Planning for irrigation modernization

by Jack R. Donis

The pumping plant is the heart of the system. Superintendent Sonny Faust had this one installed when modernizing his irrigation system at Southern Hills CC in Tulsa.

It is safe to assume that the golf course owner with a manually operated irrigation system will at some time investigate the possibility of automating the system. And why not? There is much to recommend system modernization and automation. The benefits include: less water usage, less electricity usage, the potential for better turf through better control of the growing environment, less labor input, less disruption of play. A good turf irrigation system — tailored for the specific course — is one of the few turf maintenance tools with the potential to return the initial investment.

The planning phase of a golf course irrigation system modernization project is unquestionably the most important. The proper questions asked — thoroughly investigated and correctly answered — will, to a large extent, determine what the system will be in terms of the materials selected and in their eventual placement. Also, it will have considerable influence during the design phase.

The planning phase is the information-gathering phase. Do not confuse the planning of the system with the design of the system. These are two distinctly different operations. If the planning phase is thoroughly done, then the subsequent design will be: 1) easier to complete, 2) more realistic, and 3) more useful and practical. This thoroughness must include all phases of the system.

Too often there is a tendency to look upon system modernization as a process of selecting sprinkler heads, control valves, and a control system, and to forget about such things as the pumping plant — the heart of the system. The pumping plant, whether as a pressure booster or as the primary source, must keep pace with the changing system. Indeed, full utilization of the new system is usually dependent upon a revised and redesigned pump plant. The two go hand-in-glove. The multiple pump approach gives the greatest amount of system flexibility. Properly engineered, this approach can provide several advantages for the superintendent, including constant main line pressure to facilitate certain maintenance functions such as filling spray tanks and spot watering syringing. Additionally, the constant pressure system will make life easier for the total system by eliminating pressure surges and entrained air.

Also, the modern automatic system will generally require cleaner water than was used in the old system. Many older systems incorporate large nozzle sprinklers at high pressure — usually 90 psi and higher. This type of system might simply "blow out" particles of dirt and debris that are permitted to enter the piping system. Most automatic systems will incorporate at least some sprinklers, usually around the greens and on the tees, having smaller nozzles that will not pass this debris. Additionally, most automatic control valves have very small internal ports that are even more sensitive to water quality than sprinkler heads.

This most vital aspect of system modernizing must be considered early on. Even if a modernization project is to extend over a period of years, the water quality is important the very first year!

The potential usefulness of the existing mainline and fittings must be thoroughly evaluated. Pipe and fittings for a complete new system can total up to a third of the total cost. It should be determined how much of these, from both a practical and a hydraulics standpoint, are usable in the new system. Keep in mind, however, that marginally useful pipe and fittings should not be used. There are numerous areas involving false economy with irrigation systems. Very often the dollar saved today will develop into a 2-dollar expense at a later date. With components that are as costly and difficult to get to such as pipe and fittings, do not gamble on the usefulness of existing materials.

Too often the system modernization work is "figured out" by a materials supplier whose interests seldom extend beyond the "getting the order" phase of the job. While many such firms do have qualified personnel, it really is not reasonable to expect them to invest the time necessary to make the complete project workable. Irrigation system modernization is much more involved than simply purchasing materials!

Do it right from the beginning

Very often the course owner has very limited information about the system that needs modernizing. Highly useful and, more often, essential information includes:

1) A current aerial photograph of the course. Photographed to provide a 100 scale picture, this is much more satisfactory than using outdated plans and maps. Golf holes change over time depending upon how they are played. Mowing patterns will change the way a hole is played and consequently the areas requiring irrigation have changed. When the aerial photograph is taken is an ideal time to devise a highly visible marking system for locating "in-the-ground" site features such as utilities, drain pipe systems, gate valves, pipe, quick coupling valves, etc.
2) A topographic map of the course. Knowing elevation differences will significantly affect the location of system components. If these elevation differences are known during the design phase, then the design becomes just that much more useful and realistic. Additionally, it is obvious that system hydraulics will be greatly affected by elevation differences. These matters should not be guessed at.
3) Electrical power. Sources and availability of electrical power for use on the course are necessary; particularly with the advent of centrally programmed systems, where

---

Jack Donis has been a golf course irrigation systems designer for 16 years, the last 2½ years in professional practice as an irrigation consultant. A graduate of the University of Oregon School of Landscape Architecture, he has taught irrigation design and worked as an irrigation systems installer.

the coordination of the power source for the central programmer and the field controllers is necessary.

4) Water data. Complete information about the amount, the quality, and the water pressure if known is very important.

Not only does the owner seldom have this information readily available, he is sometimes reluctant to take the time and/or spend the money to develop this preliminary data. It should be pointed out that the quickest way to have a potentially disastrous outcome is by not having as complete as possible information when starting. Under the best of circumstances there will be inevitable unforseen problems; attempting to reduce these to a managable level is the whole idea behind the planning phase.

Many times it is the owner's wish to proceed with system modernization on a phased basis. Often this involves beginning with the greens and tees automation: a portion of these one year and a portion in each of the following couple of years. The conventional thinking too often is that because the work each year is not very large or significant, an overall plan is not required. This type of thinking is not only wrong, but it ignores the more important point of where do we ultimately want to be. It is essential on a phased conversaion type job that what work is done today must be usable as the work progresses over the years. This is most important for pipe and wire sizing. Having the plans and the "work-completed-to-date" information being carried around in the head of a superintendent, who could be gone on short notice, is a very poor way to manage an investment that could easily reach $200,000 or more.

