

charged a \$10 registration fee, but with the condition that anyone attending all sessions would get a \$5 credit at the pro shop and we gave back the other money in prizes.

"It helped their golf games, their physical well being and it encouraged them to play more golf, because they were enjoying it more."

A good youth program also is included in Gerring's plans to serve his members. He is aware that multiple benefits can result from cultivating youthful interest in golf. Not only, he says, are the children where their parents want them to be, but, he adds, "A lot of adults start playing because their children do."

Teaching, also, ranks high on Gerring's list of services to his members, and because he has had rewarding results as a teacher, he intends to spend a lot of his time at Holly Tree teaching.

"I've never seen," he says with a smile, "a professional who was a good and enthusiastic teacher, lose his job."

"I still believe in the old time values—courtesy, appreciation, interest in your members and their families."

Members undoubtedly will applaud the plan to keep the course open seven days a week from March through October. Gerring simply does not think a course must be closed one day a week for maintenance. In the other months, November through February, he feels six days will be plenty to satisfy playing appetites.

Members will find more than golf at their club. The clubhouse will house a sauna bath and an executive suite. The latter will be equipped with a desk, telephone, note pads and other administrative accoutrements as an added convenience for those members who need to conduct one more office chore before they reach the tee.

There also will be a card room and a golf museum, stocked initially by a large number of items that people have given Gerring over the years, "including about 180 hickory-shafted clubs."

The site of Holly Tree is eight miles outside Greenville. There are good access roads, and Shaw's hous-

ing development was well under way before the idea of the club was even a consideration. Dr. McNamara already owned some of the land which will feel the spikes of play at Holly Tree. Part of it is on his former cattle farm. The group extended the corporation's land holdings to 935 acres before they made their initial announcement.

An Atlanta firm already has bought 35 acres to build condominiums, a feature the partners feel will add graciousness to their project.

The first 18 holes, for which ground was broken almost during the initial press conference, rolls over 175 acres, and the land reserved for the third nine does not have long to wait, it seems.

Gerring, who normally has 24 hour, seven day, 12 month enthusiasm, verbally caresses his new undertaking. He talks of bentgrass greens, the flexible tees the way some men talk about their horses.

As count-down to opening day began in earnest, his thoughts jumped so far ahead that he began checking off the people to whom he felt a great debt for helping bring Holly Tree to reality.

"Jack Shaw and Dr. McNamara, of course. And a man who has been tremendously helpful, George Cobb. He has done a super job of giving me the benefit of things he has learned in constructing over 300 other golf courses.

"Bill Ullman, of Southern Golf Course Builders has been a great help."

Those were immediate and belong to the present. His conversation then turned to his pro shop philosophy, which he has acquired working for Wade Ruffner at Biltmore Forrest CC, Biltmore, N.C., E.E. Johnson, Belle Meade CC, Nashville, Tenn., and Harold Sargent of Atlanta's East Lake CC.

Those were the head professionals under whom he served his official apprenticeship, after having served an unofficial apprenticeship under his father.

All of them have contributed to Gerring's picture of the type of golf operation he would like to run. Many professionals have had the same dream. What make Gerring's different is that his is coming alive. □

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For more information circle number 157 on card

GRAFFIS from page 11

nationwide influence.

Hunter says that the Riviera shop was so successful he could hardly spend time playing golf with or teaching members. He had done well playing in tournaments as an amateur and professional, then began making so much money in clothes that he was losing his identity as a golf professional.

Hunter says that pro shops got big in soft goods selling while the department stores were sleeping, but now the picture is changing and

shortly there will have to be drastic changes in pro shop apparel selling to beat the store competition.

With his useful background as an official of the Southern California PGA, Hunter is the local opposition to one of the PGA's most persistent demands: that of complete shop concessions for the professional. Hunter maintains that this policy is an archaic element that should be and could be replaced by an attractive and rewarding salary and bonus plan. This would enable the profession-

al to develop a program that draws and serves more members better and allows him to attend to what should be his specialized area of business. Hunter declares that the shop concession is the reason why too many professionals have bad credit ratings. These fellows have been caught in a losing struggle of trying to finance what actually is club business, he says. He asserts that private golf clubs generally do not look realistically at their businesses and throw away money by having \$30,000 a year chefs cook hamburgers.

Slow play is getting to be deadly at private clubs, Hunter says, and for a reason I haven't heard before. Tournament-paced golf takes up more time than a harried business executive or his company can afford during the week. Hunter says that one of the urgent, important ideas a club professional has to put over to his pupils, men and women, is to play faster golf. But how is a professional going to do that when he can make more money selling ready-to-wear apparel?

