

MEMBER: CHICAGO METROPOLITAN LANDSCAPER'S ASS'N.  
MEMBER: INTERNATIONAL SHADE TREE CONFERENCE  
LICENSED TREE EXPERT

PHONES: DU 1-1082  
1-2326  
AREA CODE 312

## *Roth Landscape and Tree Service*

P. O. BOX NO. 1  
BARRINGTON, ILLINOIS

- DESIGNING
- CONTRACTING
- TRACTOR ROTARY MOWING
- STUMP REMOVAL
- DUTCH ELM DISEASE CONTROL
- ROTOMIST AND HYDRAULIC SPRAYING  
SHADE TREE  
ORCHARD  
MOSQUITO
- COMPLETE TREE SERVICE

May 15, 1964

Mr. J. Frank Wyatt Jr.  
640 Grove Ave.  
Barrington, Illinois

Dear Mr. Wyatt:

Using the method of evaluation as devised by the National Shade Tree Conference, the values of the parkway elm trees located on lot north of 515 Summit St. are as follows:

26 inch diameter	--	\$ 1274.00
24 inch diameter	--	\$ 1086.00.

Very truly yours,

*Rowland F. Roth*  
Rowland F. Roth

RFR:lr

Roland Roth 5-15-64

Elm trees south of 515 Summit St.

26" trunk diameter	#1,274
24" " "	1,086

Authority:

National Shade Tree Evaluation  
Shade Tree Evaluation Booklet.

8/21/64: ~~unable to serve now~~ 7  
~~not heard from~~ 3  
 ✓ accepted 14  
 24

copy 7-7-64  
~~accepted~~  
~~43~~  
~~no response~~

May 25, 1964

NAMES SUGGESTED FOR HUMAN RELATIONS COMMISSION

1. Mr. Carl O. Anderson	317 W. Russell St. ○	
2. Mr. Corliss D. Anderson	217 Linden Rd. ✓	
3. Mrs. David R. Capulli	521 So. Hough St. ✓	
4. Mrs. T. F. Gayer, Jr.	835 Skyline Drive ✓	
5. The Reverend Robert D. Gerhard	243 W. Hillside Ave. ✓	
6. Mr. Thomas B. Hanchett	813 Dundee Ave. ✓	
7. Mr. Arthur Hrobsky	650 Grove Ave. ○	
8. Mr. Ray M. Jurs	402 Berry Rd. — ○	
9. Mrs. Sidney T. Kramer	203 W. Lincoln Ave. ✓	
10. Mr. Harold Lipofsky	203 W. Lincoln Ave. ✓	
11. Mr. Donald McLean	510 Summit St. ✓	
12. The Reverend Eugene B. Nyman	407 Grove Ave. ✓	
13. The Reverend Donald T. Olsen	135 W. Russell St. ✓	
14. Mr. Richard Palermo	610 Hill Street ○	
15. Mr. E. W. Plagge	200 W. Russell St. ✓ ✓	
16. Mr. Norman H. Reese	618 Summit St. ✓ ✓	
17. The Reverend Peter J. Riley	211 North Ela St. — ○	
18. Mr. Melvin A. Rosenfeld	123 Sturtz St. ✓	
19. Mr. Earl M. Schwemm	247 Maple Rd. ✓	
20. Mr. Harold B. Smith, Jr.	616 Grove Ave. —	
21. Mr. Richard D. Sturtevant	233 Linden Rd. ○	
22. Mr. Ray Tourville	615 Dundee Ave. —	
23. Mrs. Wilbur Veath	328 W. Station St. — ○	
24. Mrs. Erskine Wilder	208 W. Lake St. ✓	

15  
 2nd

## Estimated Cost of 1964-65 Program

From May 1, 1964 to April 30, 1965  
~~From April 1, 1964 to April 1, 1965~~

Remove dead wood, cross branches and muckers , including haul brush. Based on trimming - fall of 1960, spring 1961	\$13,312.70
Spray 2,256 elm trees at 70¢ each (rotomist) 1964 cost	1,579.20
30 bbls. 25% methoxychlor 1,500 gal. at \$2.69 per gal. 1964 cost	4,035.00
30 methoxychlor bbls. at \$6. each (returnable) 1964 cost	180.00
Remove 95 stumps 3,265" at 42¢ per inch, 1963 cost	1,371.30
D.E.D. take downs 1963	2,528.40
Vapor trenching between diseased elms	378.72
D.E.D. cultures	828.00
SD3562 (Bidrin) inject 50 elms	536.64
Extra & emergency work (clear village elms & other trees effecting private property) Trim other than elm trees (See Exhibit B)	20,000.00
Reforestation , 200 trees at \$25.00 each	5,000.00
	<hr/>
	\$49,749.96

