when your season rolls around...

be ready to roll with a NUnes sod harvester

NU nes Slab Sod Harvester . . .

lifts, cuts, and conveys slabbed sod to loading platform. Handlers can load directly on to pallet as tractor moves.

PATENT APPLIED FOR

- With a NUnes Sod Harvester and three men you can lift, cut, roll and palletize up to 1200 square yards of sod per hour.
- The harvester, developed at Cal-Turf Farms in California, is designed to handle any length of rolled or slabbed sod.
- Field grading of sod is done by the tractor operator, who has clear visibility at all times.
- Hydraulic controls permit quick and easy adjustment for all conditions.
- The sod harvester travels alongside, never on the turf, during harvesting and can pick up and roll sod at any time your tractor can operate in your field.
- Sod can be cut with any type of sod cutter. The long ribbons can then be lifted and cut to any desired length from 24" to 90", size depending on thickness of sod.
- Loaded pallets can be spotted for later field removal and be clear of the next harvest run. If direct truck loading is desired, a conveyor extension is available.
- The basic power train is a Ford LLG-2110 wheel tractor. The sod harvester can travel at speeds up to 17 MPH for quick transportation between plots.
- The efficiency of this all-mechanical operation has been proven on Cal-Turf Farms in Patterson, California, and it can solve the problem of quick and economical harvesting of sod for all turf farmers.

For more information please contact:

THE JOHN NUNES MECHANICAL HARVESTING CO.

2006 Loquot Avenue, Patterson, California 95363, Phone (209) 892-6311

NU nes SOD HARVESTER

For More Details Circle (101) on Reply Card

The Cover

Saving hand labor has proved to be the greatest boon possible to the vegetation care and control industry. Not only is hand labor not readily available, man-hour costs make the price prohibitive.

Equipment such as the units being demonstrated by Omark Prentice Hydraulics, Inc., Prentice, Wis., build business. These loaders are among the 41 different types available from Omark Prentice alone.

Today, operators determine their specific work loads and then depend on suppliers to practically custom fit their equipment needs. Next month WEEDS TREES AND TURF magazine will feature a business forecast of the industry along with the annual suppliers guide and equipment directory.

Soil and Plant Analysis Explained in Brochures

Harris Laboratories, Inc., has recently announced the availability of two new brochures that explain in laymen's terms the complex process involved in completing a typical soil or plant analysis.

Entitled "The Story of Soil Analysis" and "The Story of Plant Analysis," these 4-page brochures also explain how soil and plant sampling supplies (information sheets, sampling instructions, sample bags and shipping containers) may be obtained without cost.

For your free brochures, write Harris Laboratories, Inc., Box 427, Lincoln, Neb. 68501.

WEEDS TREES and TURF

FORMERLY WEEDS AND TURF

November 1968
Volume 7, No. 11

Features:

Departments:

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.

Changing Your Address?

If so, notify our circulation department right away to be certain the magazine reaches you at your new location. The Post Office won't forward your copies. So when you write us, make it at least three weeks in advance of your moving date, and include your old address, as well as the new one. We'll see you don't miss a single issue.

Send old and new address information to:

WEEDS TREES and TURF magazine

Circulation Department

9800 Detroit Avenue

Cleveland, Ohio 44102

Assn. For Spraymen

Custom spray applicators need a national association. Seeing the Northwest Spraymen's Association members in action at their annual Spray-O-Rama offered more than adequate evidence of the value of a closely knit organization. This regional group, made up of pesticide applicators in Washington and Oregon (see their report beginning on page 19, have done a remarkable job in promoting both their own private businesses and their industry. More such associations are needed, both state and regional, which could then be molded into a national organization, with a far greater chance of success than the earlier attempt which aborted some two years ago.

