

PROSCAPE

by **Michael Hurzdan**, Ph.D., and **Jack Kidwell**, partners in Kidwell and Hurzdan, Inc.,
golf course architects and consultants.

Q: *It is my belief that our course is the subject of poor design. In an effort to speed up play we made it too simple. How does one go about choosing professional design assistance?*

A: All improvement planning must be done by those who have the professional expertise and experience to maximize the time and money allocated for such improvements. This is more important now than it was even 4 or 5 years ago, for several reasons. First, the cost of construction has risen to over \$30,000 per hole and the cost to rebuild just one green is close to \$15,000. With such large expenditures probable, it is a false economy to save a professional's fee and risk such large sums of money. This point is best illustrated by the next reason for retaining a competent golf course architect: that is, the technical sophistication of current construction methods.

The hiring of an outside golf consultant also allows the course to be viewed impartially and objectively. If improvements to courses are based on the greens committees' personal opinions and prejudice, we have a classic case of the horse designed by a committee that ends up being a camel. Further, with each change of the board you have a change in "what the golf course needs." Any improvement program that must run one or more years must have a thread of continuity that keeps the progress moving in one direction.

Lastly, any improvement to a course should be based on accepted design standards to avoid possible legal complications later.

It is natural that not all golf course architects, of which there may be as many as 250, will have the same approach to an improvement plan or study. Therefore this professional should be very carefully selected, so that the long-range objectives of the club are fulfilled. The golf course architect should not be selected only on the basis of reputation or the number of advertisements in magazines. Rather the golf architect should be hired on the basis of his past performance with nearby clubs, his personal philosophy of golf, his demonstrated knowledge of technical matters, and his projected schedule of planning and inspection visits. In our opinion, the golf architect should be "local" to the area, so he is accessible to provide maximum inspection of all improvements. The implementation phase of the design process is as important as the planning phase.

Further, the golf course architect should do all planning within the guidelines provided by the improvement committee. This will help insure consistency with the club's goals and objectives.

After the club has interviewed several firms and selected the golf course architect, the process is for the club to provide the architect with a re-

cent, scaled aerial photograph and matching topography. The most inexpensive source of these maps is through the county or state highway department.

Once the golf architect has these scaled maps, he is ready to analyze the course. He should walk or play each hole, looking at it from many different points, to internalize the conditions faced by golfers of all skill levels and by the golf course superintendent. Once he understands the design intent of the hole, and existing maintenance problems, he begins to evaluate what improvements might be made to solve problems in a manner consistent with the strategy of the hole.

Finally, the architect should make a list of priorities of work that should be done and also provide a rough estimate of the cost of these improvements by hole.

The cost of such a study can be either a flat fee or based on an hourly rate. Since the planning phase is so important, it is good economy not to be overly restrictive on the golf architect's time. An average study will involve 100 to 125 hours of work including meetings, time on the course, travel, design and drafting time, and presentations. It should be noted that these are not construction drawings, but only schematic plans showing relative size, shape, and position of improvements. Before actual construction begins, detailed construction drawings are required, usually covered under a new agreement with the architect.

Detailed drawings and specifications permit the contractor to bid intelligently and more competitively, for all elements of construction are fully defined — so there is little guessing about labor and materials needed. To build a green or golf course with only routing plans or a rough drawing is like building a house with only a floor plan. It can be and is done, but it usually forces the contractor to over-estimate his projected cost because he can not accurately define and estimate the extent of his problems and liability.

We also consider it grossly unfair for an improvement committee to force a superintendent to be responsible for construction work. For if all works well, then it is expected and little thanks is given — if not, the superintendent must bear the blame and perhaps lose his reputation or job.

PROSCAPE is a free problem solving service for any residential, industrial, and golf course landscaping topic. Questions are answered by various experts in the field of landscaping, chosen for their knowledge of the subject in question. Write your questions for PROSCAPE on the postpaid reader question card in this issue.