## Prior Elm Tree Trimming information.

December 12, 1960 through April 24, 1961

Trimmed and hauled away brush - all elms trees on parkways (2,373)  
(At present time 2,256 elms)

\$13,312.70

(Billings \$3.40 per man hour)

## Add to Appropriation?

Other than elms - 1,263		
Trimmed as of fall, 1963 - 187		
Other than elms left to trim - 1,076 about \$10. each		\$10,770.00
Includes hauling brush		
Clear 2,246 elms - (branches away from private property)		
\$5.00 per elm based on 1956 elm tree survey		
Trunk diameter 1 1/4" to 18"	515 elms	
18" to 2 1/4"	543 elms	
2 1/4" and over	260 elms	
	<u>1,318</u> at \$5.00 each	6,590.00
Clear other than elms - 1,263 from private property		
Perhaps half of them are large enough to overhang		
on private property.		
631 other than elms at \$5.00 each (including brush)		3,155.00
		<hr/>
		\$20,515.00
Include breakdown (extra emergency)		\$20,000.00

1963 Original appropriation	\$19,000.
Added to "	<u>6,000.</u>
	\$25,000.

1963 Emergency storm damage	
Centennial trimming and cableing	
Clear streets to 13' for traffic clearance	\$17,300.00
Remove village parkway stumps 95	1,371.00
3,265" at 42¢ per inch	
Methoxychlor bbls. 30 at \$6.00 ea.	180.00
30 bbls. 25% Methoxychlor	
1500 gallon at \$2.69 per gal.	4,035.00
Operation of spraying	
2,256 elms at 70¢ per tree	1,579.20
	<u>\$25,465.20</u>

	\$25,000.00
	<u>24,465.20</u>
Cash left	\$ 534.80

## Private Elms in Barrington

Based on original elm population of 5,663 elms.

## Elms lost:

19	in	1957
26	"	1958
25	"	1959
55	"	1960
60	"	1961
136	"	1962
		1963
		1964

Village Parkway Elms  
Barrington

Based on original elm population of 2,411 elms.

Yearly percentage of Loss.

Elms Lost

14	in	1957	.57%	Used DDT in fall
7	"	1958	.28%	Used DDT in fall
2	"	1959	.08%	Used DDT in fall
18	"	1960	.74%	Used Methoxychlor in fall

almost doubled the losses in 1961

33	"	1961	1.36%	Used DDT in fall
47	"	1962	1.95%	Used DDT in fall
37	"	1963	1.53%	Will use Methoxychlor in spring 1964

As of the fall of 1963 there are 1,263 other than elms, 2,293 elms - total parkway trees 3,556.

There are 60 miles of streets in Barrington within village limits 1963 population 5,500.



# New Control for Elm Disease May Help Home Owners in '65

**If Bidrin Test Here Is Successful, Sale to Some Tree Firms May Be Approved**

Bidrin, trade name for a new chemical Dutch elm disease control, will be made available commercially next year if tests now underway in Milwaukee are successful.

"If we're going commercial with this, we're going next year," said Dr. Dale M. Norris, Madison, University of Wisconsin entomologist who first developed the Bidrin treatment.

Supplying the capsules in quantity will not be difficult, according to J. J. Mauget, head of the South El Monte (Calif.) firm that holds the patents on the injector capsules being used by the city forestry department.

Norris and Mauget were in Milwaukee last week to witness the start of the first large scale test of Bidrin. By the time the test ends Saturday, the city hopes to have injected between 40,000 and 45,000 elms with the chemical, a highly potent insecticide related to nerve gas. It kills elm beetles feeding on the bark before they can transmit a fungus infection that kills the trees.

**Progress Is Slow**

City crews were making pated last week with the inoculations. With half the time elapsed, only 14,000 trees had been injected with Bidrin, Rayner estimated. However, he said the crews should pick up speed this week as they gain experience in handling the capsules and injectors. The many large trees near the lake also require more time than smaller elms elsewhere in the city.

The crews this week will be working west of the Milwaukee river on the east side and west of S. Pine st. on the south side.

