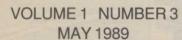
OLF COURSE MANAGEMENT OF THE PROPERTY OF THE P

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INSIDE

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bubbles over in courses

18 WILDFLOWER

innovations spruce up courses

Golf Participation in the U.S.

All Calfara (alared	1987	1988	Change
All Golfers (played at least 1 around)	21.7M	23.4M	+7.8
Frequent Golfers (played 25 rounds)	4.86M	5.62M	+15.6
New Golfers	2.10M	2.21M	+5.2
Rounds Played Total Average	434M 19.4	487M 20.8	+12.2 +7.2

29 POPULARITY of

golf continues to rise

DepartmentsSUPER FOCUS

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Jones challenges architects

Robert Trent Jones Jr. took over the gavel as president of the American Society of Golf Course Architects in April and promptly gave a rallying call for the building of 5,000 new golf courses in the United States in the next 10 years.

Jones, of Palo Alto, Calif., who took over the reins from Pete Dye, told ASGCA members at their annual meeting in Pinehurst, N.C.: "The National Golf Foundation says we must add at least one golf course every day for the next 10 years to meet the exploding demand for golf throughout the country.

"We should probably round that figure off to 5,000 before the year 2000 and consider it one of the greatest challenges that this organization has ever faced."

Jones said it is also "a tremendous challenge to the creative energy and talent of each one of us individually. The game has never been more popular than it is today, and it is our responsibility to meet that

Continued on page 29

1988 Golf Facilities in the U.S.							
	1987	1988	Chan Number	ge Pct.			
Total Facilities New Facilities	12,407 110	12,582 161	+175 +51	+1.4 +46			
Total Courses New Courses	13,436* 145*	13,626 211	+190 +66	+1.4 +46			
Courses under Construction	223*	334	+111	+50			
Courses in Planning	290*	382	+92	+32			
* — Estimated.		Courtesy of N	ational Golf Fou	ndation			

Construction up 45 %

The growing wave of golf course construction in the United States rose 45 percent in 1988, according to the latest research by the National Golf Foundation.

With Floridaleading the way for the fourth straight year, 211 new golf courses opened for play in 1988, compared to 145 in 1987. Another 716 were either under construction or being planned, compared to 513 in 1987, the study found.

Florida accounted for 35 new courses, while Texas followed with 20, Georgia with

Continued on page 30

Oregon's seed industry in trouble

BY MARK LESLIE

Oregon's State Legislature is considering a field-burning ban that would endanger the country's major providers of cool-season golf course grasses.

Oregon's 70 seed companies provide all U.S.-produced ryegrass, bentgrass,

Chewings and creeping red fescues, half the U.S.-produced tall fescue and about onefourth its bluegrass.

But in the process, between mid-July and the end of September each year, the 800 farmers who grow seed burn their fields to purge them of the weeds and disease that endangers the grass seeds. And last year when one farmer was burning a field, the wind changed direction, blew the smoke onto a major highway, and a seven-death, 37-care pileup resulted.

Continued on page 14

ClubCorp. contracted for Moscow site

BY MARK LESLIE

A U.S.-Russia joint venture company has contracted Club Corp. International to build and then manage an 18-hole golf course, country club and conference center outside Moscow.

JV Dialogue, a company formed in November 1987 by Chicago Research and Trading owner Joe Ritchie and six Russian firms, plans the complex as part of a technical village it is building on the collective farm Leninski Lutch (Lenin's Light) outside Moscow.

Ritchie formed Management Partnerships Inc. to formally separate CRT from the Russian project. But CRT Executive Vice President Gus Pellizi is working on the plan and is upbeat about its prospects.

"The concept of the Leninski Lutch project is to develop a village which would enable people to live and work in a pleasant place with a pleasant environment," Pellizi said. "We thought what we would like to do was

Continued on page 29

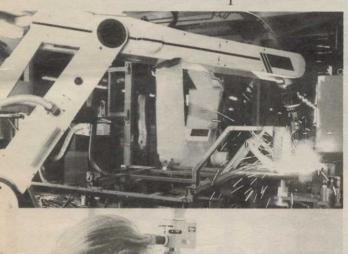


Courtesy of Applewood Seed Co.

Superintendent Dick Schmidt has beautified his Port Ludlow (Wash.) Golf Course. See pages 18 and 19 for the lowdown on innovations in wildflower use.

YAMAHA BELIEVES A FACTORY AHEAD OF ITS TIME YIELDS CARS THAT STAND THE TEST OF IT.

40 million dollars is a lot to spend on a golf car. But that's what it cost to open our new





factory in Newnan, Georgia.