PRODUCTS



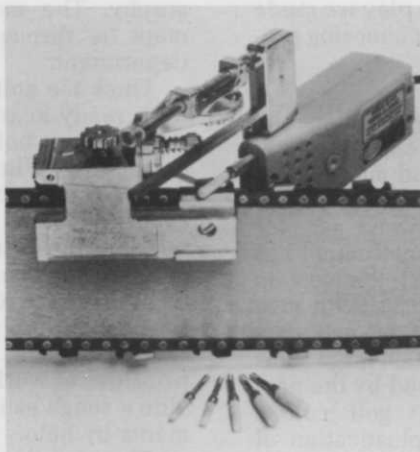
MULTI-PURPOSE LOADER from Sperry New Holland is more than just a little shovel. It can, with proper attachments, load pallets, be a backhoe, dig trenches, and transplant trees. Models range from 22 horsepower with 900 lbs. operating load to 62 horsepower with operating loads of more than a ton, all with skid steering. Featured are long dump reach, long wheel base for stability, hydrostatic drive, and easy access to the engine for service.

Circle 701 on free information card



SOIL TEST LABORATORY from Hach Chemical Co. is self-contained for on-site tests of soil nutrient and pH levels. All chemicals and needed apparatus are packaged in a black plastic carrying case. The lab operates either on batteries or AC and weighs 14 lbs. The lab carries reagents for 50 each of six different tests.

Circle 702 on free information card



PRECISION GRINDER by Granberg clamps onto the chain saw bar and holds the links to be sharpened, assuring accuracy and consistency of cutter angles and depth gauge clearances. The grinder is equipped with a 12 volt motor for in-the-field sharpening.

Circle 703 on free information card



FRONT MOWING TRACTOR from Jacobsen Manufacturing Co. features hydraulically powered reels for cutting swaths up to 15 ft. through both rough turf and fine grasses. Adjusted cutting frequencies of the HF-15 tractor remain constant because the reels rotate independently of tractor speed. Individual controls let the operator hydraulically adjust mowing swath from one to seven gangs. Each reel can be reversed to discharge debris. The reels are centered between free turning carrier wheels to help prevent scalping and to eliminate the need for rollers or skids.

Circle 705 on free information card



COMPATIBILITY AGENT from Hopkins Agricultural Chemical Co., is used with liquid fertilizer/pesticide mixtures to insure uniform mixing and dispersion, prevent separation, coagulation, and other unwanted changes. Called Unite, the agent is designed for use when mixing a combination of emulsifiable liquids or wettable powders.

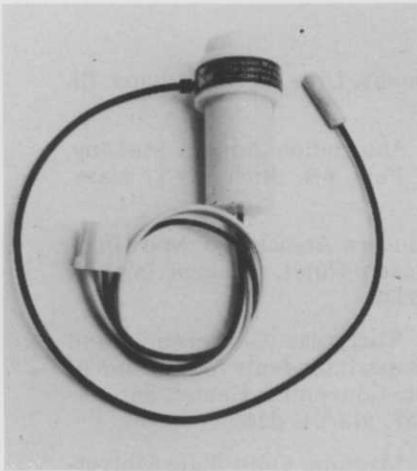
Circle 704 on free information card



DUMP BODY by Pac Craft Products, Inc., converts a standard size pickup truck into a 2½ cu. yd. dump truck. A new design enables the Sert-A-Dump to be attached to a pickup without drilling holes or damaging the truck body. Adjustable outriggers hold the dumper in place. Hydraulic components operate off a power pak that receives DC current from the truck battery and are guaranteed for one year. The dumper can be switched to a new truck in a matter of minutes.

Circle 706 on free information card

PRODUCTS



MOISTURE SWITCH and meter for sprinkler irrigation systems is new from Agtronics Manufacturing Co. The Model 8500 moisture switch measures moisture through a sensing device buried in the ground which transmits the moisture content through a pneumatic system which can turn on or off a sprinkler irrigation system. The device needs no servicing once installed.

Circle 707 on free information card



WET-WEAR OVERALLS by Edmont-Wilson resist chemicals, water, oils, and snags and are designed for worker comfort. Made of layers of nylon net and vinyl film, the overalls have welded seams to keep liquids out. The overalls are lighter, provide more space in crotch and chest areas, and have elasticized suspenders for more comfort to the wearer.

Circle 708 on free information card



GROUND TRACTOR with 26 horsepower is new from Gravely. The GMT 9000, with optional 72-inch, center mount rotary mower and 50-inch wing deck, cuts nearly a ten-foot swath. An operator can mow as many as 33-acres in an eight-hour day. Other features are a water-cooled Continental 26 horsepower engine, Power steering, individual wheel brakes, eight-speed transmission, and three-valve hydraulic system. Options include plows, cultivators, carts, snowblowers, seeders, sprayers, aerators, and a cab.