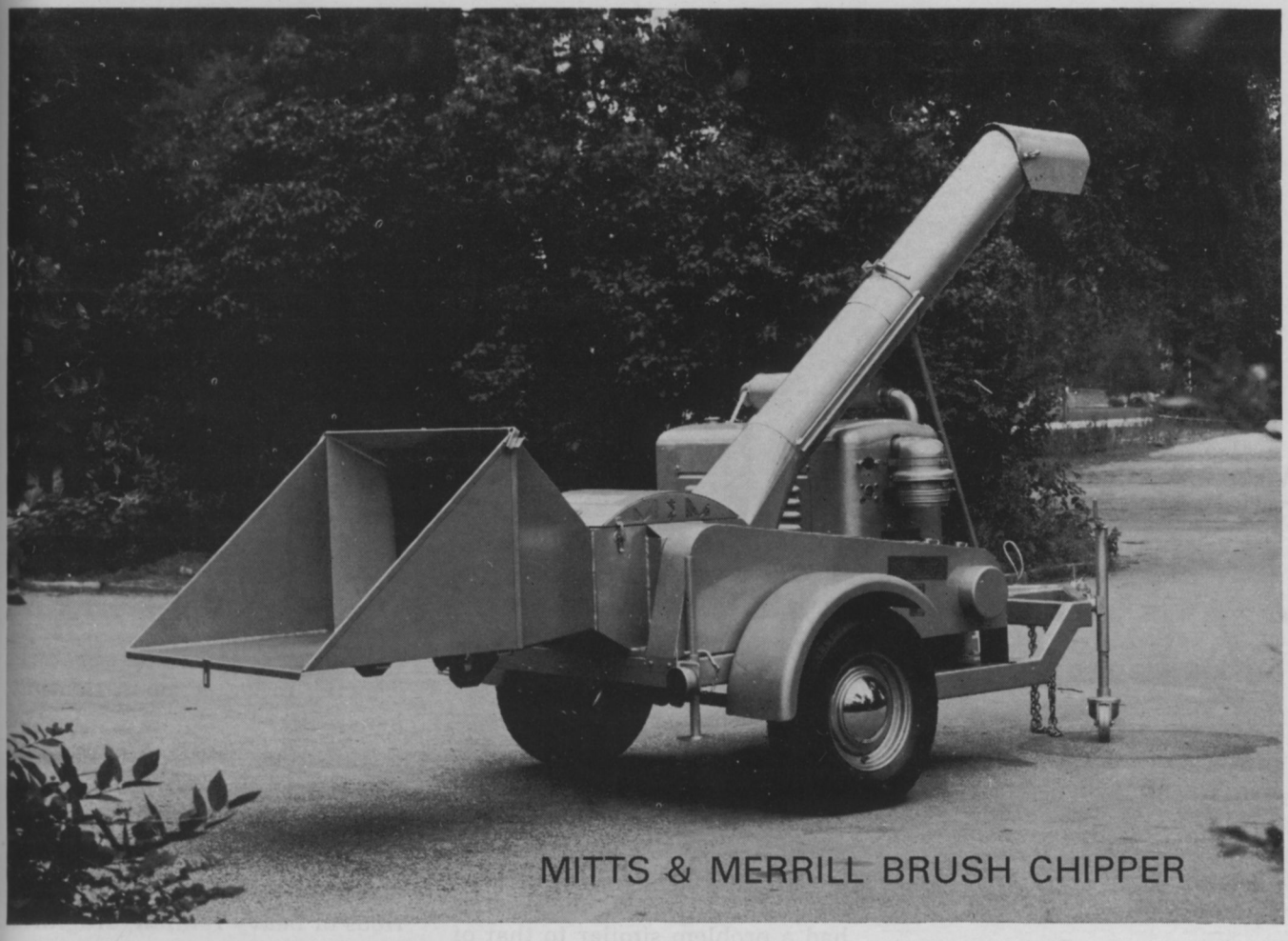
Pesticide application by custom spraymen is big business. But it is an industry generally viewed with skepticism by the average citizen. Seldom has a group done as much for the welfare of the nation as has the chemical industry—from basic producer to applicator. Insects, diseases, and weeds have been controlled, not just for beauty but to make the nation more liveable and to increase the production of quality, low-cost food.

Yet to a great segment of the public, spraymen run a questionable business. Pesticide applicators need a public relations program to tell their story nationally. They need an informative legislative program which will continuously guard their interests and at the same time serve the citizenry. They need up-to-the-minute data on new research, new chemicals, and new equipment and methods for keeping their businesses efficient.

These needs are extensive. They constitute problem areas which cannot be solved over a short period. Rather, they evolve into longtime goals. And these are goals which can be achieved only by association on a national level.