We think you'll agree the money was well spent.

After all, the technological advances that occur every hour in our new facility help us build you the finest, most durable golf cars in the world.

Consider for example, our new electrostatic and electrodeposition painting processes. By giving parts and paint opposite electrical charges, each part is uniformly coated, even in places that seem impossible to reach.

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YAMAHA USA Better in the long run. In our quality control lab, parts are subjected to punishing tests and severe scrutiny before they ever reach the assembly line. This way, if there's a problem, it happens on our turf and not yours.

But don't be confused by all this talk of high tech. The goal of our new factory remains truly simple—build golf cars that are more powerful, more reliable and more profitable than any other make you might consider.

To learn more about the golf cars now produced by our Georgia factory, call 1-800-447-4700 for the name of your Yamaha USA Golf Car Dealer.



Club Car senior notes offered

Dow Jones News Wire reported in April that \$83.8 million (redemption amount) Club Car Inc. senior notes, due April 1, 1999, weres priced at \$89.427 million.

Rated Single-B2 by Moody's Investors Service Inc. and Single-B-Plus by Standard & Poor's Corp., the issue is being sold through First Boston Corp.

According to the preliminary prospectus issued by Club Car, proceeds from the junk offer will go toward prepayment of an \$85-million bridge loan incurred during acquisition of Old Club Car

Club Car said it is highly leveraged and its pro forma longterm indebtedness has tripled to \$75.7 million because of the acquisition.

Club Car said this high level of leverage could adversely affect the company if there is an economic downturn.

The golf car maker's market share has steadily risen from 3 percent in 1978—when current management took control—to some 25 percent in 1988.

"Operating performance has been strong, with sales and operating income increasing at a 20-percent compounded rate over the past 10 years," Standard & Poor said.

American Golf purchases Innsbruck

American Golf Corp. of Santa Monica, Calif., has bought Innsbruck Golf and Country Club, a 2-year-old semi-private mountain course 75 miles north of Atlanta, Ga.

Located in a recreated Bavarian village overlooking the Blue Ridge Mountains, the 18-hole, 6,750-yard championship course was designed by Bill Watts and displays dramatic changes in elevation and mountain views.

The facility has a clubhouse with full-service dining and banquet facilities, pro shop, snack bar and driving range.

Evergreen cited third straight year

Evergreen Lawn Sprinklers of Phoenix, Ariz., has won an unprecedented third straight national award from Landscape & Irrigation Magazine for its efforts in installing an irrigation system at the Scottsdale Princess Resort.

Evergreen won the magazine's Grand Prize for 1988, presented to recognize "professionals who develop or implement new and creative solutions to rising energy and labor costs."

No other firm has won the award even twice, the magazine said.

Dow, Eli Lilly form Dow Elanco

Company will be one of industry's six largest in world

Dow Chemical Co., Midland, Mich., and Eli Lilly Co., Indianapolis, Ind., will join forces to form one of the six largest agricultural-chemical concerns in the world.

To be called Dow Elanco Ind., the joint venture is expected to have sales of about \$1.5 billion in its first year. Industry analyists said the venture would help both companies be more competitive in the world market.

One of Lilly's major agricultural products is the herbicide Treflan,

which is used on soybeans and cotton crops, while Dow manufactures Lorsban insecticide for the corn market. The same farmers usually grow both crops.

Although pharmaceutical companies have formed partnerships in the past, mainly for marketing purposes, this is believed to be the first such joint venture in a non-pharmaceutical area with another major company.

Dow Elanco will be based in the Indianapolis area and will include

the parent companies' plant-science businesses, along with Dow's industrial pest-control business. The venture doesn't include Lilly's animal-health business.

The venture fits Dow's long-term strategy of moving into specialty markets to balance its plastic and industrial chemical businesses.

John L. Hagaman, formerly president and general manager of Dow's Agricultural Products Department, will be Dow Elanco's president and CEO.

Irrigation school picks president

The board of directors of the newly opened Professional School of Irrigation in Chantilly, Va., has appointed Tim Wilson president and director of curriculum.

The board also named Jack Morrisroe general manager and vice president, and Garry Brewer vice president of marketing.

P.S.I. is a hands-on school offering one- to two-week classes.

Institutional Series

MVP In All Fields Of Athletic Competition

Most Versatile Performers

That's why Hunter Institutional Series sprinklers score big in all fields of athletic competition.

They have the latest safety and vandal-resistant features, plus the muscle for dependable performance.

At the top of the line-up are safety-cushioned rubber covers, slip clutch protected drive systems, break resistant arc stops, locking caps and



The Chardonnay Club, Napa, California

small exposed surface areas.

