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Patent Applied For

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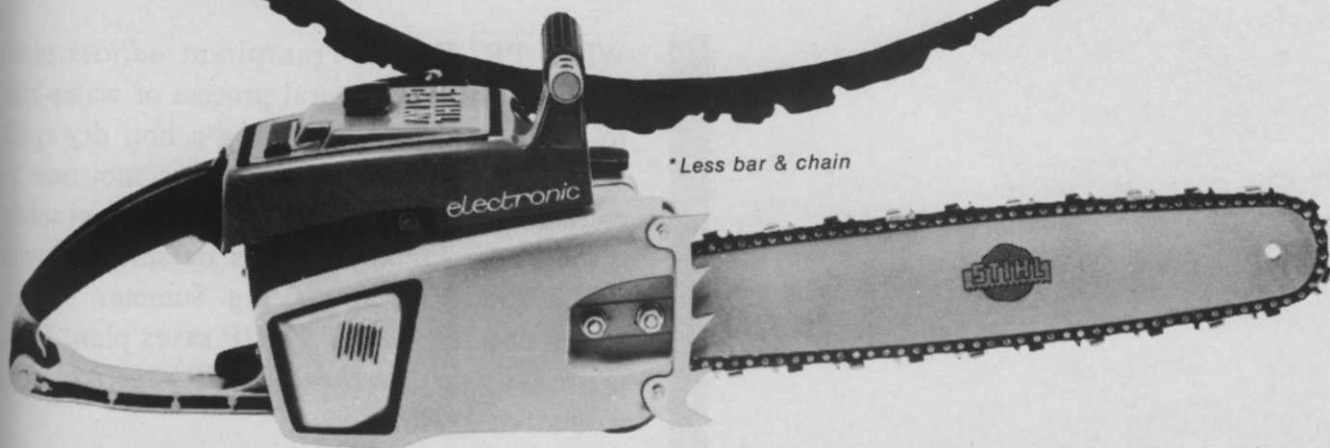
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plus solid state ignition**



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The Cover

Topeka, Kan., park superintendent Dennis Showalter watches as a John Bean Rotomist douses a pine with a Bordeaux mixture. The operator is Don Foltz, forestry foreman. Marvin Wimer, park horticulturist, is on the tractor. The sprayer is used on the pines for rust and needle diseases. It was purchased to fight Dutch Elm disease that increased considerably after a 1966 tornado. DDT was used until the Audubon Society complained; now the park is fighting a delaying action with methoxychlor. A feature about the Topeka park system begins on page 8.



WEEDS TREES and TURF®

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Member Business Publications Audit



Be Prepared to Fight Positively for Chemicals

We think you ought to be well-versed on what's being said against DDT. That's the reason for the story beginning on page 22.

Sen. Gaylord Nelson of Wisconsin has a bill in Congress to ban the nationwide sale of DDT. We called his office for the name of an anti-DDT exponent. Our source suggested Dr. Charles Wurster, Jr., citing him as "one of the world's foremost authorities on DDT."

Quite a few other leading authorities disagree with Dr. Wurster's conclusions. These disagreements are capsulized in a story beginning on the same page.

This pro-con presentation is the background for asking this question:

Who really is responsible for educating the public about chemicals?

A second question may answer the first. Who stands to lose business when ignorance and emotion are allowed to make the decision on whether to use chemicals or on what chemicals are to be used?

We think the answer to both questions is: *You, the chemical applicator.*

Sometimes it isn't enough to talk about the good things chemicals do. Sometimes it's necessary also to counter charges against chemicals.

If you don't already have one, we suggest that you initiate a "public relations" file on chemicals. Organize it in such a way that when a controversy arises in your community, you'll be able to react quickly and positively. Be prepared to provide comprehensive information to local officials and local news media.

You might approach your "chemical public relations" program under the headings of *prudence, priority and perspective.*

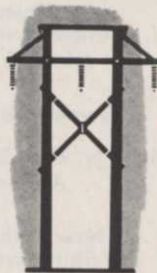
Of course, it's elementary to suggest the need for *prudent* selection and use of chemicals. Still, the ounce-of-prevention/pound-of-cure worth ratio is far too conservative a philosophy for the chemical industry.

