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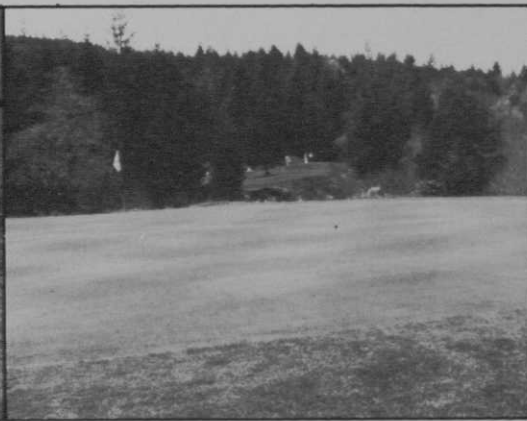
vices. Details like bucket seats engineered without seams, so water can't collect and linger. No-rust fiberglass bodies that retain their original elegance for years. With an engine specifically designed and built by Harley-Davidson for the special power, quiet and comfort demands of the golf course.

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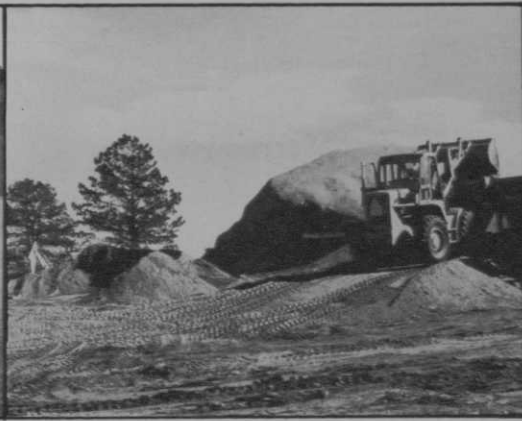
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golf business/june

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FRONT COVER:

Charles Layton, now in Pecan Grove, Texas, prepares the final seedbed on a green at Elyria Country Club in Elyria, Ohio. Frank Feck, CGCS, is superintendent.

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News

INDUSTRY

Turfco acquires assets of Sod Master from Jacobsen

Turfco Manufacturing, Inc., Minneapolis, Minn., has purchased the assets of the Sod Master division of Jacobsen Manufacturing Company, according to Bill Kaercher, president of Turfco.

Kaercher, who was former vice president and general manager of Jacobsen's Sod Master division, emphasized that Turfco will manufacture the complete line of Sod Master and Pipe Piper equipment. "The products will be made by the same craftsmen in the same plant and will carry a new color scheme of deep brown accented with a light tan," he added.

Jacobsen bought Sod Master in 1969 and merchandized through its distributors. Turfco purchased Sod Master prior to the recent purchase of Jacobsen by Textron. Kaercher said changes will include new distributors and new products, including a topdresser for the EZ-Go truck. Turfco's address is 3456 Washington Ave., Minneapolis, MN 55412.

ASSOCIATION

Golf Course Architects seek historical information

The American Society of Golf Course Architects is trying to collect and preserve historical information on golf courses and golf course designers. So far, only about 5,000 golf courses in the U.S., out of 12,500, have been catalogued.

The ASGCA's goal is to compile as complete a list as possible, listing professional and amateur architects for courses now in operation and any that may have closed. They are asking for help.

If you know the name of any course, a reasonably positive date it was constructed, and the name of the designer, please send it to: The American Society of Golf Course

Architects, 221 North La Salle Street, Chicago, IL 60601.

ASGCA also is searching for any historically significant plans or pictures related to golf course design or construction. If you have any, please send them a photocopy, the plans or pictures, or a description of any materials that you might have. Please include as much information as possible with each item.

LAND

Farmland value increases by 14%

Figures released in Washington D.C. in late March indicated that farm real estate values had increased an average of 14 percent for the year ending February 1, 1979. The rise was more evenly distributed across the United States than in past years.

A 40 percent gain in estimated 1978 net farm income before inventory adjustment caused a faster rise than the year previous when values rose at a rate of nine percent. Optimism has been restored within the farm sector and farmland buyer and seller expectations are higher.

EQUIPMENT

Three superintendents win new Jacobsen mowers

Three superintendents have won new Greens King greens mowers in the Jacobsen Division of Textron Inc. search for the three oldest operating Greens King riding reel mowers.