Inevitably there will be a violent shake up in the Tournament Players Division pattern. The satellite or minor league circuit unhappily came too early to Houston with a \$405,000 purse—\$41,000 in first prize money—and with very few exceptions a field that couldn't attract a gallery the size of the gate between a couple of dull baseball clubs. No wonder Jimmy Demaret and Jackie Burke, heavily interested in the Champions GC at Houston, don't want the Houston Open at their course. The TPD can't guarantee a first-class field at a tournament any more than the Tournament Bureau of the PGA could. Even the \$500,000 World Open at Pinehurst next fall, isn't sure of an all-star showing. What power does the TPD have to improve conditions for sponsors who work hard and get hurt? There'd better be a satisfactory answer soon or the Golden Days of the journey-men pros will be over. □

CORRECTION

Apologies to champion long hitter of the '30s, *Jimmy Thomson*, for the mis-spelling in the May issue (page 6) of his well-known name.

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On May 22, 1972, we started construction of a new 8000 sq. ft. sod nursery here at Rancho Bernardo. It was completed on June 20, and given the final touches before seeding. Penn-cross Bent was chosen for several reasons, one being the success our new Executive course was having with it. The nursery was seeded on June 30, 1972, at a heavy $2\frac{1}{2}$ pounds per 1000 square feet.

We watched until there was a very even green cast on the complete nursery and then, on July 11, we used a starter fertilizer. When the Penncross reached approximately $\frac{3}{4}$ of an inch we made our first cut with a $\frac{1}{2}$ " bench setting and continued on a daily mowing schedule until putting green height was reached.

Unbeknownst to me, some Japanese people had been watching the operation very closely. It came on with amazing speed, and sixty days from seeding we had a very good putting surface and about 4" depth on our root system. Before the sod was 90 days old we had cut and moved most of the 8000 sq. ft. to some problem greens.

This brought to my office the Japanese who had been watching the sod nursery since its conception. They asked what I had done in construction and what grass was used. They also asked if I thought I could repeat the nursery operation in Osaka, Japan? Sounds good! The only catches being: they wanted the recommendations by phone and mail and the greens had to be ready for play in early November for an American Pro Tournament. It was now August 10, 1972. I contacted my friend who had supplied the fertilizers and seed, and work began.

Fertilizer samples were sent to Japan to be inspected by the Japanese government. Fertilizer spreaders were shipped air freight, the government approved shipment of fertilizers and the move was on. The greens had already been roughed in and were ready for mix, final grade, and seeding.

After numerous meetings, letters, and phone calls to Osaka, the greens were seeded at 2 pounds per 1000 sq. ft. on September 1. The Penncross came up as predicted, was fertilized as planned, cut as soon as it was ready and progress was almost identical to our nursery here at Rancho Bernardo. They were ready by tournament time in mid-November 1972, and I'm told "better than any of the other greens at Ikeda Country Club." My new friends are very happy that they went with Penncross and claim to have the "Showplace" of Osaka, Japan.

This was all done gratis, but it was a very fulfilling experiment. Mr. Araki, President of Ikeda Country Club, flew to San Diego to give his personal thanks to my friend and myself. They favored us with some small gifts, took us out for a lovely dinner and we talked of our success with their new greens and their plans for more.

They are a very grateful people and I'm satisfied that my choice of Penncross is not only working for me in Rancho Bernardo, California, but also for my new friends in Osaka, Japan.

Gary A. Silor

Signed: GARY A. SILOR

Address: 500 So. Chestnut, Escondido, Calif. 92025

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GRAU from page 14

ation is on course. Tell them that there will be times when the fairways will be virtually unplayable except for preferred lies. Unless this is done, the superintendent could be in serious trouble.

Q—*There is high-quality coal under the land around our golf course and strip-mining is contemplated. We read so much about "the ravaged hills," "rape of the land," "erosion and silt-filled streams" that we (and many others) are deeply concerned.*

Should we form a citizens group and lie in front of the giant strippers to prevent the stripping? Is there a way to restore the land so that it is once more beautiful and useful? We need help! (Illinois)

A—I am glad that you (and others) are concerned. Yes, form a citizens group, not to prevent stripping, but to demand that, after removing the coal, the land be roughly leveled, limed, fertilized and seeded to a mixture of sturdy grasses and permanent legumes. When you are successful in withholding coal revenue from the

strippers to enforce proper revegetation your property values could be enhanced rather than depreciated.