Checks last week reinforced official optimism that the test will be successful. Virtually all trees are receiving correct dosages, Rayner said. Previous tests have shown that Bidrin is completely effective in preventing Dutch elm disease if the dosage is correct.

**First Effects Felt**

The first effects of the inoculations already are being felt. Most elms are showing a slight browning or wilting



Dale M. Norris

around the leaf edges. This is a good sign, according to Gordon Z. Rayner, Milwaukee city forester. He said it indicated that the trees have received a proper dosage.

In cases of severe overdose, some leaves may wither and drop off. However, the tree will recover fully within a month, Norris said.

Any overdose should be visible within two to four days after inoculation.

"We're going to burn a few trees — that's sure — but I think they'll be pretty well protected against Dutch elm disease," Norris said. "This is a good forestry department."

Dosage estimation, completed earlier this year, on the inoculate, was spot checked recently by Norris. He concluded, "In general the men did a really good job."

Earlier this year, each of the 45,000 trees the city hopes to inoculate was examined and a dosage estimate made. The record of each tree is then reviewed by the crew chief just before injection in case any last minute adjustment is needed.

Last week, further checks by Norris verified the accuracy of the dosages. He found just the right amount of burning on the leaves of the elms.

**Limited Tests Elsewhere**

Madison, Beloit and Kansas City, Mo., also are testing Bidrin this year, although on a much more limited basis. Madison's tests, for example, will involve no more than 600 trees.

Bidrin never will be made available to individuals, Norris and Mauget agreed. Carelessly used, it could kill both the person handling it and the tree. Norris said that the chemical probably would be given to a small number of trained personnel from tree service firms. A property owner with prized elms could then hire one of those firms to inoculate his trees.

Licensing details and other

technicalities will not be worked out until the results of the Milwaukee test have been evaluated.

**"Fringe Benefits" Cited**

Some "fringe benefits" of Bidrin inoculation might be more important to some people than its prevention of Dutch elm disease, Norris suggested. The chemical kills most of the mites, aphids and other insects that feed on an elm.

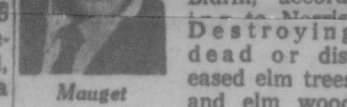
"Even the trees that get an overdose should look better at the end of the summer than those that weren't treated," Norris said.

One of the nuisances that the Bidrin injections will eliminate, he has found, is the sticky substance secreted by aphids that live on the leaves. The substance, commonly believed to be the result of the elm "sweating," is difficult to remove from cars, outdoor furniture and clothing.

**Other Controls Needed**

The Bidrin shots will never replace sanitation, spraying or Vapam treatments in the control of Dutch elm disease, Norris said.

Spraying still is a useful tool to protect trees that cannot be protected with Bidrin, according to Norris.



Mauget

Destroying dead or diseased elm trees and elm wood also remains essential to limit the beetle population. And the few trees that will become infected under the best control system must be isolated from their neighbors with a soil fumigant to break any possible connection through their root systems.

Wyatt

## Elm Survey to Note Value of Insecticide

A survey to determine the success of the city's test of a new method of preventing Dutch elm disease will be started about June 22, City Forester Gordon Z. Rayner said Saturday.

Forestry crews Friday completed a program of inoculating elms at the eastern edge of the city with Bidrin, an insecticide that had been effective in limited tests elsewhere.

Rayner said that he did not have a final report on the number of trees inoculated, but he estimated that it was above 20,000. He said the crews covered an area containing large, high value trees, from Lake Michigan to about 10th st., and from the northern to the southern limits of the city.

Rayner said one tree lost its leaves temporarily, but that the inoculation otherwise went smoothly. He said that test results probably would be known by July 15.

Injected into the elm's sapwood, Bidrin spreads throughout the tree. The insecticide kills elm bark beetles on contact.

MAY 24, 1964

MAY 17, 1964

Wyatt



Looking like a visitor from another planet, arborist John E. Szydowski, 2675 S. 28th st., wears a face mask, rubber gloves and coveralls as he attaches the highly dangerous Bidrin capsules to an elm tree. —Journal Photo

# City Set to Battle Beetles by Boring Into Elm Trunks

MAY 10, 1964

By OLIVER R. WITTE  
Of The Journal Staff

The first large scale test of a promising new method of preventing Dutch elm disease will begin Monday in Milwaukee.

The city forestry department plans to inoculate between 40,000 and 45,000 elm trees with an extremely potent insecticide known as Bidrin.

Limited tests over the last eight years have shown that the chemical can be 100% effective in preventing the

disease without harming people, property or wildlife, if safety precautions are observed.