The oldest Greens King was at Interlachen Country Club in Edina,

Minn., where Dean Sime is superintendent. Sime's was the third Greens King to roll off the assembly line.

The second oldest came from Arnold Tribble, superintendent at Meadow Club of Southampton, Long Island, N.Y. His was the fourth off the line.

The third oldest came from Wanyne Cox, who owns J-R Golf Course in Wilmington, Ohio. His was the ninth shipped from the plant.

TURFGRASS

Centipede shade tolerance as good as St. Augustine

The shade tolerance of centipedegrass matches that of St. Augustine, according to preliminary research by Dr. Earl Barrios, Jr., at the Louisiana Agricultural Experiment Station in Baton Rouge. During a three-year study, centipedegrass grew better in dense shade than Floratam St. Augustine and as well as zoysiagrass. The St. Augustine has been damaged by St. Augustine decline (SAD) in much of the state. Barrios also noted that the centipedegrass was not affected as greatly by chinchbugs, but is prone to Brown patch, similar to St. Augustine. The centipedegrass did withstand low temperatures better than the St. Augustine.

HERBICIDE/SEED

Free Roundup®, Pennfine offered for turf renewal

Roundup® herbicide by Monsanto and Pennfine perennial ryegrass

have been teamed up in the "2-Step Turf Renewal Plan". Details of the plan are available in a test kit that includes enough Roundup and Pennfine to renew approximately 200 square feet of turf.

One application of Roundup is called for in the plan, to destroy a variety of annual and perennial grasses and broadleaf weeds. Because Roundup leaves no residual soil activity, Pennfine can be spread over the treated area in about 7 days after the herbicide application.

Pennfine was developed by Dr. Joe Duich at Pennsylvania State University. It has a proven wide area of adaptation, the ability to persist at moderate fertility levels, and withstands drought conditions and soil compaction. It will take a clean, smooth cut.

The free test kit is available to turf professionals by writing: Turf Renewal Plan, P.O. Box 923, Minneapolis, MN 55440.

SEED

Sabre Poa trivialis now has certificate

Sabre Poa trivialis, developed cooperatively by International Seeds, Inc., and the New Jersey Agricultural Experiment Station at Rutgers University, and has been granted a certificate (PV 7700104) under the Plant Variety Protection Act by the Plant Variety Protection Office of the Department of Agriculture, according to J. L. Carnes, president of International Seeds.

Prior to Sabre, only common, unpedigreed seed imported from Northern Europe was available. Sabre seed is now being produced in Oregon under that state's certification program. Sabre weighs in at more than 2 million seeds per pound.

NATIONAL GOLF FOUNDATION BOX SCORE

January-May 1979		REGULATION COURSES	EXECUTIVE COURSES	PAR 3 COURSES	TOTAL
OPENED FOR PLAY	New	18	3	2	29
	Additions	5	1	0	
STARTED CONSTRUCTION	New	32	5	2	57
	Additions	18	0	0	
PROSPECTIVE		38	6	3	47

The Shotgun Fast-Play System

by William W. Amick, Golf Course Architect

Would you like to get more golfers on your course during busy days? Do your golfers complain about slow play? Could you use the revenue from increased golf car use? You can allow more golfers to play each day, reduce complaints about slow play, and increase golf car use!

The Shotgun Fast-Play System gets its name from the widely used shotgun start tournament. In a shotgun tournament golfers begin their rounds at assigned tees and all groups start at the same time. Using The System golfers may begin play on any tee at any time. This alone will increase play substantially on your course during busy times. Eliminated are the headaches of starting times, cancellations, and congestion at the first tee. This, plus other features of The System, minimizes the biggest problem plaguing golf today — slow play.

Slow play creates unhappy golfers who, on busy days, may have to wait at almost every hole during their round. Golfers who are forced to wait continually may eventually decide to play on another course or even quit the game altogether. Inevitably, slow play reduces the total number of golfers using your course. This means that revenue from green fees, memberships, golf car rentals, and equipment sales, are all reduced because of slow play.

The Shotgun Fast-Play System reduces slow play by allowing faster players to "skip" or "pass" holes which slow players are on. When a slow group is encountered, the faster group merely moves on to any hole that they haven't played. The faster golfers would then on a second trip around the golf course, return to the holes that they had skipped in order to complete their round.

