Don't bury that fish here, Pocahontas. There's an odorless way to fertilize!

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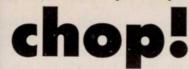
Nitroform[®], Hercules ureaform turf food, is a slow-release nitrogen that is odorless. And unlike some organics, every bag of Nitroform contains the same amount of nitrogen (38%) and gives the same dependable release characteristics. Because it's non-burning, Nitroform is safer to use. Also, it won't leach away.

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Turf & Horticultural Products, Synthetics Department, Hercules Incorporated, Wilmington, Delaware 19899. *HERCULES TRADEMARK STH67-7 HERCULES

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No matter *how* fast, it won't be faster than the high-velocity cutoff unit on a RYAN Heavy-Duty Sod Cutter (photo).

Chop! Just like that you get a clean, *absolutely square and vertical* end cut...automatically. And right on the button to the exact length you're pre-set from 1 to 9 feet.

This ability to cross-cut sod as you go is just one of many reasons RYAN is the first choice of 9 out of 10 commercial sod cutters.

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Another . . . visibility. The operator sees and follows the previous cut at all times . . . strips the field clean without a bit of waste.

For still other reasons why a RYAN will cut *better* sod *faster* (sod that *lays* better and faster, too), write today for the new RYAN Heavy-Duty Sod Cutter Bulletin.

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Highly maneuverable in restricted areas, easy to move from job to job, the famous Ryan Jr. cuts 100 sq. ft. of sod per minute. Cuts a 12'' strip up to $2^{1}/2''$ thick. Write for Bulletin!

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WEEDS TREES and TURF

FORMERLY WEEDS AND TURF

October 1967 Volume 6, No. 10

Features:

Researchers Study New Methods For Combating Aquatic Weeds By Dr. Lyle W. Weldon and Robert D. Blackburn	
Beauty Combined With Business Management Is Pattern of ISTC and Arborist's Annual	
When, Where, and How to Sod for Turf By Dr. P <u>. E. Riek</u> e and Dr. R. E. Lucas	
Midwinter Weed Control—Useful Practice for National Institutes of Health By George P. Rosenkranze	
Chemicals Control St. Augustine Grass In Bermudagrass Turf in Texas Tests By Dr. B. E. Bordewick	
Departments:	
Editorial: Money For Your Advice 4	

Editorial: Money For Your Advice 4
Meeting Dates
Know Your Species
Insect Report
Classifieds
Advertisers Index
Trimmings

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Money For Your Advice

We are often reminded that Socrates went about giving advice. He was poisoned. But times have changed. People are willing to pay for value received, and today good advice carries a monetary value.

Norman J. Scott of Willowdale, Ontario, Canada, made this point at the recent International Shade Tree Conference at Philadelphia, Pa. After finding retirement a bit too monotonous, he started a horticultural consulting service. His point, directed to arborists attending the 43rd Conference was that they dispense advice freely with no thought of remuneration for advice only. He said this is not true of many other professions, the implication being that it should not be true in any business where technical information based on years of experience and background are so important in determining overall costs of a venture.

Scott has found that municipalities no longer depend on advice from a firm doing the landscaping or tree work but come to him for professional advice. He believes that the consultant in the horticultural field can serve a role parallel with that of the architect in the building industry.

In talking to tree care company men and to contract applicators, we find they offer their qualified advice and many times see the job go to a competitor or even a part-time operator. Scott says there will be little business to be found with the private homeowner on a strictly consulting basis. But government departments at all levels, industries, insurance companies, and large stores dealing in retail horticultural products can use a paid consultant to advantage.

We know that few tree men would give up their business for a strictly consulting venture. Nor would many choose this on retirement. But there are likely numerous tree companies with the size and experienced personnel to run a consulting service as a distinct and separate phase of the existing business. Queries which obviously call for advice which could logically be chargeable could be referred to this department.

Advertising by direct mail might bring in more business than expected. Scott has found that word of mouth by lawyers, real estate appraisers, and others have kept him busy.