Injected into an elm's conductive tissues, Bidrin rapidly spreads throughout the tree. An elm bark beetle, feeding on even a small twig, will be killed before it can transmit the disease to the tree.

Milwaukee's experience with Bidrin is expected to be watched with international interest. Dutch elm disease has ravaged elm

trees in Asia, where the disease is believed to have originated, and Europe for more than a century.

Gordon Z. Rayner, Milwaukee city forester, said that some 50 communities all over the United States already have written to him asking for help. Letters from individuals number in the hundreds.

The use of Bidrin will be confined to the approximate half of the city east of N. and S. 35th st. Time and

manpower limitations prevent the inoculation of more elms in a larger area, Rayner explained. Moreover, not all elms will tolerate the Bidrin treatment. About 20%, on the average, are too small or have an unfavorable type of crown development, according to Rayner.

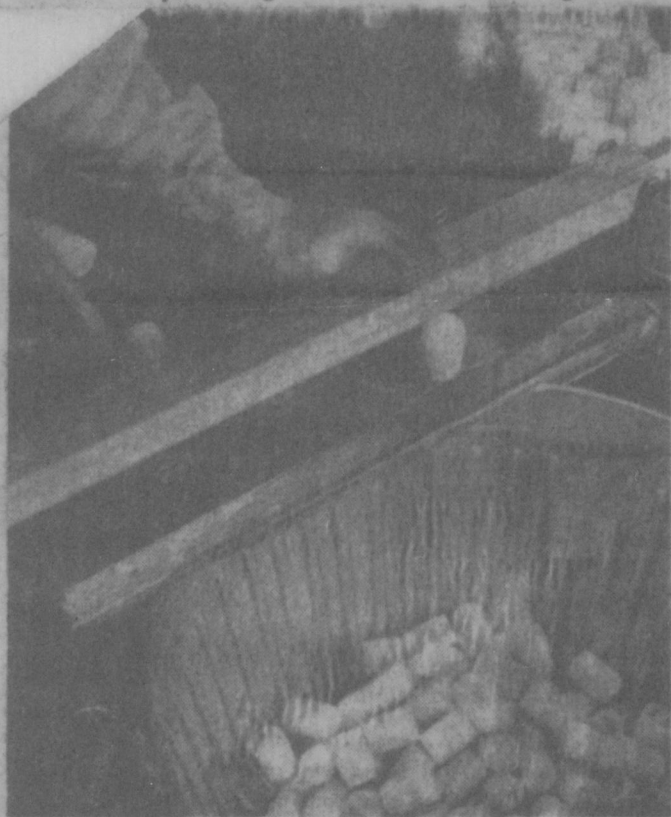
Some 30,000 of the elms west of the 35th st. line were sprayed earlier this spring by city crews. Continued bad weather made it impossible to spray more trees in that area.

Since the city has 122,000 elms, this will leave about 47,000 unprotected, Rayner estimated.

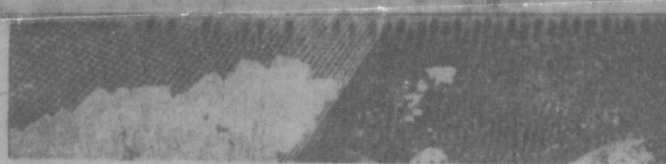
### Cost \$1.50 a Tree

Rayner said that 16 crews of three men each, plus replacements, have been trained to inoculate the trees. Half of the crews will begin near the intersection of N. Lake dr. and E. Kenwood blvd.; the rest will begin near E. Oklahoma av. and S. Superior st.

Inoculations will stop May 22 because most infections, if they occur, will have taken place by that date.



Pressure is applied to the liquid Bidrin by driving the upper portion of the capsule into the lower portion. The capsules are not pressurized until last week to reduce any chance of the highly potent insecticide from leaking out. Applying the chemical under pressure speeds the inoculation process.



Safety precautions are emphasized at every stage of the Bidrin inoculation process. When the capsules are unpacked, they are rinsed thoroughly to remove any trace of chemical that might have leaked out during shipment. Above, Eugene W. Fliss, 3223 W. Lakefield dr., removes a dipperful of capsules from the rinse tank. —Journal Photos



# Battle With Beetles Set

## Potent Chemical Will Be Used on Some 45,000 Elm Trees

Rayner said. He stressed that Bidrin was only a preventative, not a cure for Dutch elm disease.