This has been done so successfully in Southeastern Ohio that beef, grazed on the proper combination of grasses and legumes, established on land from which coal was strip-mined, topped the Chicago market. Also, beauty was restored, the land is more useful than before, and erosion is ended.

This Q & A is only the "tip of the iceberg." To elaborate full recommendations in this piece is impossible. There is a way! Most popular writers of the day lament the "rape" instead of learning how to correct it and to tell the legislators that it can be done. This writer will accept questions on the subject and they will be answered. □

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But if you've got leaf spot and rust we have something to help you get rid of them.

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It helps keep your greens (and fairways) in the pink.

SUP'R-FLO Maneb Flowable.

From Rhodia Chipco Products.



"What do you mean the course is too wet for a golf cart?"



BEARD from page 12

most extensive research on turf-grass nematode problems has been conducted in that state. Unfortunately, potential nematode problems have not been investigated extensively in the past in the cool-humid regions of North America. Recent studies, such as those reported here, indicate that there are situations where nematodes may be causing serious problems on cool-season turfgrasses by restricting turfgrass growth, particularly on putting greens. Thus, the golf course superintendent in those regions should be alert to this potential problem.

Nematicides should not be applied indiscriminately. These materials are extremely toxic not only to nematodes, but to man when applied improperly. The application of a nematicide should only be made after a soil nematode analysis has been made and a nematicide recommendation given by a qualified nematologist. Nematodes can rarely be eradicated. Nematicides provide a temporary reduction in the parasite nematode population. Once chemical nematode control is initiated, it usually should be continued regularly. Thus, the use of nematicides for nematode control should only be utilized where the problem has been identified. □

For more information circle number 141 on card

COUNTRY CLUB from page 29

hangar-like pavilion housing five indoor courts. The indoor courts played 90 per cent capacity last winter.

The fee schedule is different for winter and summer, prime or non-prime time and indoors or outdoors. Outdoors, court charges are \$2 an hour weekdays after 6 p.m. and all day weekends and holidays, or \$19 a.m. to 6 p.m. weekdays. Indoors in winter, rates are \$6 an hour weekdays until 6 p.m., \$8 an hour at night and on weekends. Half rates apply indoors for the five summer months.

A staff of seven professionals, three year-around, is headed by Dr. Irwin Hoffman. The pavilion houses a well-stocked, although small, shop, and the new wing of locker rooms added last spring.

The swimming program also is extensive. Classes include beginning swimming for children, advanced classes, adult "learn to

swim," mother tot, water survival, life saving, diving and swimming teams. Hours are 10 a.m. to 10 p.m. in summer, indoors year-around. Aquatic Director Ruthie Seylmaker heads a staff of 12 in winter, 25 in summer. Open swimming is free to members, 10 a.m. to 7 p.m. indoors, 12:30 p.m. to 7 p.m. outdoors. Guests pay \$1 weekdays, \$2 weekends.

A variety of other kinds of recreation and classes is headed up by Activity Director Cathy Hepler. Members are kept informed about these events by regular newsletters and calendar reminders.

For adults, there are bridge classes and competition, painting, exercising, yoga, arts and crafts, theater and concert parties, lectures, fashion shows, movies and ski trips.

A child day care center for ages one and up is available Monday to Friday, 8 a.m. to 6 p.m.

The summer youth program in-

cludes horseback riding, sailing, roller skating, bowling, ballet, macramé, bachelor survival courses, baton and cheerleading classes, charm and modeling courses.

They all add up to the reason Heather Ridge is such an attractive way of life, why people of all ages move to and/or join such a club. Golfers and non-golfers alike can appreciate the good life as described in this Heather Ridge brochure:

"We've created a place for you here that's unlike any other country club in Colorado. Heather Ridge has been built on the basic premise that trees are prettier than cars; that grass is nicer than pavement; that a good time is always twice as good when it happens in beautiful surroundings. . . . Add the sheer physical exhilaration of a hard-won game of golf or tennis or a sun soaked afternoon of relaxation . . . and you'll know what makes Heather Ridge a very extraordinary place indeed." □



Tennis at Heather Ridge is inexpensive and popular, and players are well served by this attractive shop.

THE HISTORY AND FUTURE OF HEATHER RIDGE

The original plan called for Heather Ridge's 320 acres to be used for rental apartments. Market studies made in the late 1960s showed that more apartments would be needed in Denver, so the community was planned to accommodate 4,000 units in 135 buildings.