System modernization projects, more so than new construction, often end up being do-it-yourself jobs. The owner should be fully aware of the magnitude of this method. If his superintendent has done this type of work previously and understands the system proposed, then this way can work out quite well. And it is fair to say that many times the inexperienced superintendent can successfully tackle the job, if he does his homework and is vitally concerned. Also, a lot depends upon the complexity of the system. A less complex system would naturally be easier to understand and probably easier to install.

I have seen systems go in the ground under many different arrangements. My personal feeling, however, is that the course owner is better served by having a truly qualified irrigation contracting firm effect the installation. There are no disadvantages to doing it this way if the contractor is qualified and cares! From the owners standpoint, this way will cost more money. However, when we're dealing with complex systems and hundreds of thousands of dollars it seems best to entrust work of this magnitude to highly qualified professional installers. Let them solve the problems; let them take the responsibility. The successful installation of 800-plus sprinkler heads, 250-plus control valves, 50 miles of wire, and a complex control and pumping plant are really best left up to truly qualified individuals and firms.

This does not mean that the superintendent should become a totally disinterested party; to the contrary, as the person charged with operating and maintaining the system, he must be keenly aware of all aspects of the system and of the installation. The smart superintendent is out with the contractor all the time observing what is going on, as well assisting in major decisions affecting *his* golf course.

Design the best possible

Earlier I made the point that system modernization involves much more than simply buying sprinkler heads, automatic valves and control system. I want to emphasize this point by stating that a truly versatile, workable system has built into it what I call refinements. These refinements are not "gold plating," but are so often essential pieces of equipment. I am referring to such things as pressure reducing valves, air and vacuum relief valves, pressure relief valves, main line check valves, main line isolation gate valves, etc. These are the hardware items, where needed, that can elevate a good irrigation system to a truly versatile maintenance tool. These items must be planned into the system. Their absence, where required, can lead to very expensive repair both to equipment and to the golf course itself.

In system modernization it is advisable to plan for, or to design for, the maximum condition. It makes little sense for a system to be adequate for anything less than 100 percent of the time. Here in the Willamette Valley, until maybe 7 or 8 years ago, the conventional thinking was that if a system could provide one inch of water per week for turf that would be enough. Well, it took a few jobs and additional observation and input to prove that that was simply not enough water to carry a golf course through our summers. We now know that we must at least provide for the ability to apply a minimum of 1½ inches per week. Why let the golf course burn up during those months when the income potential and rounds played is the highest?

Most geographical areas that I am familiar with experience a lessening of wind velocity during those hours normally assigned for operating the automated irrigation system. However, not all areas are like that. Many areas experience a night time continuation of high velocity daytime winds. This condition must be taken into account in the planning phase if a truly workable system is to result.

Always plan to satisfy the maximum critical condition.

Once the planning/information gathering phase has been completed, the design phase can begin. With thorough information the designing of the system becomes, essentially, an exercise in product application. It is necessary for the designer to have first-hand knowledge of the various products available so that intelligent decisions and selections can be based upon an assessment of what is best for a particular situation. In the irrigation industry, this type of objective thinking can best be made by a professional with only the best interests of the owner/client in mind.

In elemental terms, an automatic irrigation system is the way to apply water WHEN (time) and WHERE (place) it is required. Recreational turf areas usually have a time period within which to complete the irrigation. The amount of time allotted will directly affect two important factors: the amount of water required, and the cost of the system. As the time available for irrigation decreases, the demand on the two above factors increases.

The following three statements are good to keep in mind during the planning phase:

1) Use equipment constructed and intended for your application.
2) Never exceed any manufacturers recommended maximum spacing pattern.
3) Attempt to "go for lower", i.e. "lower pressure= lower precipitation= lower cost."

With proper planning the design process can be made simpler, and the end result—the installed system—will be a more effective turf maintenance tool. □

fine, finer, finest

EVERYWHERE

THE BEST SEED SHOULD DO MORE THAN GROW GREEN GRASS

Acclaimed throughout the world, ADELPHI Kentucky Bluegrass seed has been a top performer in density, disease resistance, drought, heat, cold and is completely free of noxious weeds. ADELPHI, a first generation apomictic hybrid, has been chosen by the Plant Variety Protection office in the U.S. Dept. of Agriculture as the standard green color which all other bluegrasses applying for plant protection will be compared to. For uniformity in turf growth, for thicker, greener grass insist upon the best. ADELPHI

For information, contact:

J & L ADIKES, INC.
Jamaica, N.Y. 11423

JONATHAN GREEN & SONS
Farmingdale, N.J. 07727

NORTHRUP KING CO.
Minneapolis, Minn. 55413

VAUGHAN-JACKLIN CORP.
Bound Brook, N.J. 08805
Downers Grove, Ill. 60515
Post Falls, Idaho 83854

Canadian Inquiries: **ROTHWELL SEEDS LTD., Box 511, Lindsay Ont. K9V 4L9**
Other International Inquiries: **NORTHRUP KING CO., Minneapolis, Minn. 55413**

Adelphi

(U.S. Plant Patent NO. 3150)

THE GREENER KENTUCKY BLUEGRASS

Getting the most out of grass and weed trimmers on the golf course

Probably the hottest product on the market in consumer lawn and garden lines the past few years, the flexible-line trimmer has also proven to have broad application in professional turf maintenance and has become a widely used tool on the nation's golf courses. Convenience and safety are its selling points.