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, and supervisory personnel with highway departments, railways, utilities, golf courses, and similar areas where vegetation must be enhanced or controlled. While the editors welcome contributions by qualified freelance writers, unsolicited manuscripts, unaccompanied by stamped, self-addressed envelopes, cannot be returned.



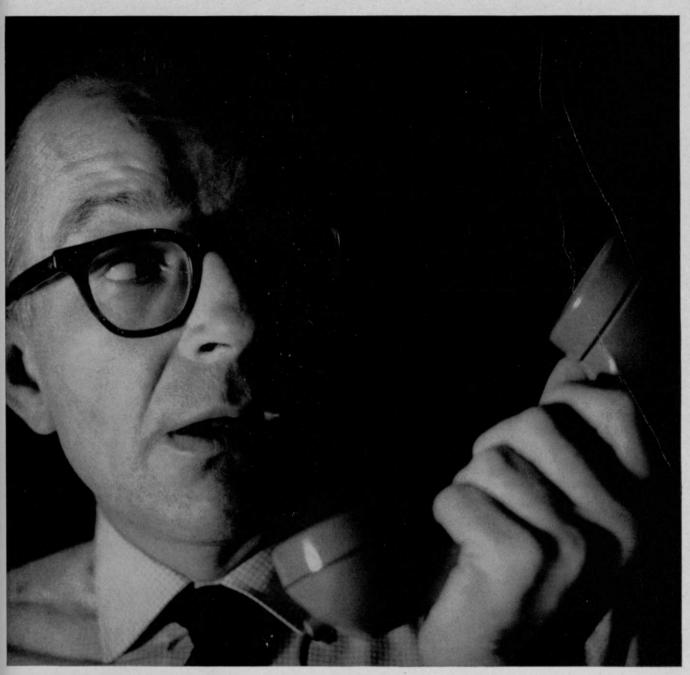
Melvin C. Rich, Richlawn Turf Farm, Littleton, Colorado

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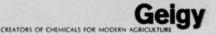
You'll hear from your customers less often in this case for only one reason. And that's because they'll be getting positive long-term weed control that Geigy industrial herbicides deliver with just a single application.

This, of course, will help you to eliminate time-consuming and unprofitable call-backs. So you'll be free to take on new customers or expand the maintenance services you offer. Each Geigy industrial herbicide has special features to solve specific problems. As a group, they can handle just about any annual and perennial weed problem customers can toss your way.

So it will definitely pay you to find out more about these Geigy herbicides: Atrazine 80W wettable powder, Simazine 80W wettable powder, Pramitol[™] 25E emulsifiable solution, Pramitol[™] 5P pellets, and Atratol[™] 8P pellets. Remember, each one has its place in a fully effective weed control program. So you might need them all in order to solve most of your customers' weed problems.

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Researchers Study New Methods For Combating Aquatic Weeds

LYLE W. WELDON and ROBERT D. BLACKBURN

Research Agronomist and Research Botanist, Crops Research Division, Agriculture Research Service, U. S. Department of Agriculture, Fort Lauderdale,

THE unique field of aquatic weed control requires new approaches and concepts if aquatic weed nuisances are to be economically controlled. Proper placement of the chemical may be the most important factor for effective plant control.

Research on new application techniques has been part of the aquatic weed research program at the USDA, ARS aquatic research laboratory at Fort Lauderdale, Florida. Since a majority of aquatic plants float on the surface of the water, concentration of the chemical at the water surface would lead to more efficient utilization of the chemical.

Walnut shells, corn cobs, and many other floating materials were tested as herbicide carriers in greenhouse tests. A coarse grade vermiculite granule was found to be the most effective floating material to serve as a carrier of diquat and paraquat. The granule formulation is either applied to the surface by blower or by simple hand distribution.