In the last two years the market changed. After 741 apartments were completed—about 90 per cent rented—the original plans were revised to include townhouse development. Future construction, phased over the next five years, will be geared solely to townhouses.

Of the first section of 176 townhouses, 90 per cent were sold before

completion. Advertising was minimal. More effective was word of mouth promotion of the new concept with lots of amenities at low prices.

Prices for townhouses range from \$23,000 to \$29,000 for smaller units in one section, to \$33,000 to \$45,000 for large units in another. Units facing the golf course fairways cost \$4,500 more than those off the course. Monthly apartment rentals go from \$186 for a buffet unit to \$575 for a three bedroom unit.

One unique feature of the community plan is the grouping of "neighborhoods" for residents with similar interests. Each will have its own swimming pool and barbecue/picnic area. Some will even have children's play areas.

By 1978 Heather Ridge will house about 15,000 people, predicts Howard Farkas, president of Environmental Developers, Inc., the owner. Affiliated with Transunion Corp. of Chicago, EDI is building seven other new communities, including two in Chicago and one in Phoenix.

More than \$100 million will be spent at Heather Ridge by the end of the decade. Future amenities will include a shopette, movie theater and ice skating rink. More than \$2 million was spent even before the first apartment was occupied. The designed team was made up of three engineers, land planner, architect and golf course architect Richard Phelps of Denver.



FOURTH ANNUAL SOUTH CAROLINA TURFGRASS CONFERENCE, Clemson House, Clemson, S.C., July 10-11.

CMAA CONTINUING EXECUTIVE EDUCATION PROGRAM, Advanced Management Techniques, Denver, July 16-18.

OHIO STATE UNIVERSITY TURFGRASS FIELD DAY, Columbus, Ohio, August 7.

CMAA CONTINUING EXECUTIVE EDUCATION PROGRAM, Personnel and Motivation Management, Haverford, Pa., August 13-15.

RHODE ISLAND TURFGRASS FIELD DAYS, University of Rhode Island, Kingston, R.I., August 22-23.

TURF AND LANDSCAPE DAY, Ohio Agricultural Research and Development Center, Wooster, Ohio, September 11.

MICHIGAN TURFGRASS FIELD DAY, Michigan State University, East Lansing, Mich., September 13.

TURFGRASS FIELD DAY, Ornamental Horticulture Research Center, Urbana, Ill., September 18.

PROFESSIONAL GROUNDS MANAGEMENT SOCIETY ANNUAL MEETING, Wilson Lodge, Ogelbay Park, Wheeling, W.Va., September 19-22.

MIDWEST TURF FIELD DAY, Agronomy Farm and Campus, Purdue University, West Lafayette, Ind., September 24.

YOUTH from page 27

play golf should be regarded as the sole motivation for youth golf enthusiasm.

Hebron has had a large measure of success with his golf camps at Smithville Landing. "Kids meet here one day a week for eight weeks. We don't want to saturate their interest with too rigid a program. Our classes run from 12:30 to 5 p.m., and they have plenty of time to fish or do other things.

"Being natural hams, they particularly like to view the periodic films we take of their progress. We try to keep the fee for our summer camp to the minimum we can function with (\$50)."

Hebron regards his youth program efforts as an investment in the future of golf as well as a bid to motivate juniors to participate in a worthwhile sport. "They benefit and golf benefits. The player and the sport are the same," he says.

Hebron urges the establishment of more inexpensive clinics, the financing of which could come from private sponsors. "The main thing is recruiting interested people to get these sponsors and follow the programs through. People will often give money but not their time. We need both."

Jimmy Jackson is another man who has not been selfish with his time. This fall he is again scheduled to teach golf to underprivileged youngsters through a series of clinics at six junior high schools in New York's South Bronx, one of the most depressed areas in the city. (See article appearing on p. 34.)

The National Golf Foundation published this year a booklet, authored by Gary Wiren, educational director of the Professional Golfers' Assn., wherein he stated the NGF feeling about youth and the future of golf: "Junior golf means working with young people, and working with young people means an opportunity to shape the future of golf.

"Qualities such as courage, perseverance and self control," Wiren continues, "which are elemental parts of achieving playing success, are values which can be strengthened in the youngster's character under competitive golf situations."

Wiren also stresses that the teaching of golf skills makes juniors enjoy the game more.

