**Advances in Turfgrass Pathology**

published by HARCOURT BRACE JOVANOVICH PUBLICATIONS in cooperation with Dr. B. G. Joyner, Dr. P. O. Larsen and Chemlawn Corporation

This extensive volume contains chapters on:
- turfgrass diseases
- cool v.s. warm season pythium blight and other related pythium problems
- snow molds of turfgrasses
- fairy rings
- leaf spot of Kentucky Bluegrass in Minnesota
- initial and field fungicide screening
- turfgrass disease resistance
- PLUS MUCH MORE!

ADVANCES IN TURFGRASS PATHOLOGY is a compilation of more than 23 reports and discussions by the nation's leading turfgrass pathologists. Explore the diseases that attack turfgrass. Find out how to conquer the battle of turfgrass diseases.

KEEP CURRENT WITH NEW IDEAS ON HOW TO HANDLE TURFGRASS PROBLEMS WITH ADVANCES IN TURFGRASS PATHOLOGY.

$27.95* (hardcover)  
$18.95* (paperback)

COPIES LIMITED — DON'T DELAY!

Return this coupon to: Book Sales
Harcourt Brace Jovanovich Publications
One East First Street, Duluth, MN 55802

YES! Please send me _______ copy(ies) of ADVANCES IN TURFGRASS PATHOLOGY.

Name ____________________________  
Address __________________________  
City _______ State _______ Zip _______
Phone ____________________________

A check or money order for _______ is enclosed.

*Please add $2.50 per order plus 25¢ per additional copy for postage and handling.

Please charge to my Visa, Master Card, or American Express (circle one)
Account Number __________________________  
Expiration Date __________________________

Please allow 6-8 weeks for delivery.

**Finally, An Aid For Teaching Turfgrass**

Superintendents, Contractors, Lawn Care Managers, New, On-the-Job Reference. The Turf Managers’ Handbook is a comprehensive, organized approach to turfgrass science and care. It has been designed and written by leading turf specialists from Purdue, Dr. William Daniel and Dr. Ray Freeborg, for on-the-job reference and as a text for students.

The book contains 150 illustrations and 96 color photographs. Data includes 240 tables and forms. Included are specifications for rootzones, employment, calculations for chemical applications, and extensive metric-imperial conversion. Business and technical aspects of turfgrass management are covered in this 424-page book. Planning, purchasing, hiring, construction, and plant selection are put together for easy on-the-job reference.

Markets covered include lawn care, sod production, golf course management, cemeteries, athletic fields, and low maintenance areas. If it concerns turf, it’s in the Turf Managers’ Handbook.

**Ordering Information**

Please send _______ copies of the hardback ($18.95* ea.)  
________ copies of the paperback ($14.95* ea.)  

* Please add $2.50 per order, and if ordering multiple copies, also add 25¢ per additional copy for postage and handling costs.

A check or money order for _______ is enclosed.

I understand that delivery may take six to eight weeks.

Quantity and bookstore rates available upon request.
Prusa is new GCSAA education director

Jim Prusa, superintendent of buildings and grounds and acting general manager of Pasatiempo Country Club in Santa Cruz, California, has been named to the position of Educational Director of the Golf Course Superintendents Association of America to replace Palmer Maples who left in June. Prusa’s father is superintendent of Aquamarine Golf Course in Avon Lake, Ohio.

After a stint in the Navy, Jim attended Orange Coast Community College in Costa Mesa and California State Polytechnic Institute in Pomona. He was Kent Kurtz’s turf technician at Cal Poly and was awarded the GCSAA student scholarship in 1973. He was also president of the Cal Poly Horticultural Alumni Association.

Prusa first served as superintendent to China Lake Golf Course and then moved to Pasatiempo. He is currently working on an MBA under a scholarship from the Club Management Association at the University of Santa Clara.

Attendance record for 1982 GCSAA Show

With nearly 8000 attendees already registered, the Golf Course Superintendent Association of America’s 53 International Turfgrass Conference and Show in New Orleans (January 28-February 5) is set for a record turnout.