Going to a vacant tee for either starting or passing is much quicker in a golf car than by walking, so The System also brings increased revenue from more green fees and additional equipment sales because of faster play. Faster play means that golfers could even play more holes of golf during the day, if they wanted to.

The only change to a course using The Shotgun Fast-Play System is to provide paths so players can skip holes safely. The paths should be located far in the rough, away from play. This is so that golfers who are passing will not be hit or be in the way of other golfers who are playing that hole. They should be marked: "Passing Paths."

Because it isn't necessary to start on the first tee, no starting times or starters are needed, even on busy days. In addition, there is no need for rangers to patrol the course to speed up play, because slower groups may be passed at any hole. The direct result will be a greater number of happy and satisfied golfers generating increased revenue for you.

Any existing course is able to use The Shotgun Fast-Play System with the proper printed instructions and advice. The instructions will be provided on or with the score cards. Golfers will merely leave the spaces blank on the score card for the holes that they have skipped on their first trip around the course. The golfer's round will be completed by returning to all the holes that have been skipped.

Golfers will still play all 9 or 18 holes of the course to finish their round. It will however, usually be in a slightly different sequence each time golfers play the course. In reality there probably won't be much skipping of holes, just where it is necessary to pass groups of slower players. Returning to holes that have been skipped will be much easier in a golf car, therefore increasing golf car use.

When golfers see the benefits of The Shotgun Fast-Play System, such as faster play, they will be in favor of it. The golf professional and staff can make the transition to the system much easier if they will offer help and instruction to golfers. Signs in the golf

"Satoh hugs the hillside like a mountain goat. And that satisfies me."

Front tire: 9.5L-10
Rear tire: 21.5L-16.1



Satoh satisfaction starts with the Stallion Ground Hugger's dependable, smooth-running 38hp water-cooled Diesel engine. With nine forward speeds (three reverse) and dual-speed live PTO (540 and 1,000 rpm), the cost-efficient Stallion Ground Hugger is ideal for hilly terrain uses such as municipal park maintenance and golf

course grooming.

And its standard power steering gives you effortless maneuverability.

Let Satoh satisfy your tractor requirements like a pro. It satisfies mine.

**Satoh.
Satisfaction!**

Get it at your **SATOH** tractor dealer.
P.O. Box 5020, New York, N.Y. 10002

Circle 113 on free information card

INSTRUCTIONS FOR THE SHOTGUN FAST-PLAY SYSTEM

© William W. Amick 1978

The Shotgun Fast-play System was developed by David W. Amick, Daytona Beach, Florida, and William W. Amick, Golf Course Architect, to permit more and faster play on busy golf courses.

1. Golfers may begin their round at any tee that is empty or when they become first in line on a tee.
2. After completion of a hole, golfers may go to the tee of any hole they haven't played and play that hole, if the tee is empty or when they become first in line.
3. Golfers should later return to the holes they skipped to complete their round.
4. When traveling to a tee golfers must stay out of the way of all other play. Use the "passing paths" if they are provided.
5. Passing slower groups, skipping crowded holes, and cutting-in at other tees are permitted to speed play. Follow these instructions and enjoy your golf more!

Note to golf course operators: Permission is given to use the above copyrighted material on score cards, instruction sheets, and signs, if all of the material is included. The reprinting must contain the title, copyright notice, introduction, and the five instruction items.

shop and near the first tee should also inform players on the use of The System.

When looking at the congestion on the first tee, hearing your golfers complain about slow play, or paying ever-increasing costs, think about the many advantages of The Shotgun Fast-Play System.

If they desire, a group can start from the first tee and play all of the holes in numerical sequence. Even when a course uses the system, anyone can also play conventionally. This should reduce initial resistance. Those using the present method of play would pass, but only if they were waved through on a hole by the group ahead. Tournaments could still be conducted starting everyone from the first tee and not allowing passing or skipping for that event.

Wouldn't you like to forget about starting time hassles and complaints about slow play? You could be doing more important things like counting increased revenue, obtaining more important things like counting increased revenue, obtaining more members, or just listening to the praise of the new System from your golfers. The Shotgun Fast-Play System could be your solution to slow play and getting more golfers on your course during busy times!

Managers, Instructors, Librarians

Finally, An Aid For Teaching Turfgrass

Purdue University's turf experts, Dr. William H. Daniel and Dr. Ray P. Freeborg, have coauthored a comprehensive, organized approach to learning turfgrass science and care. Based upon years of teaching experience at Purdue, Drs. Daniel and Freeborg cover management of all major turf uses today.

