Tan-Tar-A, on beautiful Lake of the Ozarks, in Missouri, has one of the most beautiful, and playable golf courses anywhere, thanks to Jim Lewis and his “arsenal” of Mallinckrodt fine turf chemicals. Jim’s conscientious turf program, using the Mallinckrodt line, has protected—and improved—his fine turf. Doesn’t your own beautiful course deserve the same? See your distributor for your Turf Improvement and Protection System booklet, with full details of the complete program. See for yourself what Mallinckrodt has “going for YOU”!

### HEALTHY TURF

**MALLINCKRODT FUNGICIDE-HERBICIDE CHART**

<table>
<thead>
<tr>
<th>DATA</th>
<th>FUNGO®</th>
<th>KOBAN®</th>
<th>PO-SAN®</th>
<th>KROMAD®</th>
<th>TREX-SAN®</th>
<th>PRE-SAN®</th>
</tr>
</thead>
<tbody>
<tr>
<td>TYPE</td>
<td>Systemic Turf Fungicide</td>
<td>Pythium Fungicide</td>
<td>Poa Annua Herbicide</td>
<td>Contact Broad-Spectrum Turf Fungicide</td>
<td>Systemic Herbicide</td>
<td>Pre-Emergence Herbicide</td>
</tr>
<tr>
<td>SEASONAL CYCLE</td>
<td>Throughout Growing Season</td>
<td>Preventive and Curative</td>
<td>Post Emergence</td>
<td>Throughout Growing Season</td>
<td>Post Emergence</td>
<td>Pre-Emergence</td>
</tr>
<tr>
<td>PEESTS CONTROLLED</td>
<td>Turf Diseases . . . Brown Patch, Dollar Spot, Pink Snow Mold, Fusarium Blight, Stripe Smut, Copper Spot, Red Thread, etc.</td>
<td>Pythium Turf Disease</td>
<td>Poa Annua (Annual Blue-grass)</td>
<td>Brown Patch, Dollar Spot, Copper Spot, Red Thread, Leaf Spots</td>
<td>35 or More Types of Broadleaf Weeds</td>
<td>Poa Annua Crabgrass Goosegrass</td>
</tr>
<tr>
<td>APPLICATION RATE(S)</td>
<td>1-2 Ounces Every 1 or 2 Weeks “Depending on Disease” 4-8 Ounces for Fusarium Blight</td>
<td>4 oz. per 1,000 sq. ft.</td>
<td>1 to 1½ Gallons per Acre - per Application</td>
<td>3 to 5 oz. per 1,000 sq. ft.</td>
<td>1 Gallon to 4 Acres per Application</td>
<td>1 Gallon per 12,000 sq. ft. per Application</td>
</tr>
<tr>
<td>PHYSICAL FORM</td>
<td>Wettable Powder</td>
<td>Wettable Powder</td>
<td>Liquid</td>
<td>Liquid</td>
<td>Liquid</td>
<td>Liquid</td>
</tr>
<tr>
<td>APPLICATIONS</td>
<td>Every 1-2 Weeks for most Summer Diseases 4-8 oz. for Fusarium Blight 3 Applications Every 2 Weeks Beginning Mid-June</td>
<td>Every 5 to 10 Days During Conditions Favorable to Disease, Depending on Climate Situation</td>
<td>Every 1 in Early Fall 1 in Spring</td>
<td>Every 5 to 7 Days During Growing Season</td>
<td>1 in Spring (1 Possibly in Fall)</td>
<td>1 in Spring 1 in Fall</td>
</tr>
</tbody>
</table>
Tanglewood Park...the 56th annual PGA and Dolge...Par for The Course

Tanglewood Park with its boundless trees, well placed water and sand traps combined with its natural rolling fairways was a challenge to the touring professionals in the 56th Annual PGA and to the Tanglewood Grounds Keepers to meet the rigid demanding challenge of preparing for this prestigious event.

We at Dolge are proud that our complete line of ground maintenance products helped make their job easier, and the 56th Annual PGA an overwhelming success.