GUIDELINES

It may prove beneficial to country clubs in evaluating the strengths and weaknesses of their junior programs to ask themselves the following questions:

- 1) Does our golf course have a regular junior day or morning that is scheduled each week during summer months?
- 2) Do our juniors have an organization with a statement of purpose?
- 3) Is there a schedule of events or seasonal program for the juniors that is posted or printed?
- 4) Are lessons or clinics offered on regularly junior players?
- 5) Is there a substantial weekly junior turnout at our club?
- 6) Is there an area, a room or a bulletin board set aside specifically for juniors?
- 7) Is there an active junior golf committee at our course, which is representative of the adults, the directors or owners, the golf course staff and the junior players?
- 8) Are our juniors required or given an opportunity to take tests in skills and on rules and etiquette to achieve certain privileges at the course?
- 9) Does our junior program produce players who participate on high school golf teams or who distinguish themselves in district or state competition?
- 10) Does our golf course hold an annual junior championship for its own players?

It should be remembered that the single most important component in a successful youth program is the dedication of the adult club coordinators.

It would be unfair not to report that there are those in the industry who have expressed doubt that junior membership drives and special rate stimulants for young adults will be productive as a device to fill the member rolls of the future.

The future of the golf industry and country club life is hard to predict, but one thing seems certain: Little can be hurt by taking a hard look at successful clubs and implementing what appears to work. □



LAURA BAUGH, who won the women's U.S. Amateur title in 1971 at the age of 16, has joined the Wilson Sporting Goods Advisory Staff as well as GOLF Magazine's panel of instruction editors.



Baugh

MICHAEL W. ABRAMS has been appointed territory manager of Dunlop Tire and Rubber Corp. Abrams will be responsible for the sales and marketing in eastern North Carolina.

JERRY BRANSFORD has been named western turf sales manager for Rain Bird Sprinkler Mfg. Corp., Glendora, Calif. Bransford has been with Rain Bird since 1970 as a district manager and has had 16 years of prior experience in the irrigation field.



Bransford

RICK HARDIN has been added to the sales organization of Richard E. Hardin & Sons, Needham, Mass. Hardin & Sons is the New England representative for Wigwam Mills, Inc., of Sheboygan, Wis.,

makers of sport socks and knit headwear. Rick Hardin will service accounts in eastern Massachusetts and Maine.

TOM WENTZ and FRAN BERDINE are the new ProTurf technical representatives who will be working with Mid-Atlantic golf course superintendents. Wentz replaces Don Ord in western New York. Berdine replaces Jim Rosco in northern New Jersey.

A.D. DEGIDIO has been appointed vice president-general manager for Toro Pacific. DeGidio will be in charge of three Toro-owned distribution facilities in California: at San Francisco, Los Angeles and San Diego and the irrigation branches of Santa Ana and Riverside, Calif. DeGidio currently is vice president general manager for Toro's Turf Products Division and will carry the dual responsibilities until a replacement is found.

HOBART C. PORTER, extension urban soils specialist at Virginia Tech, has retired, after 38 years of active service to his native state of Virginia.

FREDERICK B. LEDEBOER will head the Department of Agronomy and Research of Lofts Pedigreed Seed, Inc., Bound Brook, N.J. Dr. Ledebor becomes a vice president responsible for proprietary turfgrass and research development activities.

THOMAS CHRISTY JR., has been appointed vice president marketing for the Pipe & Plastics Group of Certain teed Products, Corp. Christy joined the Pipe & Plastics Group in 1972 as general marketing manager.

ROBERT L. PILLER has been appointed district sales manager for Cushman Motor's golf and turf vehicles and Ryan turf equipment. He will be responsible for the area including Washington, Oregon, California, Montana, Idaho, Utah, Colorado, Arizona, New Mexico, Wyoming, Nevada and western Canada.



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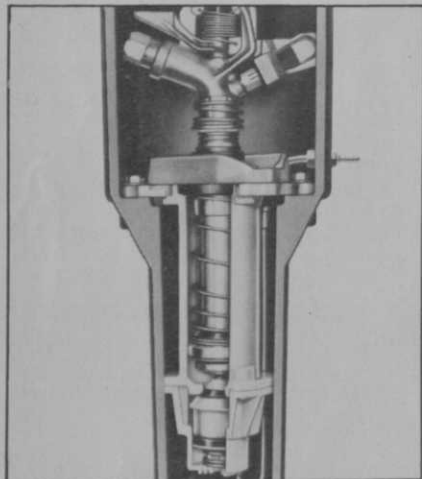
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For more information circle number 154 on card