The book, a valuable reference, includes specifications for planting, fertilizing, regulating growth, mowing, and other maintenance practices.

Whether for quick reference or as a basis for all turf knowledge, the book will be among books by Couch and Beard on the reference shelf. The book is 420 pages and contains 16 pages of color illustrations.

TURF managers' HandyBOOK



Comprehensive
Practical
Instruction
for All Turf
Professionals

W. H. Daniel
R. P. Freeborg

Harvest Publishing Company, 1979

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**"I could sure use a
rugged mid-sized rotary
that really maneuvers."**



A lot of our customers have been wanting a mid-sized mower that's built tough to take it, and that's highly maneuverable at the same time.

So our engineers came up with the amazing Turfcut.

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First, you have a choice of a 50" or 60" deck. (They're interchangeable.) Fully articulated, they closely follow ground contours so you get a smooth, even cut with practically no scalping.

Deck design lets you trim close, and also gives super clipping dispersion. The deck raises and lowers hydraulically for curb climbing and transport. And you can adjust cutting height from 1" to 4".

Then, the three-wheel, wide track design gives the Turfcut great stability on slopes. And the foot-operated hydrostatic drive lets you steer and maneuver while changing speeds or going from forward to reverse.

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We hear you.

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TEXTRON

Jacobsen Division of Textron Inc.

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Clippings

Brief bits of news from in and around the golf business.

The first 18-hole, championship golf course in St. Thomas, Virgin Islands, is being constructed. Known as Mahogany Run, the course is being developed by Armour Enterprises, a Caribbean investment group.

First Pennsylvania Bank in Philadelphia, along with the Small Business Administration is providing \$1 million for construction and financing.

Survey results from the Bureau of Labor statistics show that the average **job tenure** for all workers dropped from 3.9 years in 1973 to 3.6 years in 1978. According to the Bureau, this reflects two trends: The large inflow of youths and women into the labor force; and the trend toward earlier retirement.

Hartford Fire Insurance Company has made payment of \$240,000 to be divided among 72 present and former employees after losing an age discrimination suit filed by the Department of Labor under the **Age Discrimination** in Employment Act (ADEA). The suit charged that the company had fired, demoted or failed to promote 72 workers aged 40 to 65 because of their age. The upper age limit for persons protected by ADEA was extended from 65 to 70 as of January 1, 1979.

The **1979 Directory of the Golf Course Builders of America** now includes practical advice on golf course construction. A 52-page booklet, it is free from GCBA, 725 15th St., N.W., Washington, D.C. 20005.

The American Society of Golf Course Architects Foundation now has copies available of the proceedings of their recent **wastewater** conference. Copies are \$10,000 each from the ASGCA Foundation, 221 N. LaSalle St., Chicago, IL 60601.

O.M. Scott & Sons new **Information Manual for Lawns** is out. The 96-page, hardcover book discusses lawn planting, lawn management and spreader usage with more than 140 color photographs and illustrations. Copies are \$7.95 from Bill Boyd, O.M. Scott & Sons, Marysville, OH 43040.

A copy of Paul L. Jacquemin's address announcing the results of an 8-year, 20-state test program to develop a highly effective **Poa annua control** program is also available from Bill Boyd. Jacquemin, with O.M. Scott & Sons, spoke on the subject at the Iowa, Kentucky, and Ohio Turfgrass Conferences.

In commemoration of the ProTurf Division's 10th anniversary, O.M. Scott & Sons has republished its series of 10 full-color frameable **prints of the most popular turfgrass plants** in America. They are: tall fescue, perennial ryegrass, Kentucky bluegrass, fine fescue, creeping bentgrass, bermudagrass, zoysiagrass, St. Augustinegrass, dichondra and bahiagrass. They are available for \$2.00 (or \$1.00 for cool or warm season grasses only) from: Scotts Paintings, Dept. A.O., Marysville,

OH 43040.

Futura, **a new turfgrass blend**, has been released by Pickseed West. A blend of Blazer, Fiesta, and Pennfine perennial ryegrasses, Futura has received outstanding test results across the country, according to Pickseed. Literature and brochures are available from Mike Robinson, Marketing Manager, P.O. Box 888, Tangent, OR 97389.