A *priority* of preservation needs to be established and understood. Your customer, whether an individual or an entire community, should at least tacitly approve the use of a chemical with

(Continued on page 8)

September

WEED & BRUSH CONTROL PLANNER



Timing Is Everything

September marks the end of foliage brush spraying and yet is too early for starting your dormant cane winter brush spraying program. How to make

productive use of labor force and equipment? Go after those hard-to-kill perennial weeds and grasses. Amchem has 2 new chemicals that will get rid of them for a full year.

Why Apply Now?

Two reasons. Next spring you are going to need your men and equipment to fight brush problems. Applying chemicals now gets weed killing out of the way and avoids expensive, wasteful down-time for men and machines. September is also the time when fall weeds and grasses are starting to grow. Soil sterilants applied now receive enough moisture to give a long-term residual kill.

What to Apply Now?

Here, Amchem offers you flexibility and broad spectrum kill. If weeds and grasses have not emerged, use Fenavar[®] Granular. It is a clean, dust-free, easy-to-handle combination of Fenac[®] and bromacil that kills weeds before they emerge. **Tip:** Using Fenavar Granular enables you to clean and repair spraying equipment now. If weeds and grasses are up to 1' high, use Fenavar[®], a combination of Fenac, amitrole and bromacil. Fenavar is readily soluble in water, requires no agitation, and may be applied with any type of spray equipment. **Tip:** To control johnsongrass and Bermudagrass, apply 10 gals. Fenavar with 1 gal. Trans-Vert in 50 gals. of water per acre.

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

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Be Prepared . . .

(from page 6)

the understanding of what possible adverse effects exist.

The anti-DDT people are outrageously off base on this matter of priority. On the basis of questionable adverse effects upon wildlife, they cry for an outright ban at the expense of the very real possibility that one result will be to condemn perhaps thousands of human beings to death.

Because such a warped sense of judgment can develop regarding chemicals, it is imperative whenever a problem does arise to see that it's reported in proper perspective.

Repeating: The cry is for a ban on DDT, although there is not one shred of evidence that any human being has died from the effects of it.

Yet there is another "DDT"—Drunk Driver Traffic—that has been statistically tagged with being directly responsible for killing between 15,000 and 20,000 people in the U.S. every year.

So who's excited? So who has a bill before Congress to ban either alcohol or the automobile?

A chemical public relations program is essential to your business. It must be in depth and overwhelmingly convincing.

It must be capable of overcoming that oft illogical aspect of human nature—emotion—that in the case of DDT has said:

A dead bird in hand is stronger proof than 200 healthy birds flitting in the bush.



Dennis E. Showalter's pen rests on the headquarters site for the park domain that he supervises. Most — but not all of it — is indicated by the shaded patches on the city map of Topeka, Kan. The system includes 59 parks, an 18-hole golf course and 15 lighted ball diamonds.

Dennis Showalter, Topeka Superintendent:

Stretch Resources To Place the Park Where the People Are

By GRIER LOWRY
Independence, Mo.



A massive tornado that swept through the heart of the city in 1966 and an accelerated spread of Dutch Elm Disease have demanded the maximum capability of the city's three aerial bucket units. Cleo Campos is working from the bucket of Reach-All unit manufactured at Duluth, Minn.

TAKING a good basic program and continuously upgrading it usually is a pretty sound success formula for any undertaking. It's the strategy for developing the turf, weed and tree program for the park department in Topeka, Kan.

The park system in this city of 130,000 encompasses 59 parks, an 18-hole golf course, 15 lighted ball diamonds, five swimming pools, three recreation centers, and nine shelterhouses.

It adds up to 1,450 acres to keep looking nice for Dennis E. Showalter, superintendent of parks.

Topeka residents take more than the normal pride and interest in their system. Usage is uniformly high, from the new downtown park near the Capitol and a senior citizen's home to any one of the suburban playground-recreation centers. The task, therefore, for Showalter, who holds a degree in ornamental horticulture from Kansas State University and has had varied experience in several nurseries, is all the

more challenging, demanding and rewarding.

Weeds and turf are thought of together, for Showalter believes the most effective way of controlling weeds is through good turf.

However, in early spring, the park crew of 31 employees does unleash a weed-control program, spraying with the lowest volatile 2-4-D ester on dandelions and other broadleaf weeds.