RAIN BIRD SPRINKLER MFG. CORP. presents the new Stopamatic valve in head rotor sprinkler, which eliminates drainage through low sprinkler heads in systems when the water is turned off. This rotor is ideal for golf course applications. The valve is located at the base of the rotor, yet is easily removed from the top of the case for maintenance. The valve prevents line surges by keeping the line filled with water and increases the life of sprinkler components. In addition to the added feature of the valve, the rotor is equipped with a patented wiper seal that cleans the rotor stem each time the head operates to prevent the head from sticking in the raised position. Improved range nozzle gives maximum distance of throw, and double slotted spreader nozzle increases uniformity. Rotor also provides positive rotation, minimum pressure loss and easy field maintenance.

Circle No. 101 on reader service card



RYAN TURF EQUIPMENT presents the new Greensaire II aerator, which is said to aerate an average size green in less than one hour. According to the company the Greensaire II can remove about two cubic yards of soil and thatch per 5,000 square feet. Its lubrication system recirculates the grease, eliminating lubricating the aerator after each green. The aerator has four sizes of coring tines.

Circle No. 102 on reader service card

EXEL INDUSTRIES, INC., presents the Hustler mower with dual hydrostatic transmission that lets the operator to mow around trees, under bushes and along walls without time-consuming gear shifting or



clutching. It cuts a 72-inch swath at infinitely variable speeds and can mow up to four acres an hour. Attachments include dozer, sweeper, snowblower and flail mower. The Model 272 as well as the hillside model 360, which stays level on slopes as steep as 30 degrees, are both now available.

Circle No. 103 on reader service card

UNIROYAL, INC., SPORTING GOODS DIVISION features golf balls in a can—a packaging first for this product. The program, created by New York design consultants Gerstman and Meyers, Inc, involves new graphics for the four packages of the Uniroyal dealer line, new physical packaging and new displays for shelf and counter selling. The four products in the line—representing balls of different qualities—emphasize the Uniroyal name as a unifying factor, with each package color-coded to distinguish it from the other three.

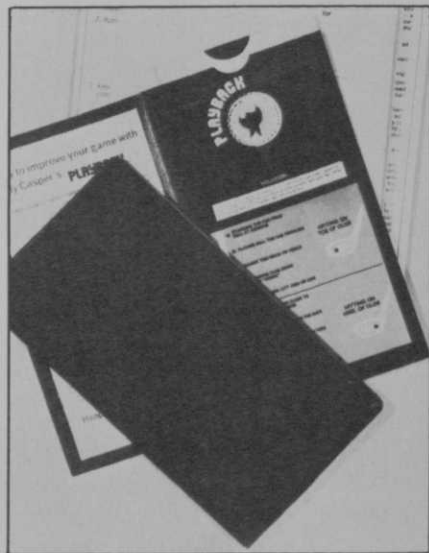
Circle No. 104 on reader service card



PERRYGRAF, a division of the Nashua Corp. has unveiled a new format in designing and marketing its Slide-Charts with Playback, a successful golf teaching device made for Billy Casper and Educa-

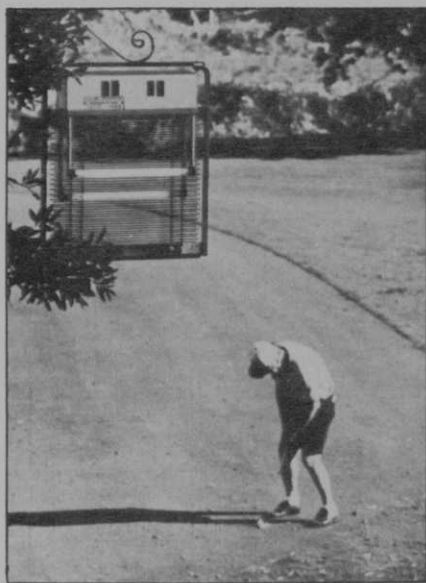
tional Golf, Inc. The Playback, produced by Educational Golf, Inc., uses a Slide-Chart Playback Analyzer, which, in conjunction with adhesive impact markers fixed to the face of a golf club, tells how to correct 22 common errors in the golf swing. The kit, including slide-chart, markers and Billy Casper's "Helpful Hints on Driving," comes in a handsome wallet case. The company states that these Slide-Chart Packages can involve almost any combination of slide-chart and supplementary materials. Their service includes the design of the total package as well as its manufacture. In addition to wallet-type container, the Slide-Chart Packages can also be put together in box, can, book, file folder, desk or counter holder.