The flexible-line trimmer normally has no wheels, but this is the feature that gives it great versatility. Its cutting line will cleanly trim grass and weeds, but yet will not cut through shoes or clothing or an electric cord. If the line should happen to hit bare skin, it may raise a welt or break the skin, but it will not sever a toe or finger as a steel-bladed mower would.

Reportedly invented by a man using an empty popcorn can and a length of fishing line, the flexible-line trimmer has been on the market in the United States since the early '70s. Its principle is simple: an electric motor or a small gasoline engine spins a length of monofilament cutting cord at speeds up to 12,000 revolutions per minute. Most trimmers carry extra line on a reel in the head, and the user pulls out more cord as it is shortened by use. Some models have devices to automatically feed out a new length of cord when the trimmer head is tapped on the ground; most have a built-in cutting edge to trim the cord to optimum cutting length.

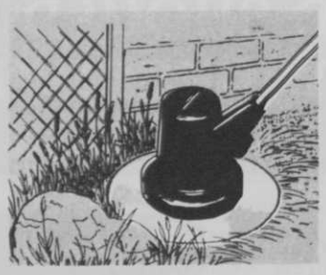
Just as the cutting cord will not mutilate the user, it also will cut right up against concrete, rocks, walls, wooden fence posts, or sprinkler heads without cutting, chipping, or otherwise damaging them.

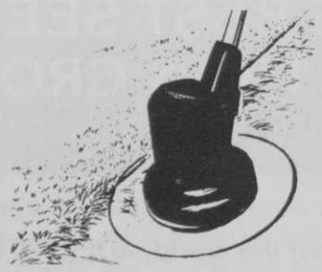
Gasoline-powered trimmers are usually larger, heavier, and more expensive than electric models — but they are not tied by a cord to a power source and, therefore, can be used anywhere on the golf course. Electric models are somewhat cheaper to purchase and operate, and they can easily be used to trim in the vicinity of the clubhouse, pro shop, or maintenance building.

Uses around these buildings are probably familiar to most superintendents: trimming grass and/or weeds along the walls of buildings, under and around fences, along flower beds, and around trees. The trimmers will also edge grass along walks, patios, driveways, parking lots, and golf car paths. Another use that many greenkeepers may not have thought of: controlling ivy and other ground covers.

Out on the course, maintenance workers can trim right up to trees and fence posts, ball washers, pipes, drinking fountains, and sprinkler heads. They can also use the flexible-line trimmer to put a neat edge around sandtraps and water hazards.

Because of the direction the cutting cord spins, most flexible-line trimmers should be used to trim from right to left to throw dust and clippings away from the operator. For most trimming chores, the cutting head should be tilted to the left at about a 30-degree angle.





Edging along hard paved surfaces requires a slightly different technique. Although conventional blade edgers dig a small trench along the edge of the pavement, an alternate method is to let the grass grow over the trench, then trim it by skimming along the top of the pavement with the flexible-line trimmer.

Holding the cutting plane parallel to the ground, the trimmer can be used for mowing — although it's not comfortable or practical to do large areas this way. Two ways are worth considering for golf course maintenance, however. One is to closely crop the grass around trees, bushes, and posts. This gives a neat appearance and doesn't have to be repeated as often as light trimming. The other mowing application, possible with some models, is on steep banks of bunkers and hillsides where it is difficult to use a conventional mower.

Manufacturers stress the importance of **not** pulling out and cutting with a length of cord longer than that recommended for your particular make and model of trimmer. Doing so can overload the motor, and the cord can become wrapped around pipes, branches, etc.

While the flexible cutting cord is relatively safe to use, operators should wear sturdy leather shoes, and gloves are a good idea. Because bits of grass or small pebbles can be thrown by the trimmer, operators should wear safety goggles or glasses and should not use the trimmer close to other people. Electrically powered trimmers should not be used in damp or wet areas.

Some manufacturers offer trimmers with special features that enable them to perform tasks in addition to those mentioned above. HMC, for instance, makes some models of its Green Machine with a reduction gearcase at the bottom and optional metal blades that extend use of the trimmer to that of a tree pruner and brush cutter. According to HMC President D. D. Evenson, "This allows the superintendent to clear heavy brush from along fence lines and open fields which are unimproved.

"The brush blade is also excellent for clearing grass along-side ponds and lakes, and also for cutting growth from underwater. The shaft can be placed underwater for cutting with the brush blade. Maintenance should be provided upon completion of this work merely by removing the lower gearcase."

Using the optional metal saw blade on the Green Machine, the superintendent can cut very heavy brush and small trees.

In conclusion, Evenson said, "The reliability of the new two-cycle engines, where backed by appropriate parts and service from the distributor, has made these products some of the most trouble-free pieces of equipment available. This, plus the time saving from use of this tool, has made this a must piece of equipment for the golf course superintendent.