“Managing Change, with GCSAA at the helm,” is the theme of the show. Along those lines, the educational program has been bolstered. Six preconference seminars are scheduled for Saturday and Sunday. Optional examinations with points towards certification renewal will be offered. A water symposium is scheduled for Monday and Tuesday afternoon, while the USGA Green Section’s educational program will be held on Wednesday. GCSAA’s educational program will wrap up with a full day of seminars on Thursday.

The 1982 GCSAA Golf Championships will be held January 28-29 at Walt Disney World in Orlando, FL. The men will compete on the Palm and Magnolia courses and the women will play on the Lake Buena Vista links. Jim McKay, ABC TV sports commentator, will deliver the keynote address to kick off the show.

Over 200 exhibiting companies have “sold-out” the Rivergate Convention Center. The 1982 show also marks the first use of a computerized registration and inquiry system. This system allows exhibitors to send additional information to attendees via their badge number. As an added service to its members, GCSAA has scheduled various New Orleans-style social events during show week.

Golf leaders agree to increased promotion

In an effort to stem the decrease in the number of players, courses, and rounds of golf, 142 industry leaders attended the Forum Of Golf at the Amfac Hotel and Resort, Dallas, TX. The consensus of the meeting, sponsored by the National Golf Foundation, was that golf needs increased marketing and promotion via a unified industry voice.

“Over the last 20 years the golf industry has taken the same market and cut it up—at each other expense,” said Deane Beman, commissioner of the PGA Tour. “We need to expand our market.” Ray Volpe, commissioner of the LPGA, said, “If anybody is going to help the game of golf, it is the people in this room. The NFL, NBA and NHL all have their own marketing departments to promote themselves. What golf needs is a single voice, a coordinating action point. I believe that the National Golf Foundation should be that voice.”

The forum was attended by representatives from nearly every major golf organization and related manufacturing companies. NGF added the Club Managers Association, American Society of Golf Course Architects, Touring Professionals Association, Golf Course Superintendents Association of America, Professional Golfers Association and Ladies Professional Golfers Association to its board of governors.
TO THOSE WHO HAVE NO CHOICE BUT TO ECONOMIZE:

A CHOICE.

Nobody understands the budget squeeze you’re feeling better than Cushman. After all, getting the most work out of every manhour is something we’ve specialized in for years.

Take the two vehicles below, for instance. On the left is the Cushman Runabout. With an 18-hp OMC engine, it seats two workers and hauls up to 1500 pounds of cargo. A new centrifugal clutch is standard, which allows the driver to stop and go without shifting. And a 12-hp model offers even greater economy as well as easy handlebar steering.

On the right is the new Cushman Turfcart™. A 7-hp engine is an economical way to get your crew off their feet and moving. Flip up its rear passenger seat and you’ve got room for tools, supplies and equipment.

Either way, Runabout or Turfcart, you’ll get a vehicle that's easy on gas and easy on the budget.

For the location of your nearest dealer, call 402-435-7208.

Outboard Marine Corporation, 1981. All rights reserved.
Banvel® + 2,4-D = Turf
(minus 29 of the toughest kinds of weeds)

All it takes is one application, and your weed control job is done for the season. And so are 29 of the hardest-to-kill varieties of broadleafs.

BANVEL plus 2, 4-D is a versatile combination you use anytime from early spring to late fall. It kills by penetrating both leaves and roots, so weeds can't come back.

Mixes quickly, stores well. Use it according to directions, and your weed worries are over for the year.

Ask your Velsicol distributor about BANVEL 4S, too. Or write Velsicol Chemical Corporation, 341 E. Ohio Street, Chicago, IL 60611.

Before using any pesticide, read the label.

©Velsicol Chemical Corp., 1981

Circle No. 138 on Reader Inquiry Card

PLCAA adds insurance to its services

The Board of Directors of the Professional Lawn Care Association of America approved the implementation of a casualty insurance program which can save members 10 to 30 percent compared to existing rates.

The insurance program will also help the lawn care industry develop a credible data base of premium and loss information to gain more favorable treatment from underwriters. Improved data could add 25 percent to the savings.