Circle No. 105 on reader service card



GARDNER MFG. COMPANY provides a series of Model AG-360 units which, when located in strategic areas of a 24-hour golf course, attract flying insects through the use of fluorescent "black light" lamps, and the insects are electrocuted on the killing grids. The use of Gardner units completely eliminates the necessity of spraying for flying insects, which is not only ineffectual but can be hazardous to desirable wildlife and humans. A bonus is the fact that the harmless dead insects attract a large number of birds that feed on the dead insects, while also eating live insects during the daylight hours. Operating costs of the Gardner units are figured at pennies a day. The units

are ruggedly built of heavy-gauge aluminum for outdoor use and will provide years of low-cost, trouble-free service. Circle No. 106 on reader service card

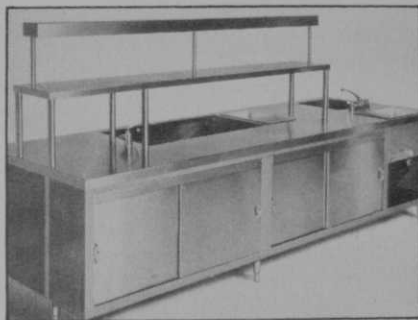


GOLF TECH, INC., distributes Golf Alarm, an electronic theft alarm that attaches to the golf bag and is set off by any slight movement of the bag. A built-in electronic motion sensor can detect the removal of a single club from the bag. When it does, the alarm emits a strong, very loud alarm, which will continue its piercing signal until the owner turns it off with the key provided. Two AA Penlite batteries power the unit which retails for \$19.95. Circle No. 107 on reader service card



DUKE MFG. COMPANY now offers the industry's first mass-produced and economically priced Chef's Unit. The same benefits of flexibility and engineering excellence, available in costlier, custom-made units, are available in the new Chef's Unit. Regardless of an individual chef's needs the Unit can be modified and adapted to fit special requirements. The unit is

available in either stainless steel or paint grip steel with baked on hammer-finish gray silicone enamel. Its one-piece body can incorporate plate storage cabinets, sliding doors, overhead shelves, sink with faucet, refrigerated sandwich unit, hot food well, soup station, sliding trays and other customized features. Circle No. 108 on reader service card



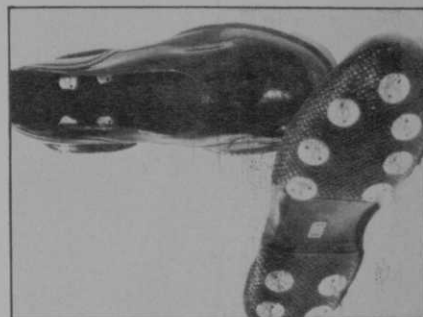
INFOTAPE, Div. of Continental Dynamics, Inc., offers Exercise and Your Heart in tape cassette or eight-track, which is an exercise program by a well-known heart specialist that uses golf and other sports. Information on how to take care of the heart, relating to exercise, also is included on the one-hour tape. It retails for \$9.95 and is being distributed only through pro shops. Circle No. 109 on reader service card



FORD MOTOR COMPANY presents its new Model 6500 tractor-loader-backhoe. The highly maneuverable 6500 can be ordered without the backhoe and used as a loader only with factory-installed weights replacing the backhoe

unit. Powered by a 70 net-flywheel diesel engine, the 6500's heavy-duty backhoe has a dig depth of 15 feet, 7 3/4 inches, a loader lift capacity of 5,000 pounds and 10,000 pound breakout force, and more than 15,500 pounds of working weight. Optional on the 6500 is an all-weather cab with heater and safety frame. Circle No. 110 on reader service card

WAUKEGAN OUTDOOR PRODUCTS now has available Dri-Foot Golf Rubbers for use when heavy dew or rain blankets the course. These attractive rubbers fit easily over street shoes and have seven sturdy steel golf spikes in the sole and four in the heel. All are replaceable. The new rubbers are available in sizes 7 through 13, with no half sizes, and retail for \$9.95. Circle No. 111 on reader service card



REYNOLDS FOUNDRY AND MFG. CORP., Sprinkler Division, is featuring its full- and part-circle solid brass impulse sprinklers and its aluminum stake combination. They are made in various models with adjustable diffuser screws, deflector shields, capable of watering up course areas to 80 feet in diameter. Circle No. 112 on reader service card



WITTEK GOLF RANGE SUPPLY COMPANY, INC., has a new golf club

continued

PRODUCTS *continued*

washer in its 1973 line that is designed to speed up the job of cleaning member's clubs, thus reducing labor costs. The unit has rotating, interlocking nylon brushes for cleaning irons without damage. Contoured wood cleaning brushes clean sole plates, faces, toes and heels in simple operation. Wittek's super club washer requires only 1½ square feet of floor space and operates on a regular 110-volt outlet. All working parts are rust resistant, and the tank holds 2½ gallons of water and has a drain outlet. The cabinet has a baked enamel finish. The unit sells for \$290 for the standard model, and with a coin-operated device is \$365.