"However," Evenson added, "the superintendent should not attempt to

WEED EATER® GASOLINE TRIMMER/EDGERS.

When they're up against a tough cutting battle, veterans reach for THE ULTIMATE WEAPON: a Weed Eater gas trimmer. For years, these rugged, reliable, and ready-to-go trimmers have engaged the thickest grass, weeds, and brush everywhere. And turned battlegrounds into parade grounds quickly and easily.

There are five different Weed Eater gasoline trimmers. Each armed with a powerful 2-cycle engine. And each is designed with features to complete a variety of grounds maintenance missions. Like the Tap-N-Go line feed on the Model 608. Or the big 4-exit cutting head on the Model 657. Or even the metal blade capabilities on many of the models.

Whatever the mission, Weed Eater gas trimmers will meet the challenge on any battlefront. That's why they're THE ULTIMATE WEAPON. Just ask any veteran.

For a full briefing on Weed Eater gas trimmers, write to: Weed Eater, Inc., P.O. Box 37347, Houston, TX 77036.

THE ULTIMATE WEAPON. COMBAT-PROVEN BY VETERANS.

Pictured left to right: Model 698, Model 608, Model 657, and Model 600. WEED EATER®, Inc., a subsidiary of Emerson Electric Co.

Circle 137 on free information card

"Organize a Junior Golf Program. It's a great place for kids to play a round."

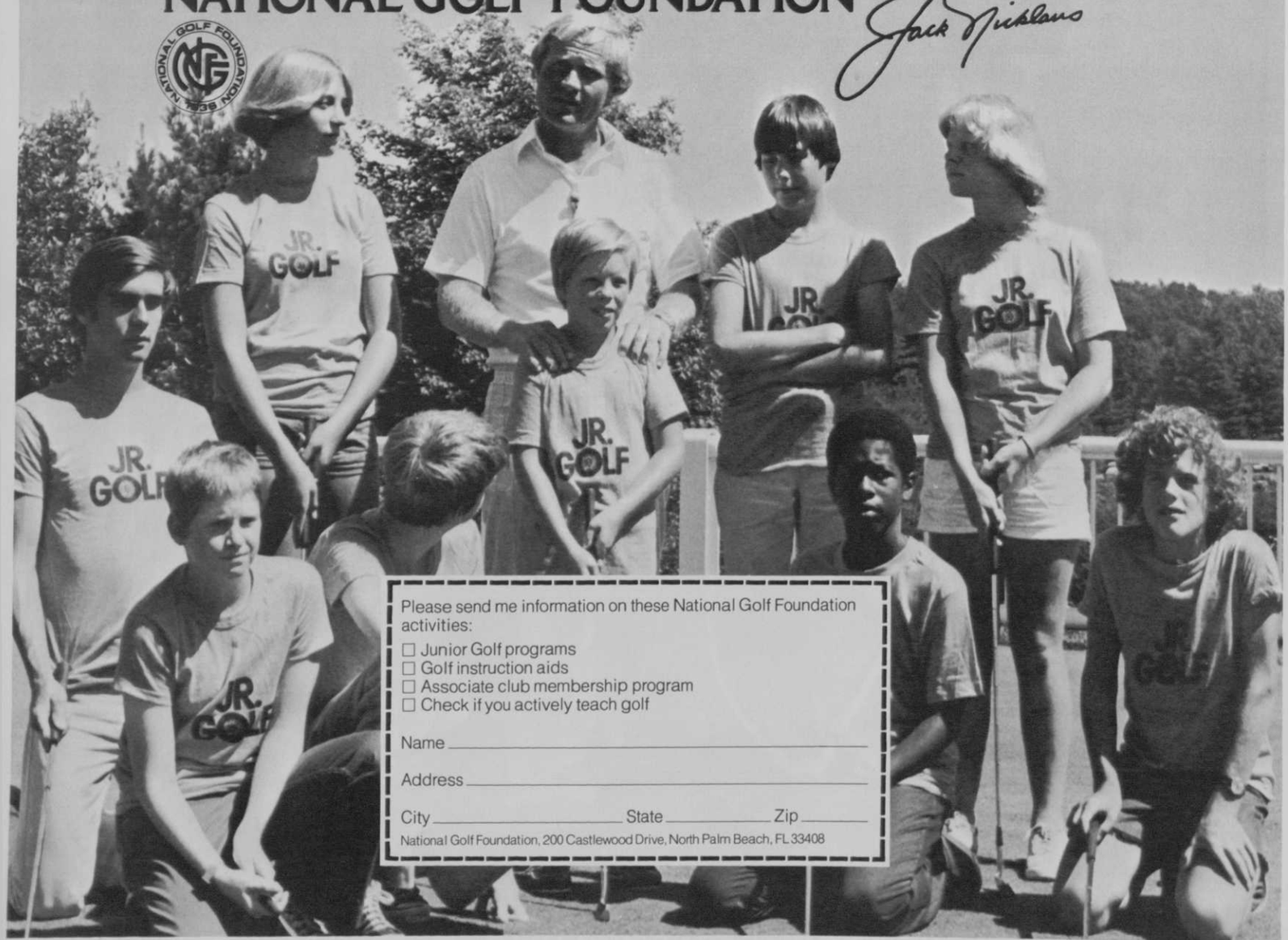
Youngsters have never faced as many temptations and frustrations as they do today. And that's why I think it's particularly valuable for boys and girls to get involved in a sport like golf. It not only gives them a chance for self-expression, but it's a great teacher of self-reliance and self-discipline.