Marsh and McLennan, Inc., will administer the program for the PLCAA. Members may apply directly to M&M, 222 S. Riverside Plaza, Chicago, IL 60606, or through their present insurance broker. Membership information can be obtained by contacting PLCAA, Suite 1717, 435 N. Michigan Ave., Chicago, IL 60611.

PLCAA has already instituted safety engineering and loss control training for members. Douglas Baker is head of the Insurance Committee for PLCAA.

Interior landscape meetings draw near 1,000

Nearly 1,000 business persons registered for the ALCA Interior Landscape Conference in Atlanta in September and the Interior Plantscape Association Conference in St. Paul in October.

Both conferences covered business matters heavily to help the relatively young industry survive a recession. Technical subjects were also covered to update the interior landscapers on tissue culture, equipment, soils, and lighting.

The IPA conference was almost three times as large as the ALCA conference and some persons attended both meetings. The IPA meeting also offered the certification examinations for the first time. Chicago's Gerry Leider, one of the oldest and largest interior landscapers with his Tropical Plant Rentals, gave the keynote address at the IPA show. His topic was Success in the 80's. Many interior landscape contractors presented their view of the profession during the conference. Scientists from five universities updated horticultural techniques.

Rod Bailey, president of Evergreen Services in Seattle, WA, gave the keynote address at the ALCA conference. A unique suppliers night gave industry manufacturers and growers a chance to discuss new products with the group. Acclimitization, certification preparation, and the introduction of a new publication "Plants for Interior Landscaping" highlighted the three-day program.

Landscape clinic set for Galt House

The annual Landscape and Garden Center Clinic sponsored by the National Landscape Association and the Garden Centers of America is ready to go February 7-10 at the Galt House in Louisville, KY. L.C. Chadwick leads a distinguished group of speakers for the clinic. Interested persons should contact NLA, 230 Southern Bldg., Washington, D.C. 20005, (202) 737-4060.

LA magazine announces consumer edition

Jeff Gatewood, general manager of Landscape Architecture magazine, recently announced future publication of a consumer landscape architecture magazine. To be titled either Garden Design or Domain, the magazine will come out four times per year and have newsstand distribution.

Landscape Architecture magazine, published by the American Society of Landscape Architects, has sold certain issues at newsstands as an experiment. Success led Gatewood to suggest a separate publication for consumers. For more information contact Landscape Architecture, 1190 East Broadway, Louisville, KY 40204.
WE GIVE GREENS THE KINDEST CUT OF ALL.

WITH REELS THAT FLOAT.

Toro pulls out the stops to give you the kind of greensmower you want most. One that keeps you cutting. With a quality of cut second to none.

That's why our Greensmaster 3® is the choice of the majority of America's top hundred golf courses.

This fast, agile professional gives each green a uniform cutting height, appearance and playing characteristic.

Because it's the only greensmower in the world with cutting heads isolated from the traction unit and grass baskets. Our secret is a carrier frame, with low pullpoints, that pulls rather than pushes. Resulting in balanced, fully floating cutting heads that allow the reels to float freely as they cut, unaffected by dips or bumps encountered by other parts of the machine. Or by the weight of clippings in the baskets.

You get the kindest cut of all. Smooth. Even. Consistently superb.

Plus, other features that make the Greensmaster 3 a versatile as well as durable performer. Like quick disconnect cutting heads for easy conversion to thatching or spiking units.

Call your Toro distributor. He'll give you more good reasons to choose our Greensmaster 3. The greensmower that proves Toro quality doesn't cost, but pays.

TORO

THE PROFESSIONALS THAT KEEP YOU CUTTING.
MH Pesticides Suspended

In September the Environmental Protection Agency took action to suspend the registrations of pesticide products containing either the diethanolamine salt or the potassium salt of maleic hydrazide (MH). While MH is principally used to prevent tobacco suckering or harvest sprouting of onions and potatoes, it is also registered for use as a plant growth regulator on turfgrasses, ornamental hedges, and trees. It is especially useful in areas that are difficult to maintain such as along rights-of-ways, highways, industrial areas, airport properties and golf course roughs. We now have only those products which are now in the distribution chain.