YOU CAN BRING YOUR COURSE UP TO CHAMPIONSHIP PAR WITH THESE FINE PRODUCTS.

TOTE. Weed Eradicator. Total kill, plus maximum safety. Acts positively on annuals, biennials, perennials; sterilizes soil. Exceptionally high LD rating. One gallon of TOTE in 15 gallons of water treats 1000 sq. ft. at 83.3% labor saving.

PENETRATE. Organic soil improver opens dense soils, improves porosity, encourages deep stronger root growth. Not a wetting agent.

DOLGE LAKE DYE. Turns muddy water hazards and ponds bright, lasting blue. No danger to pets or wildlife.

MICROFEED. "Vitamins for Plant Growth (Micro-Nutrient Supplement)"— has not only iron, but four (4) other Nutrients usually needed by plants for good growth. Causes roots to be stronger, puts greener color into grass, and generally strengthens plants.

FUNGO 50. Broad Spectrum Systemic Fungicide. Will prevent or cure Brown Patch and/or Resistant Dollar Spot without mixing with other fungicides.

CRABGRAX (AMA/DSMA), for positive crab grass control, even hard to kill silver crab grass. Full line of Turf Insecticides to control animal and insect pests.

BOOST J70. Miracle solvent cleaner for all machinery and golf carts.

DOLCO Pine Ball Wash, pleasantly piney, quick thorough cleaning of golf balls in paddle or rotary machines.

THE C. B. DOLGE CO., Westport, Conn. 06880 (203) 227-9591

For More Details Circle (110) on Reply Card
The letter of the law has to be that way, I guess. Anyway, after Johnny quit Spalding for whom he was selling several thousands of dollars worth of balls, clubs and bags and went into real estate business, he was secure in amateur status. He was runnerup to Skee Riegel in the 1947 National Amateur at Pebble Beach. Thunderbird had tough going in its early years and got solid when it got a number of good-spending members from as far away as Chicago. After Thunderbird got established the desert became a golf empire. It now is by far the greatest golf real estate development in the world and the operation that set the pattern for other huge and successful golf real estate projects in the United States and other countries.

Johnny Dawson has never been mentioned among golf’s millionaires, yet the pleasant, handsome, soft-sell salesman has made immensely more money in golf business than any other one man.
FAST EDDIE PUTTER, INC. introduces its new CES 100 sand iron. Investment cast of 316 stainless steel, the club offers a sole and hosel design that offers good capabilities in sand. The club serves a dual purpose as a utility wedge. Suggested retail price is $32.

ADVANCED PERFORMANCE FEATURES are the major items in Ford’s current line of rider mowers. The Tractor and Implement Operations division has introduced two new models this year, the 66 and 61. Both units offer new eight-horsepower engines, new steering wheels teamed with a new gear-reduction system and gear-driven transmissions with a new inside belt-drive idler that softens the clutching. Three forward gears offer speeds up to 6 1/4 mph along with a reverse gear. Several optional attachments are also available including dump cart, leaf mulcher, rear-mount grass catcher and snow blade. Heavy-duty one-piece rigid steel frames on both Ford rider mowers have full running boards for easy mounting and operator comfort and safety.

WITH A 38-QUART CAPACITY, Geerpres’ new oval-shaped plastic bucket will accommodate mop wringers of any size or style. Molded in one piece of pastel blue “Polyline-10” glass-filled linear polyethylene, the larger bucket joins the popular 26-quart model introduced by Geerpres several years ago.

AVAILABLE IN SEVERAL COLORS, ColorChain is the latest innovation of the Campbell Chain Company. The line is available in either one or two inch diameters. A variety of post assortments complement the chains. Aimed at the course market, the chains can provide a wide variety of recreational uses, including traffic control at tournaments, tees and areas that should not be traveled by golf cars.