Circle 709 on free information card

THREE POINT MOUNT LIFT by Edwards Equipment Co., has a 4,000 lbs. capacity. The fork lift is designed for tractors with category two and three hitches for lifting, moving, and loading palletized mate-



rial, bins and other heavy bulky objects. The TT 5000 permits easy on and easy off to free the tractor for other uses.

Circle 710 on free information card

PREEMERGENT HERBICIDE from Rhodia Inc., has recently received registration for turf and ornamental uses. Chipco Ronstar G can now be used as a selective, preemergent herbicide for control of germinating crabgrass, poa annua, goosegrass, oxalis, stinging nettle, carpetgrass, pigweed and Florida pusley in established perennial bluegrass and bermudagrass turf. In ornamentals, the herbicide can be applied on newly planted field and container stock.

Circle 711 on free information card

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EVENTS

International Society of Arboriculture, Ohio Chapter Annual Meeting, Sheraton-Columbus, Columbus, Ohio, Jan. 22-26.

Ohio State University Nursery Short Course, Sheraton-Columbus, Columbus, Ohio, Jan. 22-26.

Mid-Atlantic Agricultural Chemical Trade Show, Virginia Pesticide Association Annual Meeting, State Fairgrounds, Richmond, Va., Jan. 25-26, Terry Rock, Va. Pesticide Assoc., P.O. Box 7494, Hollins, Va. 24019.

USGA Green Section Annual Conference on Golf Course Management, Mark Hopkins Hotel, San Francisco, Ca., Jan. 27.

Southern Turfgrass Conference & Show, Southern Turfgrass Association, Broadwater Beach Hotel, Biloxi, Miss., Jan. 29-Feb. 1, 601/325-6161.

Associated Landscape Contractors of America Annual Meeting & Trade Exhibit, Hyatt House, Orlando, Fla., Jan. 30-Feb. 3, 703/893-3140.

Illinois Commercial Arborist Association, University of Illinois Annual Arborist's Seminar, Sheraton-O'Hare Motor Hotel, Rosemont, Ill., Jan. 30-Feb. 2, 312/991-1160.

International Society of Arboriculture, Midwestern Chapter Annual Convention, Sheraton-O'Hare Motor Hotel, Rosemont, Ill., Jan. 31-Feb. 2, Marvin DeSmidt, president, 5633 Durand Ave., Racine, Wisc. 53406.

Michigan Forestry and Park Association Annual Meeting, Kellogg Center, Michigan State University, East Lansing, Mich., Feb. 1-2, Bob Newmann, Jr., 517/355-2286.

N.Y. Turf & Landscaping/Long Island Gardeners Association Annual Turf & Landscape Conference, Tappan Zee Inn, N.Y., N.Y., Feb. 1.

Fertilizer Institute Annual Meeting, Regency Hyatt, Chicago, Ill., Feb. 5-7, 202/466-2700.

Landscape/Garden Center Management Clinic, National Landscape Association, Galt House, Louisville, Ken., Feb. 5-8, 202/737-4060.

National Limestone Institute Annual Convention, Capitol Hilton, Washington, D.C., Feb. 5-8, 703/273-8517.

International Society of Arboriculture, Rocky Mountain Chapter Annual Meeting, Denver Merchandise Mart, Denver, Colo., Feb. 6-7.

Pennsylvania Nurserymen's & Allied Industry Conference, Feb. 7-9, 717/243-1786.

Weed Science Society of America Annual Meeting, Dallas Hilton, Dallas, Tex., Feb. 8-10, F. W.

Slife, Dept. of Agronomy, Univ. of Ill., Urbana, Ill. 61801.

Wisconsin Arborist Association Annual Meeting, Green Bay, Wisc., Feb. 8-9, Richard T. Hasa, 554/002-3666.

American Sod Producers Association Midwinter Meeting, Nassau Beach Hotel, Bahama Islands, Feb. 12-14, 402/463-5691.

49th International Turfgrass Conference and Show, Golf Course Superintendents Association of America, San Antonio Convention Center, San Antonio, Tex., Feb. 12-17, 913/841-2240.