The low volatile is employed to reduce damage to trees and growth on private property adjoining parks.

Re-Seeds With K-31

When Showalter came to Topeka in 1961, he noticed that K-31 fescue used in re-seeding park areas was developing beautifully. He decided the technique warranted continuance and upgrading.

Poor turf areas are plowed up in late July and August and re-seeded. Weeds not controlled through re-seeding are sprayed in fall and spring. Re-seeding on poorest turf

is conducted on about 200 acres each year.

"It is our experience that if we can get the seed into the ground by Aug. 15 and up past Labor Day, we never have a failure due to hot weather," said Showalter.

"If we have a hot, dry fall and try and get the seed into the ground after Sept. 10, our chances of failure increase. I know most bulletins state that planting this early isn't advisable, but it works for us."

The method includes plowing up the ground with a disk plow if the land is rocky or is full of tree roots, or with a moldboard used on good, open land. The ground is plowed to a depth of about eight inches. A "Rotovator" is employed in the second step to "mix everything together."

A smoothing harrow prepares the ground for actual seeding, accomplished with a "Viking" seeder. About 200 pounds of K-31 fescue per acre is sown. Fertilizing is delayed until a good stand is established, which usually arrives by October.

As a seed, K-31 has numerous cardinal virtues, says Showalter. He points out that the area is in the so-called "Crabgrass Belt," sandwiched between the cool and warm weather grasses. K-31, he says, has proved to be a tough, relatively drought-resistant, easy-to-establish grass, one that withstands the heavy traffic it receives on the ball diamonds. His single qualification: As long as a thick stand is established.

"It is interesting how K-31 changes by the second year of growth," Showalter notes. "The first year it is usually fine-bladed. But the second year, it often starts to get a little coarse."

"I think you'll find more and more institutions, including schools, and more homeowners, turning to K-31."

"It responds well to fertilization, yet it gets along well without it. One drawback is that the grass during May grows rapidly as it shoots up its seed head. This means a lot of mowing, at least once weekly. So May is the month when things get pretty frantic around the city park department."

Re-seeding is done by a crew of three or four men, all classified as equipment operators and all with grass-seeding experience. Driving a straight line with the tractor, with no doubling-back, skips or gaps, is regarded as part of the good re-seeding technique.

An entire park is seldom re-seeded, chiefly because the park people don't want to deprive youngsters of



Leonard Cutting has variety in his work — some 400 varieties of trees and shrubs in the city's arboretum. The home, part of the six-acre park and two-acre arboretum, is the Ward-Meade mansion built in Civil War days. It overlooks the Kaw River and is now the center for garden club and conservation meetings.

the entire play area. The usual plan is to re-seed one third or half of a park in one season.

Some areas of the system, such as the golf course fairways, are given special treatment. The whole idea in re-seeding the fairways is to get them back into play as quickly as possible. The crews jump in and plow them up, get the seeding done, turn the sprinkling system on so the seed will germinate rapidly. Zoysia sod is used on the summer tees, bluegrass on the winter tees.

Fertilization and Weed Control

After the grass is established, the crew fertilizes with a 30-10 mixture, since tests reveal the soil doesn't require potassium, only nitrogen and a little phosphate. In areas with a lot of trees and shrubbery, the 30-10 gets the call. In straight grass sections, a straight nitrogen is often applied.

Last year, the park department got straight ammonium nitrate at the low price of \$43 a ton (this figures out about 6.4¢ per pound of actual N. from a fertilizer bulk plant in nearby Lawrence, Kan. The fertilizer was trucked in by the park crew.

"I am convinced that one of the keys to getting K-31 established," Showalter said, "is to get it in the ground at the right time. It should be fertilized with discrimination; mowed at the proper summer cutting height. Weeds don't invade thick turf. The only areas in which we do some spraying is where parks are bordered by private homes and there is some dandelion seed blowing. We don't spray for crabgrass.

"We do use Dacthal in high-use park areas, such as the walks around the rose garden, in the arboretum and around flower beds."



There is good reason for Joe Sherwood to duck as he maneuvers this 88-inch Heckendorn around some of the larger park trees. The park has five Heckendorns and smaller mowers such as the Allis-Chalmers B-10 in the top picture that's still powerful enough to pull a trash and clippings trailer.