When an RPAR review of MH, initiated in October 1977, indicated that additional chronic toxicological data was necessary to estimate the extent of risk caused by its use, EPA asked the registrants to supply such information. The Agency received no commitments for the studies required for the diethanolamine formulations and only one for the potassium salt for control of tobacco suckering. Accordingly, EPA has no other option than suspending the MH registrations. Under the suspension action, which became effective 30 days after the receipt of the EPA notice, registrants could only package, label, and release for shipment maleic hydrazide products produced before the effective date of the suspension.

Closed Systems for Pesticides Questioned

Ever since the California Department of Food and Agriculture required that commercial agricultural applicators use closed liquid systems for transfer of chemicals displaying the signal word DANGER on the label from containers to spray apparatus, there has been concern about the need for such a system. The controversy heated up further when EPA considered the use of closed system transfer as a requirement for the continuation of the registration of the emulsifiable concentrate of diallate, a pre-emergent herbicide.

Hand pouring has long been suspected as being the most hazardous activity involving the handling of highly toxic pesticides and the closed system transfer has been found by researchers in California to reduce this risk significantly. Diallate field studies by the producer, Monsanto Chemical Co., indicated an exposure reduction of 89% when closed system and protective clothing was compared to open system and protective clothing. However, the company also found that a similar reduction could be obtained by using rubber gloves and goggles and following label instructions explicitly. This information was presented at a Workshop on Closed System for Diallate in September, 1981 in Fargo, ND as were many of the disadvantages of the closed system. These included: lack of uniformity of containers and openings, large number of transfer systems but little standardization of pumps, pipes, motors, etc., the cost of the system, the time needed to activate a complex, closed system, and maintenance costs of the system. The Workshop conclusion was that closed systems have great promise but there must be considerable more experimentation before finding ones acceptable to the users, chemical and container manufacturers and the EPA.

Turfgrass Variety Protection

In December 1970, the U.S. Plant Variety Protection Act was enacted to encourage the development of novel varieties of seed-reproduced plants ranging from farm crops to flowers and to make them available to the public, providing protection of those who breed, develop, or discover them. In the first nine months of 1981, certificates were issued to the Kentucky bluegrass varieties America, Apart and Eclipse; the hard fescue, Silvana; the tall fescue, Rebel; the perennial ryegrass Barvy; the red clover, Tristan; and the creeping foxtail, Retain.
ONLY A TREE TRIMMER CAN APPRECIATE HI-RANGER’S MOST INTRICATE MOVES.

The big difference between tree-trimming in a Hi-Ranger and tree-trimming in any other manlift is Hi-Ranger’s maneuverability. The way Hi-Ranger moves you right to your work. Where you can do your best. And move on to the next job without a lot of worry.

The bucket moves in the very same direction or combination of directions the 3-D One-Hand Control is moved. In a straight-line. Or around objects and tree limbs. Keeping the bucket and operator level at all times. All in one smooth motion. Let go of the 3-D Handle, and the Automatic Safety Trigger stops the bucket movement.

Hi-Ranger’s outstanding maneuverability is unmatched. A combination of superior, long-proven engineering ideas. 3-D One-Hand Control. Coordinated Boom Action. Automatic Leveling. Continuous 360° Turntable Rotation. And Hi-Ranger’s “Safety Group” of standard features and accessories. Making Hi-Ranger more popular with arborists than any other aerial manlift for over 30 years.

You can do better work quicker when the job is within easy reach. Trim time and save money with Hi-Ranger. Call your Hi-Ranger dealer or contact us today.

Mobile Aerial Towers, Inc., 2314 Bowser Avenue
PO. Box 11647, Dept. N, Fort Wayne, IN 46859, 219-744-6181
THE OTHER HALF:

AWARD WINNING INTERIOR LANDSCAPES

by BRUCE F. SHANK, executive editor

Some landscape business opportunities show great promise only to flicker and die. The interior landscaping profession has survived the speculation stage as it enters its second decade with association representation and recognition.