Horticultural Trade Meeting, Ohio State University Cooperative Extension Service, Holiday Inn, North Randall, Ohio, Feb. 14-15, 212/262-8176.

Golf Course Builders of America Annual Meeting, San Antonio Convention Center, San Antonio, Tex., Feb. 15.

Illinois Landscape Contractors Association Annual Seminar, Indian Lakes Country Club, Bloomington, Ill., Feb. 16-17, 312/894-4774.

American Society of Consulting Arborists Annual Meeting, Sarasota Hyatt House, Sarasota, Fla., Feb. 16-18, 201/821-8948.

National Arborist Association Annual Meeting, Sarasota Hyatt House, Sarasota, Fla., Feb. 19-23, 516/221-3082.

Capital Area Turf School, Hershey Motor Lodge, Hershey Penn., Feb. 21-22.

Western Pennsylvania Turf School/Trade Show, Howard Johnson Motor Lodge, Monroeville, Penn., Feb. 21-23.

Pest Management Seminar, Target Chemical Co., Anaheim Convention Center, Anaheim, Ca., Feb. 22, 213/921-7707.

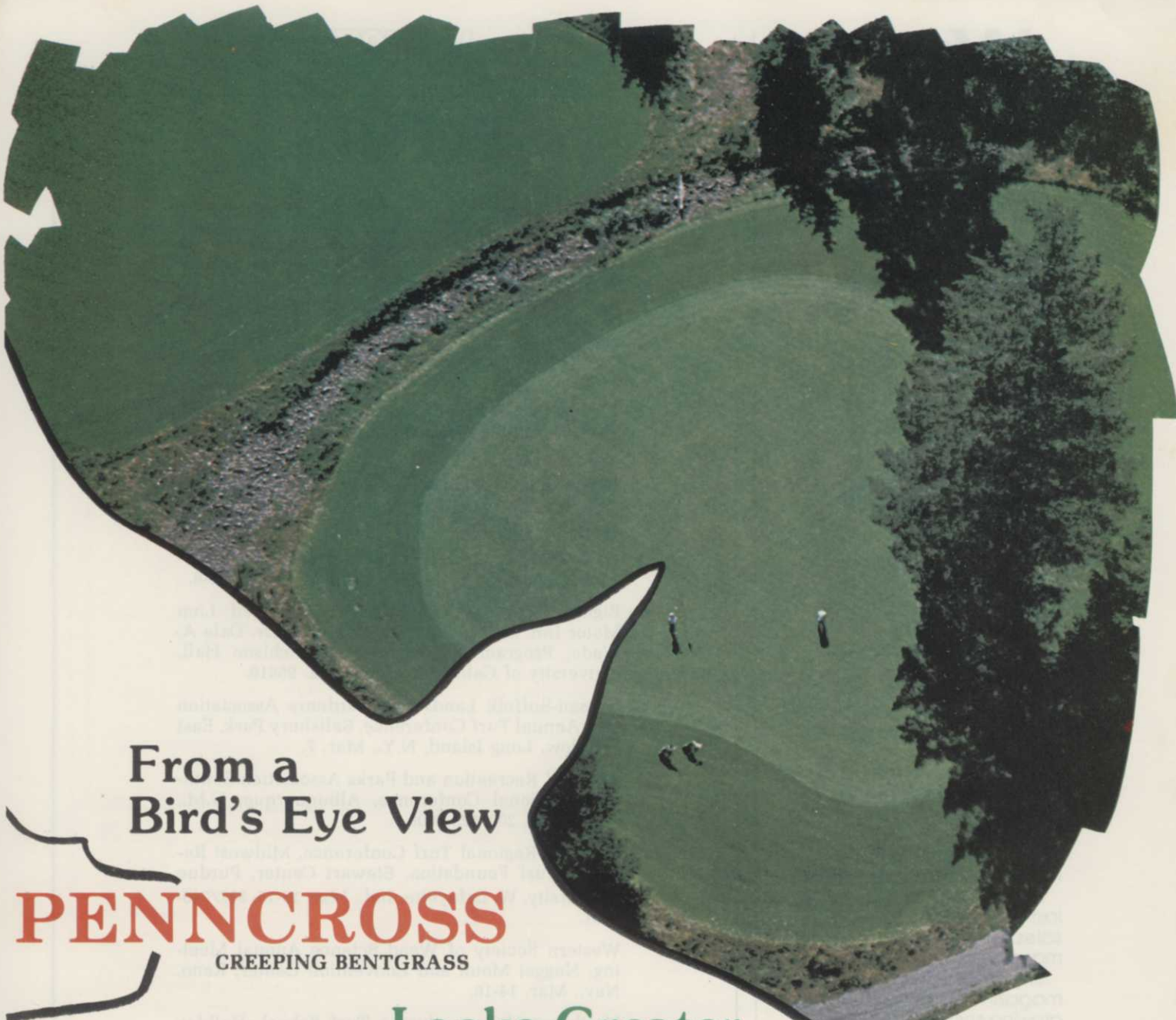
National Recreation and Parks Association Pacific SW Regional Conference, Fresno Ca., Feb. 25-28, 414/733-2301.

