and financing. Call him. John Deere, Moline, Illinois.



Power equipment for public works



Government News / Business

EPA withdrew formal hearings on the cancellation of certain uses of 2,4,5-T. They found that data does not yet exist to assess the potential hazards associated with the use of the herbicide. Formal hearings were scheduled to begin in August. Lack of data on health effects of 2,4,5-T applies both to the compound itself and to a common contaminant tetrachloro-dibenzo-para-dioxin (TCDD). Last year, hearings were postponed until August, 1974, so that samples of human milk and fat, beef, rice and wildlife could be analyzed for TCDD residues.

Irrigation Industries, Inc., Concord, Calif., was purchased assets, goodwill and name by the Automatic Rain Co., Menlo Park, Calif. Hopefully, the new acquisition will strengthen Automatic Rain's service throughout northern California.

Washington State Department of Agriculture has been awarded a one-year \$50,000 pesticides demonstration grant. The EPA grant is designed for: development of a model strategy for protecting the health of farmworkers, applicators and others occupationally exposed to fields treated with pesticides; and to enable state personnel to inspect pesticide producing plants and take samples that will support Federal enforcement actions related to violations of the Federal pesticides law. Another \$50,000 pesticide demonstration grant was awarded to Hawaii January, 1974.

U. S. Army Corps of Engineers was granted "emergency exemption" under the 1972 Federal pesticides law to use 12,000 pounds of 2,4-D to control water hyacinth on 3,000 acres of the St. Johns River near Jacksonville, Fla.

EPA has told the states that no funds are available to subsidize state pesticide applicator certification programs. Many states replied that they are in no position to educate, test, certify, administer or enforce the FIFRA-required certification. The states suggest the money come from congress.

Respirator certification hearings were postponed until September 30. NIOSH (National Institute for Occupational Safety and Health) is doing the certification work for OSHA. Rumor has it that NIOSH expects further delays.

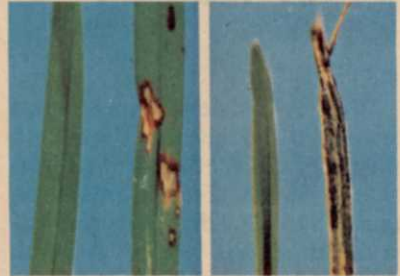
OSHA's Compliance Operations Manual has been replaced by an updated version reflecting changes in compliance policy. The loose-leaf booklet contains four new chapters and will be available as Volume V of OSHA's subscription service. Subscribers can receive the basic manual and any subsequent changes for \$8.00, prepaid. It may be ordered from the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402. It is expected to be available in December.

Former Agriculture Secretary Orville L. Freeman has warned that "the availability of arable land is nearing its limit. In many parts of the world there is actually less agricultural land available every year because of erosion, industrial development, residential and transportation requirements, and other factors," he said.

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0217 brand Fylking Kentucky bluegrass is elite and exceptional in every way, proven in 12 years of international tests. Check and compare these Fylking virtues:

1. Fylking has superior disease-resistance to leaf spot (left), stripe smut (right), stem rust, and leaf rust, as rated by every major university and institution where tested.
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3. Fylking seed tests show 97-99% purity, and 85% germination.
4. Fylking seeds germinate and grow faster. 11-day comparison with another elite bluegrass shown below right.
5. Fylking can be mowed at 3/4 inch (even 1/2 inch) and thrive.
6. Fylking greens up earlier in spring, stays greener in summer heat, remains green longer into fall.
7. Fylking is a superior mixer. With other lawn grasses it greatly improves turf quality and density.
8. Fine texture, short sheath and abundant tillering create luxuriant, deep-green, uniform appearance.



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50 Years and on the GROW

ISTC Convention Set for August

"Fifty Golden Years and Growing" is the theme of the fiftieth anniversary convention of the International Shade Tree Conference, August 18 to 22. This year's convention headquarters are at Atlanta, Georgia (Atlanta Marriott Motor Hotel).

Some 900 delegates attended last year's convention which was held in Boston. A record-breaking crowd is expected to be on hand for the golden anniversary convention.

Registration is \$65 for the educational program (including social events), \$45 for the ladies' program,

and \$28 for the youth program. Lodging at the hotel costs \$28 for a single room and \$36 for a double or a twin.

A hall in the hotel will be devoted to exhibits and displays, and there will be field demonstrations at the all-delegate event on Tuesday, August 20.

Sunday, August 18:

Morning:
Registration
Chapter presidents and past presidents meetings

Afternoon:
Executive committee meeting

Monday, August 19:

Morning:
Registration
Official opening, address by President F. Lewis Dinsmore

Afternoon:
"Half-century with trees and their friends," Dr. Paul E. Tilford
"Control of water loss in shade trees," Dr. Theodore Kozlowski and Dr. W. J. Davies
"A review of the major tree diseases of the century," Dr. J. C. Carter
"Fifty-two years of tree work," A. E. Price

Evening:
Hospitality party

Tuesday, August 20:

Morning:
"Virus and mycoplasma diseases of shade and ornamental trees," Dr. D. N. Agrios
"New directions and developments in shade tree entomology," Dr. William Wallner
"Trees in the landscape — a look beyond the obvious," Prof. William R. Nelson, Jr.

Afternoon:
All-delegate event: Stone Mountain Park, equipment demonstrations, southern barbeque and entertainment.

Wednesday, August 21:

Morning:
Business session — Board of Governors Meeting and Committee Reports (open to all delegates)

Afternoon:
"New tree selections," William Collins
"Arboricultural communication," Dr. John W. Andresen and Eric Jorgenson
"Cabling and bracing," Leslie S. Mayne

(continued on page 16)

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