Circle No. 113 on reader service card



F. E. MYERS & BRO. COMPANY, Div. of McNeil Corp., launches a new field sprayer, Model F42, which according to the company, effectively covers up to 300 acres a day with a two-side, 80 foot spray swath (40 feet each side), and features a 42 inch axial flow fan, 500-gallon tank and Myers 2C95 two-stage centrifugal pump, which delivers 200 pounds pressure.

Circle No. 114 on reader service card



POA *from page 47*

deficiencies exist. Germination and establishment of annual bluegrass from seed most commonly occurs in late summer. The superintendent, therefore, should accomplish most soil cultivation and vertical mowing operations, which disrupt the surface shoot density, in the spring when annual bluegrass seed germination is minimal. Using the more competitive cultivars also should be considered (Figure 2).

The cultural practices utilized by the superintendent to restrict annual bluegrass may not be totally effective, but if used properly they can go a long way toward limiting the annual bluegrass population.

Chemical control. A number of herbicides are phytotoxic to annual bluegrass, including benefin (Balan), bensulide (Betasan), calcium arsenate, endothall and DCPA (Dacthal). (Lead arsenate effectively controls annual bluegrass on bentgrass greens with better selectivity than the above five, but is not economical for extensive fairway turfs.) Unfortunately, all five herbicides lack the selectivity desired on bentgrass fairways for successful use. The margin of safety of the rate of herbicide needed for controlling annual bluegrass and the rate at which toxicity to the desirable species occurs is fairly good for Kentucky bluegrass and bermudagrass, but very narrow for creeping bentgrass.

The specific soil, environmental and cultural conditions that affect the degree of phytotoxicity to the desirable species is not well understood for these herbicides. We know that injury to the desirable species from inorganic arsenicals is more likely to occur (a) at acidic soil reactions, (b) under poor drainage conditions, especially finely textured, compacted soils (c) high soil phosphorus levels and (d) where creeping bentgrass is the dominant species. Unfortunately, similar information is not available for the other herbicides, because they have not been used as extensively or for as long a time as the arsenates.

Because of the uncertainties of potential phytotoxicity to desirable species, the following approach should be followed by those superintendents contemplating the chemical control approach for annual blue-

grass. The superintendent should test one or more of the herbicides on a small plot on one or more selected fairways that represent the conditions existing on the golf course. A 50- to 100-foot width across several different fairways will serve this purpose. This limited trial program should be conducted for three to four years to (1) give the superintendent the chance to learn how to properly use the herbicide, (2) obtain information concerning the effectiveness of the herbicide in selectively controlling annual bluegrass under the specific conditions on the golf course and (3) assess the potential phytotoxicity problems that may occur to the existing perennial species.

His evaluations over three or four years, will allow the superintendent to decide which one of the herbicides is most effective in controlling annual bluegrass without phytotoxic injury to the desirable species.

It is impossible to give a specific recommendation about whether to encourage or to control *Poa annua* that will apply to all golf courses. The previous discussion was presented to provide a basis for the superintendent's decision. If the superintendent chooses to use chemical control, he must bear in mind that the lack of information about selectivity and the extent of phytotoxicity suggests that an extensive chemical control program should not be initiated at this time on golf course fairways in the cooler regions where the dominant species is bentgrass.

On bermudagrass and Kentucky bluegrass fairways, a chemical control program should not be initiated without a small plot trial evaluation period under the specific conditions on the golf course under consideration. Also, renovation or reestablishment should be considered as an alternative by the superintendent on turfs containing predominantly annual bluegrass before the selective preemergence herbicide program for annual bluegrass control is initiated.

Most probably, the approach used by the majority of golf course superintendents is a combination involving cultural practices, which discourage annual bluegrass to a certain extent, but concurrently taking steps to minimize extensive loss of the existing annual bluegrass environmental stress. □