QUICK INSTALLATION AND LONG WARE are the two big advantages to Union Canvas’ newest line of tennis court windbreaks and divider curtains. The "Uni-gard" products feature the "Spring-Tight" Sewn in Hardware, for quicker installation. The products also offer different types of mesh, installation methods and optional accessories.
SAVING TIME AND MONEY and controlling the hectic club schedule is the main aim of Caddylak's Time-wise Magnetic Scheduling Calendar. At a glance, the entire plans of deadlines and appointments can be viewed to help supply important information immediately. Guessing at the schedule is no longer necessary. Wasted time sorting through papers, making phone calls and last minute rushes are eliminated. To make changes, it just takes the movement of a magnet. Important activities, dates, deadlines and appointments can be emphasized through the use of different colors.

CIRCUIT No. 708 on Reader Service Card

COMBINING THE POWER OF A BUILT-IN sound system with the compactness and light weight of a portable, Argos Sound introduces its Voice Director II. This system goes anywhere, indoors or outdoors, for any job in any environment. All components of the system are completely built-in and integrated into an attractive but rugged case that can be hand-carried anywhere. Included in the package are an amplifier, sixspeaker sound column, low-noise microphone and professional stand. The Voice Director II is completely operational on a single 12 volt battery that delivers up to 100 hours of service. The system can also be adapted to conventional electrical systems.

CIRCUIT No. 709 on Reader Service Card

IDEAL FOR REMOTE TEMPERATURE READING, THECriterion by Maximum, Inc. is one of the most accurate air and/or water temperature indicating systems now being offered. The Criterion is a completely self-contained electronic indicator that can be used indoors, outdoors, at the pool or in the sauna.

CIRCUIT No. 710 on Reader Service Card

PROS LOOKING FOR AN ADDITIONAL SERVICE for their club repair operation might look at the I.D. labels currently being marketed by Miller Golf Company. To eliminate the endless confusion and aggravation due to lost or misplaced clubs, these tags can serve that purpose while earning big profits for the shop at the same time. Included on the tag, which is black vinyl with the printing stamped in gold, is the member's name, address and zip code.

CIRCUIT No. 711 on Reader Service Card

COURSIGN INC. has announced its new trap rake, The Chicago-based firm's product has every component readily replaceable and its spike is optional. Teeth in the rake are made of the new, tougher "ABS" material and are durable for longer life.

CIRCUIT No. 712 on Reader Service Card

OFFERING THE ULTIMATE in weight distribution, balance and control, the Klunker II is the top of the line putter of the J. E. Becker Co. The Klunker II reduces club head rotation when impact is off-center, as it most always is. The "choke" at impact is eliminated since the face is well in front of the shaft. The putter is also helpful in lining up breaking shots.

CIRCUIT No. 713 on Reader Service Card

NOW IN SIX CONVENIENT and proven designs, the Seton Name Plate sign could be the answer to developing course identification. The same design in a variety of sizes helps develop continued customer recognition. Signs are applied by an adhesive backing and wash bright and clean time after time, resisting road grime and weather. The signs are guaranteed not to wrinkle or buckle. Stock sizes range from 16 1/4 x 24 1/2" to 3 x 4 1/2" and several round sizes are also available.

CIRCUIT No. 714 on Reader Service Card

EFFECTIVE AND LOW COST control of weeds and grass along steep bar ditches, along embankments and culverts, next to bridges and guard rails and other areas which have been impossible for mowing machines is now offered by the new Span-Spray herbicide unit.

Attached to the front of any tractor, the unit is extended on a boom which sprays an area of 25-feet. Span-Srapy reaches areas formerly only accessible to slow and costly hand labor.

Besides these obvious savings and the advantages of better maintenance, the Span-Spray, when used at first emergence of many common weeds and grasses, can control for an entire season in just one trip, where mowing and handwork may have required six or more cuttings per year.

CIRCUIT No. 715 on Reader Service Card

SEAMCO introduces "Woodstock", the ideal bag for a tennis weekend, hiking, cycling or camping. It has an over-the-shoulder strap, soiled clothing compartment and attached racquet cover. Available in sand with brown trim. Seamco is also currently marketing a new lightweight aluminum tennis racquet called the Liberator. Especially designed for women, the racquet offers a unique string support and a power wedge for added strength to eliminate torque.