A few of the 1981 interior landscape projects were recently honored by the Interior Plantscape Association. Since we publish the exterior landscape award winners, we thought the time was right to recognize the interior winners.

Organizations have helped the interior landscape industry develop a solid reputation with building planners and architects. The Society of American Florists cooperating with the foliage growers in Florida developed the first training programs for interior landscape design, installation and maintenance. The rapidly growing market, bolstered by foliage producers in the South, wanted more than SAF was willing to provide and sought assistance from the Associated Landscape Contractors of America and created the Interior Plantscape Association. All three groups continue to serve the market. ALCA and IPA cooperate on a

Continues on page 22
It’s been proven time and again, day after day, acre after acre. You just can’t buy better cutting gang mowers. For a very convincing demonstration, call your Jacobsen Distributor.

JACOBSEN

Textron

Jacobsen Division of Textron Inc.

Jacobsen: You just can’t buy any better.
**010, 015 - ADVANCES IN TURFGRASS PATHOLOGY**
By Dr. B. G. Joyner & Dr. P. Larsen
Leading U.S. turf pathologists report on turfgrass diseases, pythium blight, snow molds, fairy rings, leaf spot of Kentucky Bluegrass in Minnesota, initial and field fungicide screening, turfgrass disease resistance, etc. Contains new ideas on how to combat turfgrass problems. $27.95 hardcover, $18.95 paperback

**110, 120 - TURF MANAGER'S HANDBOOK**
By Dr. William Daniel and Ray Freeborg
This specially designed manual by leading turf specialists is a comprehensive, organized approach to turfgrass science and care. An easy, on-the-job reference for planning, purchasing, hiring, construction and plant selection. $18.95 hardcover, $14.95 paperback

**355 - PERSPECTIVE SKETCHES**
By Theodore D. Walker
A reference source of ideas, media use, styles and techniques. Grouped by subject matter. Illustrates technique for vegetation, vehicles, play equipment and recreation facilities, people, animals, etc. $19.50

**345 - COST DATA FOR LANDSCAPE CONSTRUCTION 1981**
By Kathleen W. Kerr, Editor
An updated unit cost data reference for designers, and cost estimators. Developed to fill the tremendous need for detailed landscape construction cost data. Laid out in easy-to-use CSI format. Annual. $24.95

**370 - LANDSCAPE OPERATIONS: MANAGEMENT, METHODS & MATERIALS**
By Leroy Hannabach
An in-depth examination that combines technical training in landscape science with methods of accounting, business management, marketing and sales. Discusses effective methods for performing lawn installations, landscape planting and maintenance. Step-by-step accounting calculations are explained in simple terms. $17.95

**380 - MANUAL OF WOODY LANDSCAPE PLANTS**
By Michael Dirr
A teaching text and reference on ornamental deciduous trees, shrubs, ground cover and vines. Provides identification characteristics with ornamental and cultural features all in one volume. $19.00

**370 - PHOTOGRAPHIC MANUAL OF WOODY LANDSCAPE PLANTS**
By Michael Dirr
Reference encompassing photographs of plant habit and ornamental characteristics. Brief descriptions of plants with major thrust on black-and-white photos selected to accurately represent growth habit and other ornamental characteristics such as bark, fruit and flower. $22.00 hardcover, $14.00 paperback

**340 - CONSTRUCTION DESIGN FOR LANDSCAPE ARCHITECTS**
By Albe E. Munson
Design specifications for layout, grading, drainage, structures and irrigation. Also explains mathematics of drafting. $24.50

**360 - HOME LANDSCAPE**
By Garret Eckbo
Provides designs, examples and current innovations and refinements to older traditional designs. Covers all aspects of residential landscape planning. $18.95

**380 - RECREATION PLANNING AND DESIGN**
By Seymour M. Gold
A comprehensive look at recreation needs for parks and how they can design the park facility for the community. Book's content can help justify construction and maintenance needs. $27.95

**790 - WESTERN HOME LANDSCAPING**
By Ken Smith, LA
Illustrations and description of western landscape plants and structures for your design idea file. Covers footpath plants, irrigation, patios and decks, walls, pools, and shelters. $7.95