Floating granules of paraquat proved the most effective single treatment for control of alligatorweed in research conducted in Florida, South Carolina, Georgia and Louisiana. Paraquat must be applied at the rate of 6 pounds active ingredient per acre. Though this chemical is not yet approved for use in aquatic weed control, it has proved itself at the research level. Tests generally showed that two or three applications were needed for control. Costs of paraquat could be expected to range from \$80 to \$100 per treatment. Thus 2 or 3 applications would make alligatorweed control exceedingly expensive.

Alligatorweed is a problem throughout the Southeastern US.

Floating granule formulation of paraquat as herbicide on vermiculite is applied by mistblower unit. Floating mats of alligator weed cover body of water 22 feet in depth. Making the application on water shoes is C. Elroy Timmer, technician for Agricultural Research Service, USDA.



It obstructs water flow, hinders navigation, and generally interferes with proper utilization of water.

Duckweed Common In Small Ponds

Duckweed is almost a universal problem in small ponds. It has been effectively controlled with floating granules of diquat in several farm ponds. The most satisfactory rate of application of diquat was found to be 0.5 parts per million of active ingredient. The granules blown onto the surface of a pond were found to move around the surface of the water with the floating fronds of duckweed.

Tests have been underway in



Vermiculite granules of paraquat have been used in Southeastern U. S. research on the control of duckweed and alligatorweed.



Floating granules of paraquat on body of water infested with alligatorweed. Floating granules of diquat also used in the research proved very effective on duckweed. Liquid formulations were used with equal effectiveness on duckweed.

not as yet by the floating granule technique.

A floating formulation for herbicide application is a new approach to herbicide placement in aquatic weed control. Research is constantly seeking such new innovations and methods for effective weed control.

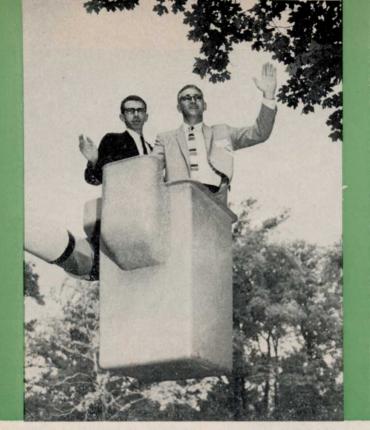
Both Weldon and Blackburn, authors of this article, spend full time on aquatic weed control research at the USDA Agricultural Research Service facility at Fort Lauderdale, Fla. Both are active in the Hyacinth Control Society, an organization dedicated to control of noxious aquatic weeds. Blackburn serving as president and Weldon as secretary-treasurer.

connection with this research at the Fort Lauderdale experiment station for the past 6 years in cooperation with the U. S. Army Corps of Engineers and the Chevron Chemical Company.

Both diquat and paraquat are produced in England at the present time. When it becomes economically feasible to produce and distribute floating granule formulation and when and if label clearance is granted, the technique may prove a boon for aquatic weed control in this country.

Paraquat is used extensively in many foreign countries for control of aquatic plants. It is being used on Lake Kariba in Rhodesia to control salvinia, but Area in foreground was treated twice with paraquat at 6 lb/A in 1966. The picture was taken 1 year after treatment.





Ronald L. Harper, left, Philadelphia Electric Co., Philadelphia, Pa., and Hyland R. Johns, Asplundh Tree Expert Co., Jenkintown, Pa., co-chairmaned the 43rd ISTC Conference. They were on hand to welcome the 1000 attending the event. They are using Asplundh Chipper Company's L-30 fiberglas boom and bucket.

NEW YORK CITY public affairs counsellor points to small businessmen as the group who have made the United States the economic symbol it is today. Even the most gigantic corporations began as small businesses. Speaking to delegates at the 43rd International Shade Tree Conference and National Arborists Association sessions at Philadelphia, Penn., Joseph J. Eley, president of Public Affairs Counsellors, Inc., challenged tree men to fight for responsible government.