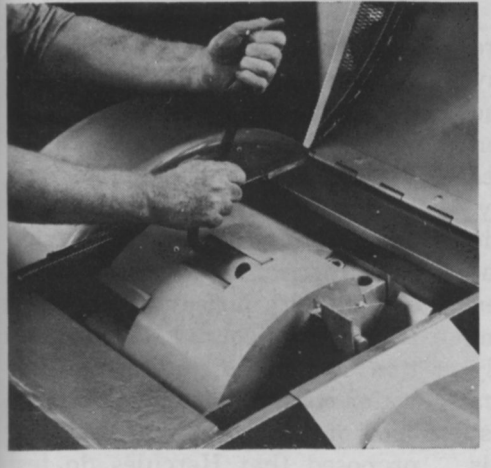
Besides these major goals, the individual who belongs to an organization gains by association with a group, by becoming an integral part of an industry, and by being recognized as the operator of a business with national affiliation. It's a phase of image building which demands high standards and quality service. The N. W. Spraymen's Association is a prime example.

WEEDS TREES AND TURF is the national monthly magazine of urban/industrial vegetation maintenance, including turf management, weed and brush control, and tree care. Readers include "contract applicators," arborists, nurserymen, sod growers, and supervisory personnel with highway departments, railways, utilities, golf courses, and similar areas where vegetation must be enhanced or controlled.



Folding feed chute

Staggered knife design



Improved to do all jobs faster with years of trouble-free service

The Mitts & Merrill Brush Chipper can do more jobs for you more efficiently. Featuring an exclusive staggered knife pattern—short knives spaced about the rotating cylinder—this chipper shaves material rather than chopping it, producing a smoother cutting action. This means lower horsepower requirements, lower operating costs and minimum maintenance. Another feature: the double-edged knives allow twice the service between sharpenings and permit quick knife reversal wherever the chipper is on the job.

More features for greater efficiency and ease of operation . . . new folding feed chute extends to 60" overall length, eases maneuverability and protects cutting chamber . . . heavy duty construction throughout, including coil spring, torsion type suspension; all tubular steel trailer frame . . . telescoping discharge chute with adjustable bonnet . . . torque converter available on all models.

Choose the chipper that's first choice from coast to coast. There's a Mitts & Merrill Brush Chipper dealer near you. He'll be happy to supply complete information. Or contact us direct.

NEW BULLETIN includes complete data, model descriptions, check list to help you write Brush Chipper specifications. Write today: Mitts & Merrill, Inc., Dept. WT-72, 109 McCoskry, Saginaw, Mich. 48601.

mitts & merrill

SUBSIDIARY

walco

WALCO AMERICAN CORPORATION

For More Details Circle (102) on Reply Card

Visko-Rhap Clears Aquatics From

Adams Bayou

THE "Greater Orange Area" of Southeast Texas, a community of some 40,000 lies near the Gulf Coast. The Sabine River divides its three adjoining cities, Orange, West Orange, and Pinehurst, from neighboring Louisiana. Until recently, these cities had a problem similar to that of many other southern communities. Local waterways were choked with alligatorweed.