American Society of Golf Course Architects Annual Meeting, Carefree Inn, Phoenix, Ariz., Feb. 26-Mar. 3, 312/372-7090.

International Society of Arboriculture, Southern Chapter Annual Meeting, Sheraton Motor Inn, Fredericksburg, Va., Feb. 26-28.

Irrigation Association Annual Irrigation Technical Conference, Stouffers Cincinnati Towers, Cincinnati, Ohio, Feb. 26-28, 301/871-1200.

Iowa Turfgrass Conference, Hilton Inn, Des Moines, Iowa, Feb. 27-Mar. 1.



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LAWN CARE INDUSTRY

WT&T

EVENTS

47th Massachusetts Fine Turfgrass Conference and Exhibition, Springfield Civic Center, Springfield, Mass., Feb. 28-Mar. 2, Mass. Turf and Lawn Grass Council, P. R. Scagnetti, The Clapper Co., 1121 Washington St., W. Newton Mass. 02165.

Northeastern Pennsylvania Turf School, Master Host Inn, Wilkes-Barre, Penn., Feb. 28.

"Tree Stresses" Short Course, University of Missouri-Columbia, Feb. 28-Mar. 1, John P. Slusher, 314/882-4444.

29th Annual Canadian Turfgrass Show, Canadian Golf Superintendents Association, Hotel Toronto, Toronto, Ontario, Canada, Mar. 5-8, 416/767-2550.

Wisconsin Landscape Federation 1978 Conference, Concourse Hotel, Madison, Wis., Mar. 5-6.

Eighth Vertebrate Pest Conference, Red Lion Motor Inn, Sacramento, Ca., Mar. 7-9, Dr. Dale A. Wade, Program Chairman, 554 Hutchison Hall, University of California, Davis, Ca. 95616.

Nassau-Suffolk Landscape Gardeners Association 10th Annual Turf Conference, Salisbury Park, East Meadow, Long Island, N.Y., Mar. 7.

National Recreation and Parks Association Southwest Regional Conference, Albuquerque, N.M., Mar. 12-14, 202/525-0606.

Midwest Regional Turf Conference, Midwest Regional Turf Foundation, Stewart Center, Purdue University, W. Lafayette, Ind., Mar. 13-15, 317/749-2891.

Western Society of Weed Science Annual Meeting, Nugget Motel and Convention Center, Reno, Nev., Mar. 14-16.

Northcentral Pennsylvania Turf School, Holiday Inn, Bradford, Penn., Mar. 21.

National Recreation and Parks Association Southern Regional Conference, Biloxi, Miss., Apr. 2-4, 202/525-0606.

Williamsburg Garden Symposium, Williamsburg, Va., Apr. 2-5, 804/229-1000 Ext. 2365.

National Recreation and Parks Association Pacific NW Regional Conference, Yakima, Wash., Apr. 8-12, 202/525-0606.

American Horticultural Society Spring Symposium, Mills Hyatt House, Charleston, S.C., Apr. 9-12, 703/768-5700.

Pennsylvania Recreation and Park Society 31st Annual Conference, Downingtown Inn, Downingtown, Penn., Apr. 9-12, James G. Smith, 215/MU 6 1776 Ext. 49781.