CIRCUIT No. 716 on Reader Service Card

OVER 20 DIFFERENT models of convection ovens are now being offered by the G. S. Blodgett Co. Ovens ranging from the counter variety to full-size are included.

CIRCUIT No. 717 on Reader Service Card

1/75 GOLDFORM MAGAZINE 65
FIGHTING THE PEAKS AND VALLEYS from page 60

Aeration. The large tees are aerated by two men using an aerator equipped with half-inch tines. Cores are removed and the entire task is done in one hour per tee. This totals 41 man-hours when all tees are aerated. Performed four times a year, 164 man-hours are needed for this task.

Pesticides. Seldom are insecticides, fungicides or herbicides applied to the bermudagrass tees, but on occasion they are needed. To apply pesticides as needed, two man-days are allotted annually. The materials needed are those supplied for the greens and aprons.

Overseed. As with the fairways, tees are often overseeded for winter color. Costs and methods are comparable to those used for overseeding fairways.

Topdressing. Tees are occasionally topdressed, usually during spring and fall. It is done mechanically, and the areas, are dragged following the topdressing. The entire operation requires about two man-hours per tee or a total of 36 man-hours. The task is performed twice a year, so 83 man-hours are scheduled to topdress the tees.

Irrigation. The tees are irrigated about three hours weekly during the summer months with lesser amounts of water applied during the remainder of the year. The man-hours needed for irrigation are based on the labor required to check and maintain the sprinklers. This requires 20 minutes per tee or six man-hours weekly for all 18 tees; on a yearly basis, it amounts to 312 man-hours.

Service and repair. Throughout the year, divot marks on the tees need attention. This requires 14 man-hours. Also, 340 man-hours are required for sod replacement.

Fairways. Fairways are mowed two to three times a week during optimum growth conditions but once a week is sufficient throughout the remainder of the year. A hydraulic seven-gang mower is used. The mowing capacity ranges from 45 to 62 acres per day. Based on an average of 5.7 acres per hour including allowance time, fairway acreage requires about 1,071 man-hours yearly.

Fertilization. Fairways are fertilized at least four times during the year. About four pounds of actual nitrogen per 1,000 square feet are applied annually. The fertilizer, 26 tons of 20 percent nitrogen fertilizer generally pelletized is applied with a tractor-drawn rotary spreader having an operating capacity of six acres per hour. An equivalent of 10 man-hours is used to fertilize the fairway acreage. It is estimated 47 man-hours must be budgeted for this task.

Aeration. A six-foot-wide fairway aerator is used to aerate the fairway twice a year. This unit, equipped with 3/4-inch tines is followed by a wire mat. Based on a rate of 1.5 acres per hour, 40 man-hours plus allowance time are needed to aerate the course. Performed during spring and in late summer, 92 man-hours are budgeted yearly for this task.

Pesticides. Herbicides are occasionally needed on the fairways. It is estimated 10 man-hours annually are sufficient for this task provided only as needed. The time allotted is based on the capacity of the equipment used. Either a tractor-drawn sprayer for liquid materials or a rotary spreader capable of covering two acres per hour when dry materials are used.

Irrigation. The fairways are irrigated by the automatic full-coverage irrigation system. Fifty-two man-hours are estimated annually to service the system supplying the fairways with water.

Overseeding or colorizing. The bermudagrass fairways turn brown during cold weather periods. To maintain a green color during that time, the fairways can be overseeded with a cool season grass or colorized. Generally, overseeded fairways are given a very close mowing, swept, and then seeded. To establish the overseeding, 21 man-hours per acre and 12 tons of seed must be allotted. With 60 acres in fairways, the overseeding task will require, including allowance time, almost 1,450 man-hours or slightly in excess of 181 man-days per year. If the fairways are to be colorized instead of overseeded, almost 3½ man-hours are needed per acre of fairways. Including allowance time, this totals 242 man-hours or slightly over 30 man-days.

Service and repair. To maintain the appearance fittest that of a quality course, 216 man-hours are budgeted yearly to mechanically sweep the fairways. The frequency and time required for this operation varies with the amount of play, wind velocity and other factors.