The problem is, most kids don't have an organized Junior Golf program to encourage them and help them learn the game. And that's why the National Golf Foundation is so important.

They've been promoting Junior Golf since 1936. And they'd like nothing better than to help you start a Junior Golf program at your golf club, in your schools, or in your town. I started in a Junior Golf program myself. And believe me, there isn't a better place for a kid to grow up than a golf course.

NATIONAL GOLF FOUNDATION

Jack Nicklaus



Please send me information on these National Golf Foundation activities:

- ☐ Junior Golf programs
- ☐ Golf instruction aids
- ☐ Associate club membership program
- ☐ Check if you actively teach golf

Name _____

Address _____

City _____ State _____ Zip _____

National Golf Foundation, 200 Castlewood Drive, North Palm Beach, FL 33408

Getting the most out of grass and weed trimmers

continued

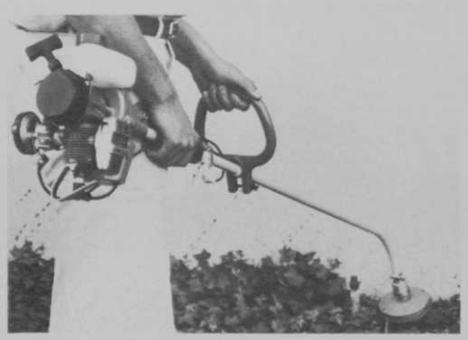
get by with just one machine. An 18-hole golf course should have from four to six units in order for the superintendent to properly achieve the overall beautification and maintenance of his course that is now possible by use of these tools."

To help interested superintendents investigate the possibilities of flexible-line trimmers, the editors of GOLF BUSINESS present below some examples of the equipment now available. For further details on any of these trimmers, just **circle the proper number on the "free information card" in the front of this magazine,** fill in the requested information, and mail the card.

Showcase: grass and weed trimmers

Homelite

Model ST100 gas-powered trimmer features the exclusive "Idle-Line" string advancing system which automatically feeds additional string to the trimmer when the engine idles. With a 1.3-horsepower engine, the edger cuts a 20-inch path and can operate 35 to 45 minutes on a pint of fuel. The trimmer weighs 7¼ pounds and stores up to 75 feet of .095-inch-diameter cutting string. **Circle 232**

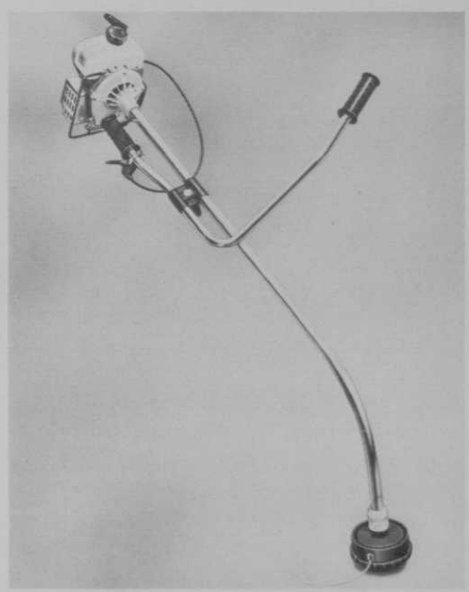


HMC

An economical gas-powered unit, the Green Machine model 1900 string-trimmer features a simple but effective manual-feed cutting head. Other standard equipment includes a flexible enclosed driveshaft and a multi-position molded handle. The machine weighs about 10 pounds and is equipped with a 14.9-cubic-centimeter engine and two .080-inch-diameter cutting strings. **Circle 236**

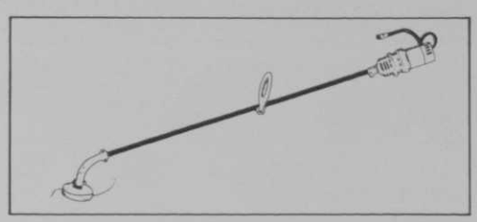
Garden Pro Inc.

Super Spintrim, a gas-powered edger-trimmer, has standard features that include a .164-inch serrated dual cutting line, snorkel air cleaner, and variable speed control with safety stop switch. An adjustable circular handle and a scientifically designed "S" curve shaft provide for lightweight handling. The unit is powered by a 31.11-cubic-centimeter engine. **Circle 237**



Allegretti and Co.

A gas-powered nylon cord trimmer, Paramount model 8021, features a 21-cubic-centimeter Kioritz two-cycle engine. The unit cuts a 17-inch path with a heavy-duty, .080-inch-diameter nylon cord. It also offers automatic line feed, trigger throttle control, and an adjustable shoulder strap which enables the user to keep both hands free during operation. **Circle 239**

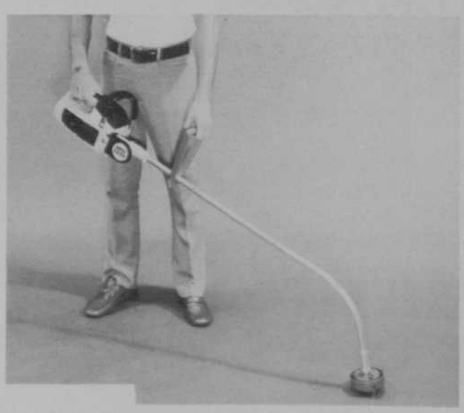


Columbia Products Co.