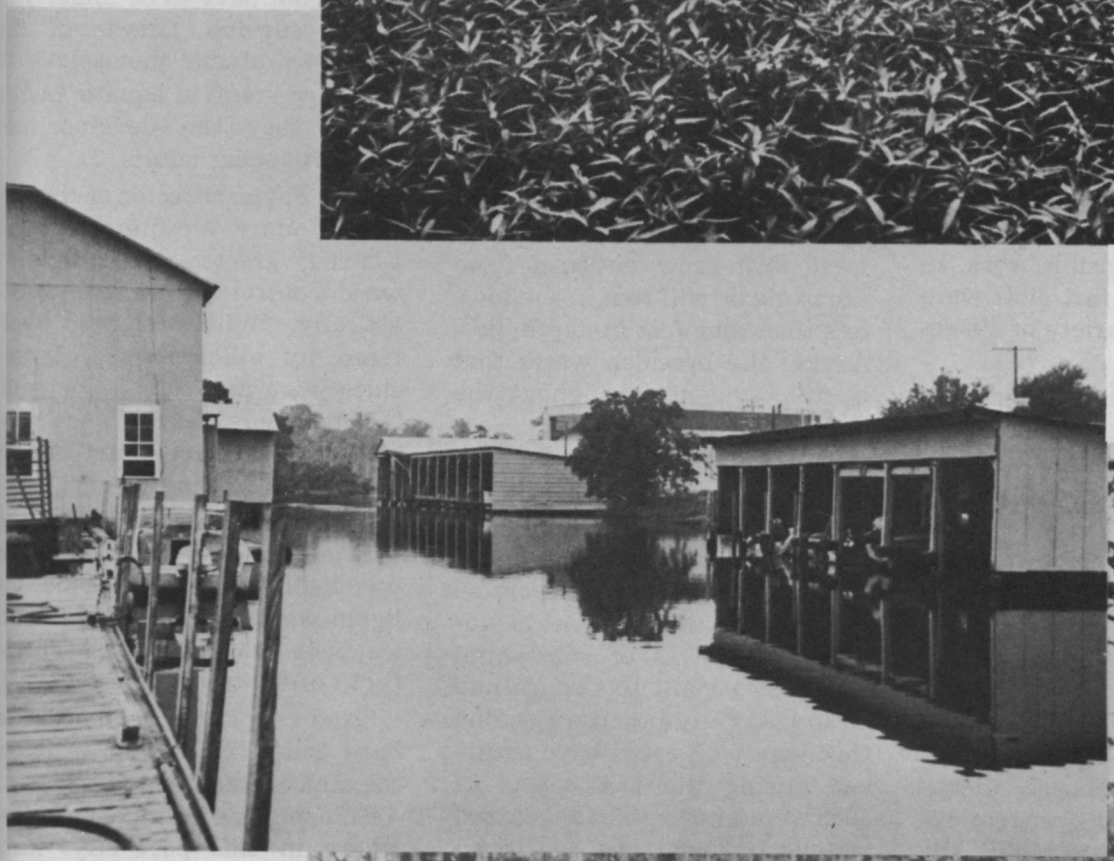
Adams Bayou winds for several miles through the three cities. It is a picturesque body of water with great recreational and scenic potential. Marring its beauty, however, has been the prolific growth of alligatorweed. Alligatorweed (so named because growth becomes so dense it "can support the weight of an alligator") had also invaded the many lateral ditches dug years ago to drain this bayou.

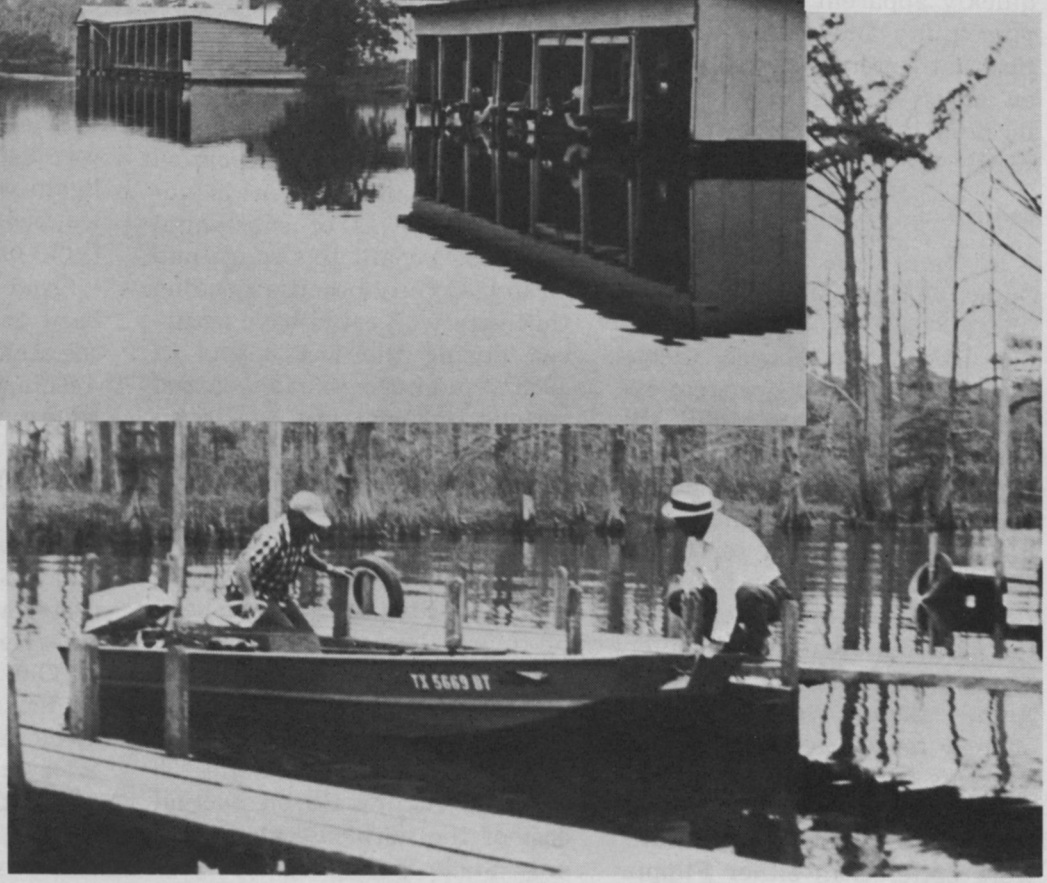
Alligatorweed *(Alternanthera philoxerides)* is a coarse, many branched plant that forms dense mats in shallow water and on mud flats. Broken-off branches root easily and spread rapidly. It has become a pest aquatic weed in coastal areas from Texas to North Carolina, and has been reported as far as 150 miles inland. Alligatorweed is widely distributed in Central America and South America. It is most difficult to control where it is growing in water, or in floating mats.