Because of damage by foot and equipment, various portions of the fairways must be repaired annually. The time required to repair these areas can be estimated on the basis of the times needed to repair tees and aprons. Accordingly, 340 man-hours are allocated to repair fairways.

Roughs. The 65 acres of roughs are mowed at a height varying from 1½ to 2½ inches. The equipment used is a five-gang pull-type rough mower. Roughs are mowed from April through September and about 11 times thereafter from October through March. Based on equipment capacity it is estimated about 38 man-hours are needed each time the roughs are mowed, totaling 1,330 man-hours annually.

Sweeping. During the year the roughs are swept about a dozen times. The equipment used is similar to that used on the fairways. Based on the time allocated for the fairways, 108 man-hours are needed for sweeping roughs.

Pesticides. As the roughs are mowed or swept, they are also inspected for the presence of weeds. Herbicides application requires 40 man-hours annually.

Irrigation. Roughs are periodically irrigated. Taking the irrigation of the fairways as a basis, 30 man-hours annually are assigned for servicing this portion of the irrigation system.

Fertilization. Portions of the roughs adjoining fairways are fertilized. This is done mechanically using bulk fairways spreaders. Based on the capacity of this equipment and a frequency of application of one-quarter that of fairways, about 12 man-hours are needed annually.

Complete fertilizers are generally used for roughs. Considering a fertilizer complex such as 16-20-0, the 65 acres would require eight tons of fertilizer based on an annual requirement of six pounds of material per 1,000 square feet.

Repair. Areas in the roughs sometimes need repair. Based on a frequency estimated to be one-fifth that of the time needed for repair of fairways, a total of 70 man-hours are assigned for this task.
MY THREE MEN FERTILIZED 700 TREES IN A DAY AND A HALF...

"My three men fertilized 700 trees in a day and a half with Jobe's Tree Food Spikes. I couldn't believe it... so I went around and checked behind them. Sure enough, they'd fertilized all 700 trees. Beautiful," says Richard Boehm, Superintendent, Military Golf Course, Wright-Patterson Air Force Base, Dayton, Ohio.

"I want to keep my trees growing strong and beautiful. That's why I used Jobe's Tree Food Spikes. I just couldn't believe that Jobes could save so much time but we did the entire course in a day and a half," concludes Dick Boehm.

"And you can see the difference they make. Similar trees were put in on the other side of the road. Ours are greener," confirms Boehm.

Jobe's Spikes can save just as much time for you. Each spike is a premeasured amount of the right combination of plant foods for trees and shrubs. This eliminates the chance for mistakes, while saving time and money. And they've proven effective in University tests.

Order direct or from your jobber-distributor. $30 per case (105 spikes) for 5 cases; $25 per case for 15 cases. Shipped pre-paid.

Jobe's TREE FOOD SPIKES

INTERNATIONAL SPIKE, INC.,
462 EAST HIGH STREET
LEXINGTON, KENTUCKY 40508

For More Details Circle (127) on Reply Card
BUSINESS OPPORTUNITIES

GOLF COURSES: Want to buy or sell a golf course? Our business is exclusively golf courses transactions. We also do golf course market value appraisals. McKay Realty — GOLF AND COUNTRY CLUB PROPERTIES. 15553 N. East St. (U.S. 27), Lansing, Mich. 48906.

LIMITED NUMBER of dealerships available in lucrative New England area — for distribution of Mexel electric golf cars. For further information contact: Fenelco Golf Car Co., 420 Penn Street, Spring City, Pa. 19475. Phone 215 935-1111.

HELP WANTED

THREE YEARS EXPERIENCE DESIRED, 18-hole championship, 9-hole par 3, 40,000 rounds 1974, more potential, opened 1971, vicinity Des Moines, Iowa. Must establish shop with electric carts, clubs, clothes and miscellaneous only. Contact Mr. Bills, Polk County Conservation Board, Jester Park, Granger, Iowa 50110. Phone 939-2394. Inquires close February 1, 1975.