An electric nylon cord edger, the model 2000EW-2 Grasswand is a 9-pound machine which features a high-speed 1/3-horsepower engine with a specially designed planetary gearbox. The .080-inch diameter cutting line rotates at 6,200 rpm. **Circle 233**

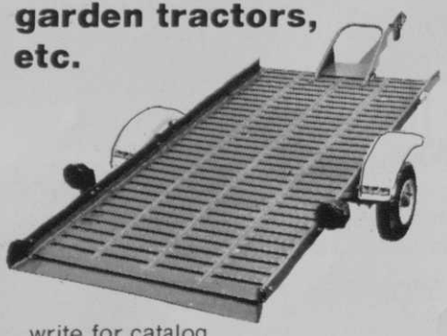
Gielow Co.

Trim-It has been developed for those who would rather push than carry a nylon cord trimmer. The two-wheel upright unit, powered by a 3-horsepower Briggs engine, is particulary useful for trimming sand traps because its patented frame enables the operator to tilt the head in any direction. Reloading the cutting line is fast and easy without the need for disassembly. **Circle 238**



Weed Eater, Inc.

Model 700 Series Nylon-Line Trimmer Attachment converts a lightweight chain saw into a heavy-duty line trimmer. The unit will adapt quickly and easily to the majority of lightweight chain saws currently on the market, providing the superintendent with two versatile tools for a minimum investment. The trimmer attachment weighs 5½ pounds and has a 17-inch cutting width. **Circle 235**



Products

Course telephone system

The 69G golf course telephone system was designed by Tele-Path Industries, Inc. to provide communication between each tee and the clubhouse. Those using the remote station need only remove the handset to be in instant touch with the command station, which automatically identifies the tee from which the call is being made. The unit also features an alarm system which immediately notifies the command station when a remote location fails to operate properly. The system comes complete with manuals for easy installation by regular golf course personnel.

Circle 208 on free information card

Convertible tractors

Gravely, division of Clarke-Gravely Corp., offers a line of two-wheel convertible tractors. With more than 20 attachments, the tractors can perform a number of course maintenance tasks single-purpose units cannot. The tractors offer a variety of features including two or four-speed transmissions with instant forward/reverse in any gear.

Circle 217 on free information card

Backpack power blower

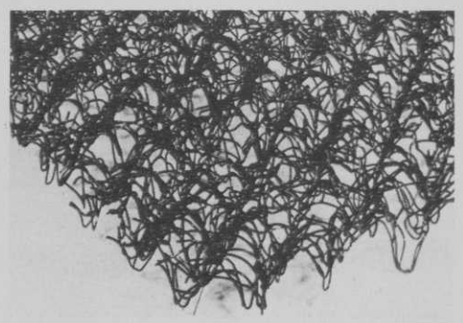
The PB-400 power blower from Echo, Inc. helps clear debris from greens, tees, around the clubhouse, and even miniature golf courses. Powered by a Kioritz two-cycle engine, the unit weighs just 20 pounds and provides 2 hours of uninterrupted use.

Circle 210 on free information card

Rear-mount grasscatcher

A big-capacity grasscatcher mounts quickly and easily, without tools, at the rear of Yard-Man Co.'s line of three 1979 rear discharge mowers. The rear discharge chute will not open until the catcher is in place. The catcher can be left off, if bagless mowing is preferred.

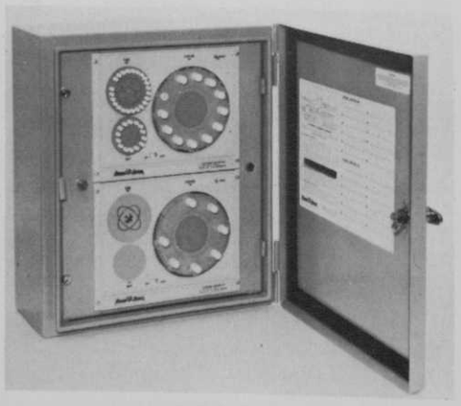
Circle 218 on free information card



Fiber lessens turf damage

Enkamat, from Turfibre Products Corp., is a product that strengthens and stabilizes turfgrass areas. Placed under natural turf sod, this three-dimensional webbing, made of tough surgical nylon, adds fiber and structural strength to grass root systems. Enkamat prevents whole grass plants from being torn from the turf and reduces compaction on tees and other heavy-wear areas.

Circle 231 on free information card



Economy line controllers

Rain Bird Sprinkler Mfg. Corp. makes a modular designed economy line of sprinkler system controllers with 15 models ranging from seven-station dual unit to 23-station individual controllers. All models are housed in heavy-duty metal cabinets with baked enamel finish and gasketed, weatherproof doors, handles, and locks. All controllers in the line provide for starts any hour on the hour except midnight and feature a 14-day calendar wheel.