Since 1953, Eley said, the federal government has frequently made noises that indicated concern for the small businessman through the Small Business Administration. Yet the truth is, Eley said, that small businessmen such as the tree care groups are very much on their own in our society. Eley pointed out that more people are engaged in service industries today than in manufacturing. There is little doubt but that the trend will continue. Henceforth, he pointed out, there will be increasing competition for the service dollar. Thus, economic and political trends will have an immense effect on business operators such as arborists. The irony, according to Eley, is that while the small businessmen are the backbone of the free enterprise system, they are given least consideration by the government, by the economist, and by the political and economic press. In stressing these opinions,

In stressing these opinions, Eley proved to be very close to the tone of thinking in evidence Beauty Combined Is Pattern of

A WTT staff report on the 43rd International Shade Tree Conference at Philadelphia, Pa. meeting in conjunction with the ISTC were members of the National Arborists Association. The groups will meet next year at Chicago, Ill., August 11-16.

by tree men attending the annual international conference. Many seemed concerned with the rising cost of doing business, and the necessity for care in keeping service charges keyed to costs of operation. At the same time delegates were highly enthusiastic about the impetus of the National Beautification Program and its impact on citizens at large. Business apparently is booming and at the same time more careful business manage-

John Bean's power spraying division exhibited the Model 100G Rotomist for shade tree, sanitation, mosquito control and leaf windrowing along with one of their truck mounted heavy duty sprayers. On Rotomist is A. O. Kalp, Middletown, N.Y.



With Business Management ISTC and Arborist's Annual

ment is required to produce a profit.

Secretary of Agriculture Orville Freeman, in his keynote speech, emphasized the Convention theme, "Beautify With Trees," when he reviewed the work of the Department in the beautification effort. Secretary Freeman said the national campaign involving the Department of Agriculture is to encourage individuals and communities to plant more trees. And not only to plant trees, but to plant the right trees, and to take care of them after they are planted. "Unfortunately," the Secretary said, "many Americans . . . have, for their entire lives, been separated from trees and from flowers . . . from something that I think is within us all, and has been since the Garden of Eden. It is an affinity with nature, of which we are a part. It is a longing for the beautiful and the good." This situation, the Secretary implied, may well be one of the complex factors responsible for the discontent in the land today. Crowded, ugly living, he said, creates what scientists call the "stress syndrome." In short, Secretary Freeman said, we need, as human beings, to "smell the flowers."

Like Secretary Freeman, Robert F. Lederer, executive vicepresident of the American Association of Nurserymen, stressed the value to the nation of the



Outgoing ISTC President Richard J. Campana, chairman of the Department of Botany and Plant Pathology at the University of Maine, Orono, Me., at the left, gets the traditional tree planting ceremony underway at Fairmount Park.

Newly elected ISTC officers, President Elect Keith L. Davey, San Francisco, Calif., left, and President Freeman L. Parr, Hicksville, N.Y., center, visit with Executive Director Dr. L. C. Chadwick, Columbus, O., following board of governors session.





Fairmount Park was setting for buffet luncheon and massive field demonstration during Conference. Buffet included silver service, and park attendants along with Park Director Harold Schick served as hosts to Conference guests.



Myers demonstrated new TT29 Tall Tree mist sprayer. Equipment according to Myers representative is designed especially for tree protection, mosquito control, leaf windrowing, brush burning and sanitation spraying.



Fitchburg Chipper demonstration was staged, right, by Arborist Equipment Co., Philadelphia. Chipper is built by Fitchburg Engineering Corp., Fitchburg, Mass.



On hand at Fairmount Park was a demonstration of the Servi-Lift built by Hunt-Pierce Corp., Milford, Conn.

Prentice Hydraulics, Inc., Prentice, Wis., showed their hydraulic loaders, left, for logging and other tree service company utilization.



Weed Control Service, Inc., Portland, Ore., demonstrated the Ackley line of hydraulic and air powered tools. Ackley equipment is built by Ackley Manufacturing Co., Portland, Ore.