If the chemical is applied too early, it is not fully effective.

The Bidrin injections will cost about \$64,000 for materials, or an average of about \$1.50 a tree. Spraying with methoxychlor, on the other hand, costs somewhat more than \$2 a tree. Bidrin is not available commercially because of the experimental nature of the treatment and the danger of the chemical if handled carelessly.

"With Bidrin this year, we hope to hold our elm losses below 1%," Rayner said. Last year, after a spring spraying program, Milwaukee lost about 2% of its street elms to Dutch elm disease.

### Trees Are "Needled"

"Bidrin still isn't the final answer, but it gives us a lot more hope until a permanent control is developed,"



Ready to be used, the Bidrin capsules are displayed by Gordon Z. Rayner, Milwaukee city forester. The capsules are manufactured and filled by the J. J. Mauget Co., Inc., South El Monte, Calif. The label says, in part: "Poisonous if swallowed, inhaled or absorbed through the skin. Rapidly absorbed through the skin." Rayner asked Milwaukeeans to co-operate with the inoculation crews by staying away from them as they work.

Rayner said. Bidrin's effectiveness only lasts for one season. Thus, continued protection calls for annual injections.

Bidrin is injected into a tree from small plastic capsules through a metal tube that functions as a hypodermic needle.

The tubes are driven into the tree at intervals of five inches around the trunk. When a capsule is forced onto a tube, a seal breaks and the insecticide, under pressure, squirts directly into the tree.

The amount of chemical required varies with the leaf area of the tree. An average tree requires about 60 cubic centimeters of Bidrin. Estimation of the leaf area is critical. Too little Bidrin will not protect a tree; too much could kill it.

### Must Wear Equipment

Rayner said he expects that some trees may be damaged temporarily by a slight excess of the chemical. In severe cases, some of the leaves might wither and drop. Any errors will be in the direction of too much Bidrin, rather than not enough, Rayner speculated.

Because Bidrin is a deadly poison, similar to nerve gas, elaborate safety precautions are being taken.

The capsules are handled only by arborists wearing rubber gloves. Members of the crews working with Bidrin will wear protective face masks and heavy coveralls. With each crew will be a supply of atropine, the antidote for nerve chemical poisoning, and a car or truck.

### Expert Is Optimistic

There will be little danger to the public, Rayner said. Three minutes or less is required for the chemical to be absorbed by the tree. During this time, one member of the crew will stand guard to prevent any curious bystanders from getting too close.

When the injection is finished, the lower trunk will

be washed with an alkaline solution to neutralize any of the chemical that may have seeped back out. Such seepage is rare, Rayner said.

Empty capsules and tubes removed from the trees will be placed in plastic bags and burned. Leaves that drop as a result of an overdose do not contain enough Bidrin to be dangerous, Rayner said.

Much of Rayner's optimism for success with Bidrin is based on several years of experience with the chemical. He has worked closely with Dr. Dale Norris, Madison, a University of Wisconsin entomologist, who first developed the Bidrin treatment.

Rayner said he furnished some 15,000 nursery elms to Norris for his research between 1958 and 1963. Assisted by city forestry department workers, Norris worked out dosages, proper timing and methods of application here.

Two years ago, Norris felt confident enough in the inoculation technique to try it on 572 nature street trees in an area bounded by W. North av. and W. Center, N. 51st and N. 60th sts.

Last year, another 153 elms on N. 11th st., south of W. Capitol dr. were injected with Bidrin.

### Test Proved Successful

The results gave Rayner all the encouragement he needed.

Not a single one of the 725 trees contracted Dutch elm disease as a result of beetle feeding. The one tree that did get Dutch elm disease was infected through the root system of a neighboring diseased tree.

If two trees are close enough, the roots of one may become grafted together with roots of the other. Bidrin, since it works only on the beetle, does not affect this type of transmission.

Most of Milwaukee's elm tree losses this year will come through root grafts, Rayner anticipates.

One disadvantage of Bidrin is that it cannot be used on very young elms or on elms with a certain type of crown development.



Driving the metal tubes into a tree during a demonstration last week was Harry P. Marquardt, 3522 N. 50th st., an arborist with the forestry department. The tubes, less than two inches long, perform the same function as a hypodermic needle. They are driven about one-quarter inch beneath the bark with the aid of a hammer and inserting tool. When the tubes are in place, the capsules are forced onto them, breaking a seal and allowing the

MAY 10, 1964

INSECTIDE TO SQUIRT INTO TREE.