Dr. James Beard, Texas A&M University, and **Dr. David Martin**, Ohio State University, are the recipients of the 1979 Oberly Award for Bibliography in the Agricultural Sciences, for compiling and publishing the *Turfgrass Bibliography — 1672-1972*. The bibliography, published in 1977, contains over 16,000 references listed alphabetically by author and is cross-referenced by subject with more than 40,000 entries. Financial assistance for the book was provided by the O.J. Noer Research Foundation, USGA Green Section Research and Education Fund, The Michigan Golf Association, and the Michigan Seniors Golf Association.

The 1979 revised edition of **How to Identify and Control Water Weeds and Algae** is available from Applied Biochemists. It is a 64-page, color "how to" guide and features the most recent information on the status of aquatic chemicals and water use restrictions. Send \$3.95 to: Brown Deer Chemical Co., P.O. Box 23403, Brown Deer, WI 53223, or call toll-free 1-800-558-5106 between 8:30-5:00, central time.



Jack Kidwell,

a partner in the architectural firm of Kidwell & Hurdzan, Inc., Columbus, Ohio, has been elected president of the American Society of Golf Course Architects. He has designed and supervised construction of 52 golf courses in Ohio, Kentucky, West Virginia, and Indiana. Kidwell is a life member of the Professional Golfers Association of America and the Golf Course Superintendents Association of America. He is a registered landscape architect.

The **Golf Course Superintendents Association of Southern California** has elected officers and directors for 1979-1980. New president is John Garcia Jr., La Cumbre Country Club. David R. Zahrt, Santa Ana Country Club, is vice president. Secretary is Richard W. Wagner, Oakmont Country Club, and treasurer is Richard H. Eichner, Lakeside Golf Club.

Directors are: Alan R. Andreasen, Marine Corps Memorial Golf Course, Neal Beeson, Anaheim Municipal Golf Courses, Hector T. Clark, Costa Mesa Municipal Golf Courses, William Gallegos, Rolling Hills Country Club, and David Mastroleo, Hillcrest Country Club.

Frederick Bove, Golf House West, is executive director.

John M. (Terry) Myline III is the new director of engineering for the Toro Company's Irrigation Division. Myline heads a staff of 15 engineers, designers and draftsmen.

David Bouck is the new greens superintendent at Beacon Wood Golf and Country Club in Florida.

The Irvine Extension of the University of California is offering a course entitled: **"Recreational and Institutional Turf Management"**. Taught by Stanley E. Spaulding, staff research associate in the department of plant science, UC, Riverside, the course will meet on Mondays and Thursdays from June 25 through July 26. The fee is \$69. Those interested should write to UC Irvine Extension, Rm. 102, Administration Bldg., Irvine, CA 92717, or call 714/833-5414.

Ohio State University will hold a **Turfgrass Research Field Day** at their research facility in Columbus, Ohio on July 31. One of the main points of interest will be their new turfgrass rhizotron/lysimeter. Other research to be discussed includes: green bug aphid, *Pythium* and dollar spot on creeping bentgrass, and a comparison of drop type spreaders.

The **USDA Turfgrass Field Day** will be held August 22 at the Beltsville Agricultural Research Center-West in Beltsville, Md.

The Golf Course Superintendents Association of New Jersey will hold their **15th Annual Equipment, Irrigation, and Supplies Field Day** at the Rutgers University stadium and golf course on October 2.

October 3 is the date for the 1979 **irrigation Conference** sponsored by the Northern California Turfgrass Council. It will be at Goodman Hall, Jack London Square, in Oakland, Calif. The committee is formulating a program to cover water recycling techniques, new innovations, efficient repair techniques, drought survival, alternative irrigation energy sources, fertigation and more.

The **New York State Turfgrass Association** is expanding their trade show, held in conjunction with the Annual Turfgrass Conference. The show has more than tripled in size. This year's dates are November 13-15 at the War Memorial in Syracuse, N.Y. For information, contact Trade Show Chairman Janet Worthington Dudones, The Ed Worthington Corporation, 50 Petrova Ave., Saranac Lake, NY 12983.



Project Director for PGA National, Thomas Sansbury (right), discusses plans for the first three courses at the PGA's new home with Don Padgett (left), Director of golf, Jim Pattee, project manager, and Al Frank, project inspector.