Circle 211 on free information card

Rubber-fingered sweeper

Jacobsen Manufacturing Co.'s 720E-HL Pull Behind Sweeper picks up everything from wet grass clippings and leaves to cans and other debris. Key to the sweeper's thorough cleanup ability is its patented rubber pickup fingers. Standard equipment includes a 12-horsepower engine and a universal hitch. The sweeper also incorporates a hydraulic system which lifts the hopper to 8½ feet for easy dumping. It holds 5 cubic yards of material and sweeps a 60-inch swath.

Circle 216 on free information card

Low flow loss valves

The 901 Series plastic valves from Johns-Manville Buckner lower automatic irrigation system costs by keeping flow loss to a minimum, cutting down the number of valves required. Plastic construction of the diaphragm valves resists corrosion, and the nonbleed manual operator allows operation of the valve at the valve location without puddling. The valves are available in ¾- and 1-inch models.

Circle 212 on free information card

Classified

When answering ads where box number only is given, please address as follows: Box number, % Golf Business, Dorothy Lowe, Box 6951, Cleveland, Ohio 44101.
Rates: All classifications 65¢ per word. Box numbers add $1 for mailing. All classified ads must be received by the Publisher before the 10th of the month preceding publication and be accompanied by cash or money order covering full payment.
Mail ad copy to Dorothy Lowe, Golf Business, Box 6951, Cleveland, Ohio 44101.

HELP WANTED

MANAGER for 9-hole public golf course. Experience in golf business. Salary open. Send resume to Don Mossor, Pres., North Bend Golf Course, 1313 Pearl Street, Harrisville, WV 26362.

SITUATION WANTED

AGRONOMIST: B.S. Turfgrass Agronomy. M.S. soil fertility. Nine years experience in golf course maintenance, three years as superintendent-golf professional which required supervising, planning, and budgeting grounds operations and operating the pro shop as own business. Desire work as golf course superintendent. Married, 25 years old, excellent health. Resume upon request. Box 184, Golf Business, Box 6951, Cleveland, Ohio 44101.

FOR SALE

VICTORY GRIPS — $8.25 doz.; Gold Crown $9.40 doz.; (4 doz. min. order) whipping-500 yds-$8.50, wood shafts-$1.75 each. Discount Golf, Box 783, Rockville, Md. 20851.

OREGON 9 hole PGA rated course, 2 sets tees, 85 acres, pro shop, lounge, restaurant, snack bar, banquet facilities, locker rooms, club storage, maintenance equipment, two residences. Price $500,000.00, will finance. Charlie Hindman, Joe Brugato Realtors, 2911 Portland Road, Newberg, Oregon 97132. 503 538-2101.

FOR SALE: 1054 acre golf course. One of central Penna. best 18 hole golf courses. 10 years old, must be sold to best offer by March 15, prime development land, scenic, adjacent to state park, 4 buildings included. For information: Michael Kranich, P.O. Box 1109, Altoona, PA. 814 944-4575.

NINE HOLE, par three golf course, club house with snack bar, driving range, lights for evening play, three bedroom brick home. Call Eder Agency, Inc. 816 279-6348 or write Eder Agency, Inc., 621 Francis Street, St. Joseph, Missouri 64501.

FOR SALE: 18 hole golf course, Northern Minnesota, 6500 yards, irrigated, pro shop, golf carts, equipment, bar and restaurant facilities, pool, year round operation. Box 185, Golf Business, Box 6951, Cleveland, Ohio 44101.

MIDWEST: Eighteen hole golf course, watered fairways, club house. Write Fahey & Associates, 809 N. Gilbert Street, Danville, Illinois 61832 for details. Phone 217 443-1660.

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 COURSE AND COUNTRY CLUB PROPERTIES. 15553 N. East St. (U.S. 27), Lansing, Mich. 48906.

MISCELLANEOUS

GOLF CART FLOOR MATS. New nylon reinforced rubber mats for Harley carts $14.75 per set. C.O.D. or send payment to Rice Die Cutting Co., 8831-33 Ave., Kenosha, Wis. 53142.

Advertisers index

golf business

ADVERTISING SALES OFFICES

HEADQUARTERS: 9800 Detroit Ave., Cleveland, OH 44102 (phone 216/651-5500)
RICHARD J. W. FOSTER
General manager

CHICAGO: 333 North Michigan Ave., Room 808 Chicago, IL 60611 (phone 312/236-9425)
JOE GUARISE
Midwestern manager

ATLANTA: 3186 Frontenack Court, NE, Atlanta, GA 30319 (phone 404/252-4311)
RICHARD GORE
Southern manager

SEATTLE: 1333 NW. Norcross Seattle, WA 98177 (phone 206/363-2864)
ROBERT A. MIEROW
Northwestern manager

Reader forum

Certification pro and con

David Harmon's Viewpoint article regarding GCSAA certification (GOLF BUSINESS, Aug. '78) and Mr. Mooney's confirmation of that article (GOLF BUSINESS, Reader Forum, November) are simplistic in nature and fail to recognize the changes in the profession of golf course management.

The past several years have seen many changes in golf course management practices. An excellent understanding of chemical application, recordkeeping, water management, etc. are needed to succeed in today's world of fine turf management. More importantly, the next decade will surely necessitate an even greater understanding of these management practices. To me, it is in this regard that the GCSAA certification program has its greatest merit. Through attaining certification a golf course superintendent proves that he or she has an excellent grasp of not only theoretical management practices, but of practical experience as well. A person must have completed at least 5 years as a superintendent prior to his even taking the exam. Much of what is being tested will surely be known through having experienced many, many turf situations. "A few dollars and some memorizing" will not gain anyone certification status nor does "10 years on any golf course" prove anything other than a person can keep a job, not maintain fine quality turf.