Numerous methods of control in Adams Bayou had been attempted for many years, and abandoned. No known herbicide had been effective. During periods of heavy rainfall, draglines were used as a desperation measure at bridges and other key points. Masses of weeds were hauled out of the Bayou and loaded into dump trucks. Though this usually averted serious flooding of the city, it was an expensive and temporary measure. Masses of weeds from upstream often broke loose and drifted down to the bridges and vigorous growth of the weed caused it to be reestablished quickly in other cleared areas.

Test Spraying

Early in 1967, Harold P. Snow, a technical agricultural chemicals representative working out of the Dallas office of Hercules Incorporated, called on Edward L. Shannon, Manager of the Orange County Drainage District. This district is a county wide agency with jurisdiction over an extensive in-county flood protection system including natural water courses within the boundaries of incorporated areas. Snow proposed that Hercules do test





The Alligator weed which is "choking" the stream in the top illustration also covered Adams Bayou, near Orange, Texas. Now, as shown in the center and bottom illustrations, thanks to the use of a new herbicide formulation called "Visko-Rhap" made by Hercules Incorporated, residents near Orange are enjoying boating and fishing on the bayou for the first time in years.

spraying of alligatorweed with his company's Visko-Rhap herbicide formulations. Visko-Rhap is so constituted that it can deliver a carefully regulated dosage of herbicide of a thick consistency that resists washoff or evaporation. Visko-Rhap herbicides also have an advantage over conventional weedkillers as the oily droplets stick and penetrate leaf surfaces more effectively.

Shannon agreed to a trial demonstration using Visko-Rhap. He was impressed with the freedom from drift the formulations possessed. Snow agreed that drift could not be tolerated on a target area which bordered on residential lots and other sites where valuable ornamental trees and shrubs could be damaged. He secured the services of a custom applicator who had a reputation for careful, responsible work. In March and April test plots were sprayed with a variety of Visko-Rhap herbicides.

Results of the treatment were quickly apparent. Shannon convinced city and county authorities that Hercules should be given an opportunity to show what its product could do on a larger scale.

Large Scale Treatment

In June and July of 1967, Snow, working with custom applicator Carl H. Flippin of Flippin Helicopter Service, Beaumont, Texas, sprayed a great expanse of Adams Bayou with the Visko-Rhap formulations that had showed most promise on the test plots. Flippin, a former Army helicopter pilot with service in Korea and Vietnam, and a skilled custom applicator, made the first treatment by helicopter. Six weeks later the center of Adams Bayou was open wide enough for use of a boat, and spraying of vegetation along the banks was accomplished with this type equipment. The results were better than either Flippin or Snow had hoped for. "Growth at that time was about two and a half feet high, and the weed was in bloom," Snow said. "For best results we recommend application before growth is so far advanced."

To the citizens of Orange the results of the project were spectacular. Arthur La Bleu, a longtime resident on the Bayou said, "I can't remember when the Bayou wasn't covered with 'gatorweed . . . summer or winter. It got so thick I've seen nutria rats walking across from bank to bank . . . and they grow mighty big!"