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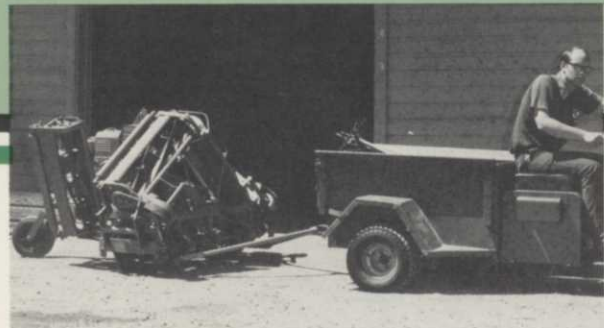
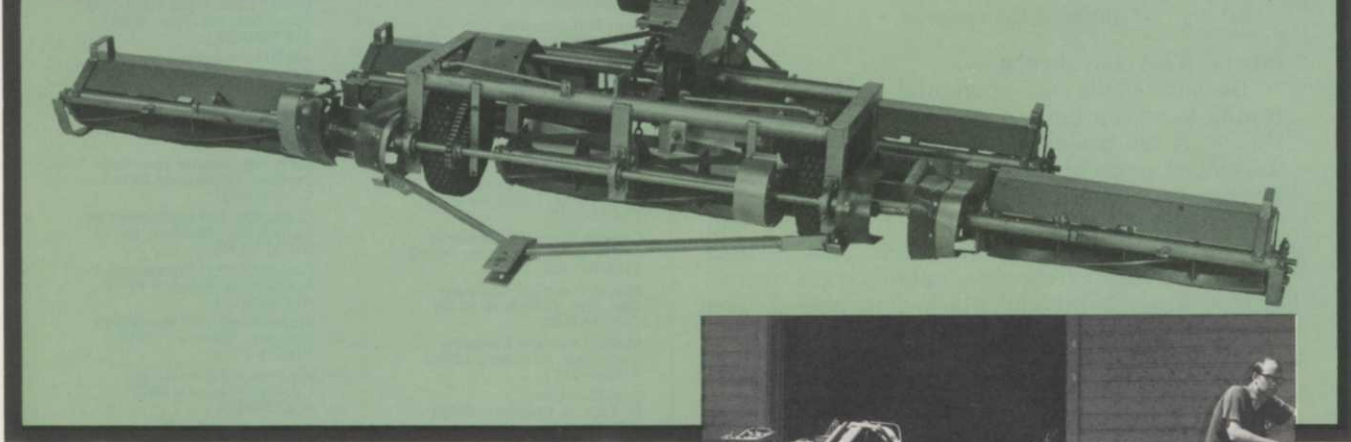
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GREEN INDUSTRY NEWS

Continued from page 44

mental trees and shrubs.

Because of the small potential market, product testing has been limited on ornamental trees and shrubs. If the project is successful, some already developed pesticides may be found effective and become registered for use on ornamentals.

Insecticide effectiveness in both field and greenhouse will be determined. The various targets include leafhoppers, aphids, lygus, thrips, bronze birch borer and black vine weevil. The researchers hope to find effective controls to protect such ornamentals as honey locust, white birch, azeala, rhododendron, taxus, flowering trees and shade trees.

Dr. David G. Nielson will be the principal investigator for OARDC. Dr. Thryil L. Ladd, research leader at the ARS Japanese Beetle Laboratory, Wooster, will represent ARS on the project.



Bob Earley, editor of LAWN CARE INDUSTRY magazine, points out the rapid growth and great potential of the lawn care industries. Earley spoke at the recent Ohio Turf Conference in Dayton.



Richard B. Craig, superintendent at Jack Nicklaus Golf Center, Kings Island, Ohio, discusses a successful lake management program. Speaking at the Ohio Turf Conference, Craig suggested German carp from Lake Erie as a solution to algae problems.

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D/B/A Desco Chemical
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Chemi-Trol Chemical Company
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Seedkem, Inc.
Evansville, Indiana 47708
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Tri-State Toro Company
Davenport, Iowa 52802
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Leisur-Aid A Division of Aidex Corp.
Council Bluffs, Iowa 51501
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Big Bear Equipment Company
West Des Moines, Iowa 50318
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Rhodes Chemical Co.
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Swift Agricultural Chemicals Corp.
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Champion Turf Equipment Inc.
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Professional Turf Specialties
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Big Bear Equipment, Inc.
Omaha, Nebraska 68137
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Turf & Garden
Division of Todd Farm Equipment, Inc.
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