The suggestion that an on-the-job inspection of a superintendent's course be made as part of the certification process is unfair and unrealistic. Such a committee, no matter how objective they propose to be, would have preconceived standards by which they were to judge the golf course. Given today's expectations, these standards would of course be high. Where would that leave the superintendent of an 18-hole course with a $50,000 budget, a crew of three, and unwatered fairways? Fair and comprehensive testing of both theoretical and practical knowledge is the only way!

Future golf course superintendents will have to be highly skilled, well-educated, and tested professionals. If our profession is to attain the acceptance and respect of the golfing public that it deserves, it will gain it only through this type of individual. The superintendent who continually refuses to take advantage of educational programs, i.e. conferences, seminars, short courses, and programs such as certification, will have no future in the world of golf course management in the 1980's and beyond.

Becoming a Certified Golf Course Superintendent does not guarantee the best jobs or the highest salary. Certification should, however, illustrate to employers that here is a candidate who has taken advantage of every educational opportunity available, who has extrapolated the most from his practical experiences, and who desires the most of his profession, that of being a true golf course superintendent.

Stephen G. Cadenelli
Golf course superintendent
The Country Club of New Canaan
New Canaan, Conn.

How refreshing to read David Harmon's recent article on certification in GOLF BUSINESS. He begs to differ from the usual run-of-the-mill conformity, and I heartily agree with his viewpoint.

Having been appointed golf superintendent at St. George's in 1963 and hosted the Canadian Open in 1968 and Peter Jackson Golf Classic in 1975 and 1978, I think I have earned some degree of proficiency along the way.

The most rewarding side benefit, however, has been the opportunity to nurture individuality and creativity. We are reminded of this when we play other golf courses and constantly pick up new ideas.

Certification is a way to go, but not necessarily *the* way. Certification or not, there always will be those among us who will seek and attain the highest levels in this most challenging profession.

William Hynd
Golf superintendent
St. George's Golf and Country Club
Islington, Ontario, Canada

Why be a superintendent?

In his Viewpoint article in the November GOLF BUSINESS, "Why be a golf course superintendent?", Gene Burress presents very valid arguments against choosing the job of golf course superintendent for a vocation. Having been associated with golf for all of my half century of life, having been born in the superintendent's home at a golf club 50 years ago this past October, I feel that many of his statements make the job a challenge that many men must have in order to feel that they are providing an area of recreation for the enjoyment of many as well as a feeling of self-satisfaction of a job well done under many times (as stated by Mr. burress) "very adverse conditions."

The compensation in return for value received is definitely a significant basis for not considering the lifetime vocation of golf course superintendent. On a comparable basis of everyday authority the golf course superintendent would probably have a title such as vice president of production or vice president of management with annual salary of $50,000 or more, and possibly higher, with many strong right arms to assist him. In a large sense we as superintendents are at fault for this.

Having just recently been in the position of job searching I received many good sources of those seeking superintendents. Unfortunately, about 85 percent were in the range of $11-15,000, and these were at some prestigious clubs all over the country. Some were as low as $8,800 and others as high as $35,000. Not over 5 percent were in the $20,000+ range and about 10 percent were under the median. That isn't a very conducive salary to raise a family and put youngsters through college. Yet I'm quite satisfied that more than 95 percent of all of these positions available were filled within 90 days.

Many of these positions were vacated as well as filled by those with CGCS qualifications. I don't have a particular bone to pick about CGCS, but the golf players of today must be made aware of the GCSAA in total — as they are of the PGA. Only then will CGCS set aside those men who have attained the title as special men who are a little more interested, qualfied, and desirable of furthering their abilities as golf course superintendents.

Let's face it, all things being equal between applicants, the man with the lowest bid for the job in salary gets it — GCSAA certified golf superintendent or not — and that is the major fault of our profession. I was personally involved with three ideal positions in our area where highly qualified men were sought. Yet, by not standing together and supporting each other, all three jobs were taken at $4,000 to $9,600 less money than was offered me and other men more qualified for the job. None were filled by CGCS men and one was filled by a college graduate not even eligible for Class B in GCSAA.

Yes, Mr. Burress, you are so right. And until we all stand or fall together, without strong support locally, statewide, regionally, as well as nationally, we as superintendents will remain the bottom rung of the club triumvirate ladder. After 50 great years of professional organization, I say each man in the profession should vow a vow unto himself to begin today to do something about it. Let us all do even more to make our profession as desirable to others as it is to us.

Dan L. Hall Jr.
Golf course superintendent
Imperial Golf Club
Naples, Fla.

Although Dan has no one to do typing for him, he felt strongly enough about the ideas expressed here that he dictated his letter to the editor onto a cassette and mailed the tape to GOLF BUSINESS. That is true dedication to one's profession. — Ed.

To voice your opinion on the above and other issues, please use the Reader Forum Card bound into the back of this magazine or write to ***Editor, GOLF BUSINESS, 9800 Detroit Ave., Cleveland, OH 44102.***