In early 1968 Shannon and his colleagues were ready with a battle plan. Snow and Flippin were on the job in May, spraying Adams Bayou and some of the lateral drainage ditches with Visko-Rhap by boat. Banks were given careful attention, for alligatorweed will grow outward from the bank, or will root in shallows less than four feet in depth, preferring the brackish water that is so prevalent throughout the Gulf region.

With the cooperation of the local press, residents were advised in advance when spraying would be done. J. Cullen Browning, editor of *The Orange Leader* pointed out that the improvement in Adams Bayou was of substantial economic benefit to Orange and Orange County because flooding that very well could have occurred during the wet spring of 1968 would have probably caused serious financial loss, and even have presented a health hazard to the area.

Economic Benefits

Aside from such speculation, the Visko-Rhap project has been of more immediate economic benefit. Drainage District Manager Shannon stated that the entire herbicide spraying bill for 1968 was $1400 for treating 30 acres of Adams Bayou (actual cost of the herbicide alone was only $14.32 per acre). "In previous years it would cost us at least $500 a day to clean out only the most strategic flooding spots, employing a dragline, crew, and dump trucks. To use such emergency measures would take from a week to 10 days each time."

Adams Bayou is now becoming a scenic asset to Orange. And many of the citizens are realizing some unexpected benefits. For example, there is a lot less scratching going on. Each spring the broods of a particularly annoying species of spring mosquito, *Mansonia perturbans*, would hatch in Adams Bayou. Unlike most mosquitoes, *Mansonia* larvae do not have to be under water to survive. Larvae of the *Mansonia* attach themselves to roots and stems of aquatic plants where they can develop into welt-producing adults.

J. G. Foyle, Director of the Orange County Mosquito Control District, greeted the alligatorweed control program enthusiastically, "With *Mansonia* sheltered by alligatorweed, larvacides were ineffective," he said. "Furthermore, larvae were protected by the weed, and almost immune to feeding by fish."

With alligatorweed out of the way at last, Foyle could wage war against *Mansonia*. "Since alligatorweed has been cleared out, we have not observed a single flight of *Mansonia*," he reported.

"And very few specimens have been collected in light traps in the area of treatment."

Things are looking up elsewhere in this port city. Mrs. Charlie J. Hall, who with her husband, operates Hall's Marina, pointed across the water to stalls filled with boats. "Before they sprayed with the weedkillers, that was grown solid with alligatorweed, and stalls were empty. Our store traffic is a lot better too, now that boats can come in closer."

Down the road from Hall's Marina is the Orange Boating Club. A year ago the docks were festooned with alligatorweed. Now the visitor can look across a clear expanse of water.

Coming in December!

Suppliers:

The Perfect Place to Advertise Your Weed, Turf, and Tree Market Products

Reserve Space Now in the

1969 Suppliers Guide

To Appear in the December '68 Issue of WEEDS TREES AND TURF

1. Boldface Listings. Suppliers using advertisements in this issue will be listed in boldface type in the directory under all categories of products the advertiser supplies. Your name stands out when readers refer to this handy directory which applicators use all year round!

2. Reader Reply Card. Bound into every December issue will be a Reader Reply Card. All readers have to do to get more information on advertised products is check off the advertiser's name and send the postage-paid card to us. We forward neatly typed lists of inquiries.

3. Repeat Readership. In the 1969 WTT Suppliers Guide, we have a complete catalog of weed, turf, and tree maintenance chemicals and equipment. Whenever readers are seeking a source of supply, this handy reference book offers them the easiest way to find it.

BONUS

Bonus for Advertisers:

1. Bold Face Listings
2. Reader Reply Card
3. Repeat Readership

LISTED in the 1969 WEEDS TREES AND TURF Suppliers Guide, readers will find all chemicals and equipment used for weed and brush control, turf management, and tree maintenance. Included are such chemicals as herbicides, insecticides for turf and trees, fungicides, and fertilizers, among others. Equipment listings include such items as power sprayers, vertical mowers, trimming and pruning tools, chippers, and many others. This is the only Suppliers Guide compiled annually for the entire vegetation maintenance and control industry in America.

CLOSING DATE NOVEMBER 10th

Reserve Space today!