PERSONABLE PROFESSIONAL or assist professional for public course, northern outskirts of New York City. Responsibilities include shop, organizing tournaments, leagues and teaching. Must be energetic, outgoing individual. Write Professional Golf Purchasing Corp., 380 Park Avenue, South, New York, New York 10010.

P.G.A. PROFESSIONAL WANTED: Experienced all phases of golf shop operation — excellent teacher and promoter — must relocate southwest region. Send full particulars to Box 16, Golfdom, 9800 Detroit Ave., Cleveland, Ohio 44102.

P.C.A. GOLF professional wanted for private country club with 435 golf members. Send resume with references, photo and salary requirements to Waynesboro Country Club, Meadowbrook Road, Waynesboro, Virginia 22980.

MANAGEMENT TRAINEE: Golf pro to train as manager. Small private club, northern New Jersey. Send resume, salary requirements etc., to Box 14, Golfdom, 9800 Detroit Ave., Cleveland, Ohio 44102.

MISCELLANEOUS

GOLF CAR TIRES First line 18 x 8.50-8, $13.25; 18 x 9.50-8, $13.75. Send for our complete tire line. All sizes available. Golden Triangle Sports, Inc., 6317 Library Road, Library, Pa. 15129. Phone 412 835-6898.


POSITIONS WANTED

PRO-MANAGER: P.G.A. Class A head professional with interesting resume, looking for year round position. Being a quarter-century pro can't do anything but wonders for any club. If interested write direct to Box 17, Golfdom, 9800 Detroit Ave., Cleveland, Ohio 44102.

PGA PRO superintendent Manager available. Many years experience as a teacher and operator of country club. Married, 1 child. Knowledge golf course construction. Write Box 2, Golfdom, 9800 Detroit Ave., Cleveland, Ohio 44102.

POSITION DESIRED: Class A P.G.A. professional desires position as head golf professional, excellent background in all phases of golf. Age 35, family. Presently employed, available in 60 days. Box 15, Golfdom, 9800 Detroit Ave., Cleveland, Ohio 44102.

FOR SALE

USED GOLF CAR CLEARING HOUSE. We have every make and model golf car in stock. If we don't have the golf car you want we will get it. Write or call collect for the golf cars of your choice. As is or reconditioned. Any quantity at the lowest possible prices and we handle the freight. NEDA Northeast Dealers Association. 420 Penn Street, Spring City, Pa. 19475. (215) 935-1111.

9 HOLE PAR 35 course in resort area adjoining California's Sequoia National Park, large clubhouse/restaurant/bar and swimming pool. Box 13, Golfdom, 9800 Detroit Ave., Cleveland, Ohio 44102.
"I'VE NOTICED ON P.G.A. COURSES I'VE PLAYED THAT HARD USE AREAS SEEDED IN MANHATTAN PERENNIAL RYEGRASS HOLD UP BETTER, LOOK BETTER AND PLAY BETTER THAN OTHER GRASSES..."

Pat Fitzsimons on Manhattan

CERTIFIED

MANHATTAN PERENNIAL RYEGRASS

- GREAT FOR HARD USE AREAS
- UNIFORM DARK GREEN COLOR
- FINE TEXTURED—BLENDS WELL WITH OTHER GRASSES

Manhattan Perennial Ryegrass was selected and developed by Dr. C. Reed Funk, Rutgers University. Manhattan develops a uniform dark green leafy, dense turf with leaf blades as fine as many Kentucky bluegrasses.

EXCLUSIVE MARKETING AGENT

WHITNEY-DICKINSON SEEDS, INCORPORATED

52 Leslie Street • Buffalo, New York 14240

For More Details Circle (134) on Reply Card
If 95% of all major golf tournaments, and the PGA, selected us to make their official crests, maybe they know something you should.

Gold Crest is the world's first name in crested products. Handmade, 3-dimensional gold and/or silver bullion crests. New PermaStamp bag tags. Blazers and sweaters. Tournament awards, prizes, and great golf gifts. Send for our free catalog.

Gold Crest Ltd.
12307 Ventura Blvd., Studio City, Calif. 91604
(213) 877-2665  Cable: CRESTOGOLD

for more information circle number 185 on card