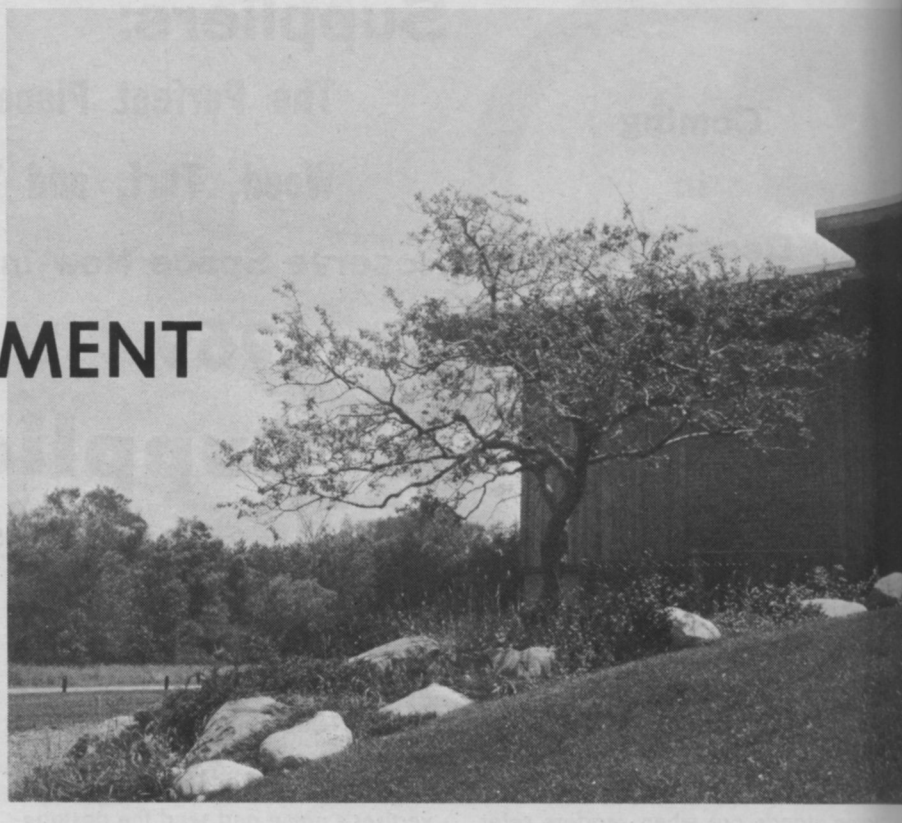
WEEDS TREES and TURF

Phone 216 + 631-6468

9800 Detroit Ave., Cleveland, Ohio 44102

EFFECTIVE PLANT PROCUREMENT

By Theodore J. Haskell
Assistant Director, Department of Parks and Recreation, Lansing, Michigan



An example of procurement by salvage is this 50-year-old quince transplanted from a sewer construction area.

JUST AS there is more than one way to "skin a cat," so there are a number of ways to "procure a plant." There are at least five practical ways for a man to obtain trees, shrubs, turf, flowers, and bulbs. This article will stress procurement of trees and shrubs, but the methods and procedures can be used with modification for all types of growing things used in our planting programs.

Before we can enjoy the trees of a new park or on the streets of a new subdivision, they must be planted. Before they can be planted they must be procured. The whole process must be integrated into the departmental operations so that the trees, the shovels, the men, the trucks, and the planting orders are ready on the morning of the same day.

We find that the same basic management skills must be applied to plant procurement as to any other operation: setting the objective, planning, operating, and control and evaluation for next time. We should improve each cycle as we analyze our results and feedback.

Objectives:

In Lansing, our objective, of course, is to obtain adequate plant materials for landscaping our parks, golf courses, cemeteries, and for street tree plantings. Some of the trees, shrubs, and other plants are for new construction and development, and some are for replacement and redevelopment of established areas. Whatever your situation may be, the first step in effective plant procurement is to set and define your objective. Only then can you begin planning an accurate picture of your needs. These will include the immediate needs and the projected needs evolving from long-range planning for our changing situations.

Planning:

Planning must begin well in advance. Optimum planting seasons are limited (in the Midwest) to spring and fall. We must plan months in advance. This is the minimum. Long-range planning several years in advance would be better yet. Many cities prepare capital development programs to allocate priorities to various development programs. If trees are involved for new streets or around public buildings, it is your job as city forester, arborist, landscape architect, etc. to see that the costs