Plus the extraordinary versatility of Hunter's interchangeable nozzles.

Now a golf course or field manager can water his turf exactly the way he wants. By using a higher application rate to match older sprinklers in his system. Or by using a modern low precipitation rate with lower operating pressure for water and energy savings.

In either case, you'll find a remarkably even distribution of water and a higher quality turf in all soil conditions.

Look for Institutional Series sprinklers at work on the gridiron, on baseball or soccer fields, golf courses, bowling greens, grass or clay tennis courts, even horse tracks.

And remember, the whole team is backed by a full five-year, over-the-counter exchange warranty (not prorated).





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Developers strive to meet regulatory decision

There is little spring planting going on at the proposed Sherman Hollow golf course in Huntington, Vt., but there is plenty of digging.

The \$22-million project, featuring an 18-hole layout as its centerpiece, had been mired for more than four years in state and district environmental board sparring with Sherman Hollow, Inc. President Paul Truax and state associates.

Truax also is principal owner of the Sherman Hollow Ski Resort, which did not open last winter because of insufficient snow.

Backhoes, bulldozers and men

'Follow Through' campaign kept alive

The Golf Course Superintendents Association of America and the Professional Golfers' Association of America are following through on their promotional campaign of last year.

"Practice Your Follow Through" is the new theme to a campaign designed to remind golfers to repair ballmarks, rake bunkers and replace divots.

The 17x22 inch four-color poster features LPGA star Nancy Lopez, Senior PGA Tour star Chi Chi Rodriguez and PGA Tour Player of the Year Curtis Strange. More than 30,000 will be distributed to golf shops, merchandise centers and golf courses throughout the world.

It was noted that "the golf professional and the superintendent are essential players on a golf course team which makes the playing experience enjoyable for the 22 million amateurs who participate in the sport today.

"Last year's campaign created an awareness to golfers of all ages that they have a responsibility to help maintain the conditions of play on the course," according to the GCSAA.

Small, Huff both honored

Charles (Jack) Small and Dave Huff shared the Maine Golf Course Superintendents Association's 1989 Distinguished Service Award.

Presentations were made at the recent annual Maine Turfgrass Conference and Show in Portland.

Small has been for 30 years course superintendent at Abenaki Country Club, Biddeford Pool, where he resides. He's also chief of the town's volunteer fire depart-

Huff, a resident of Bow, N. H., is a longtime senior technical representative of Scotts ProTurf, covering Northern New England and Canada.

He was cited for his continuous aid to Maine golf that's far transcended his 35 years in the busi-

Roger Lowell, course super at Webhannet Golf Club, Kennebunk Beach, noted that Huff was for many years conference program chairman and in that capacity helped line up many prominent with shovels in recent weeks have been probing the planned site of the golf course under the watchful eye of geologists.

The extensive earth-moving is the first step in checking course water supply, its purity, availability and contaminant possibility.

It's part of a fairly lengthy list of measures outlined by the state Environmental Board as conditions to be met before course construction can proceed.

The extensive digging operation has been expensive, but Truax remains undeterred.

Sherman Hollow is working with the golf industry in the state to help assure that reasonable standards ... are developed so that future Vermont golf developers will not find

regulatory quagmire.' - Paul Truax

themselves in a similar

He said, "Even though we feel the permit process is excessive,

why this course can not be permitted and built."

He added, "Sherman Hollow is in the midst of field testing necessary to address the specific questions raised by the board in its February decision and stipulations.

"Preliminary results confirm that the conclusions reached by the experts who testified on behalf of the golf course were sound. This further substantiates Sherman Hollow's contention that we had met our burden of proof in earlier proceedings and that the board's

we will proceed. We see no reason recent findings constitute an unnecessary and costly burden."

> Truax said the results also again "raise the question as to why the board largely ignored Sherman Hollow's extensive expert testimony."

> Truax concluded, "Sherman Hollow's representatives also are working with the golf industry in the state to help assure that reasonable standards of golf course review are developed so that future Vermont golf developers will not find themselves in a similar regulatory quagmire.'

> > JOHN DEER

Al Bryant hit over 4500 fairways with this iron last year

Rain used to be the problem. The reason Al Bryant, superintendent at Florida's Riviera Country Club, missed

a lot of fairway mowing. No more.

"Since the John Deere 305 replaced our ground-driven mowers a year ago, I've been able to work on days and in areas I couldn't before," says Bryant. "I mow our fairways five times a week with the 305—put over 1500 hours

"Our fairways have also improved because of the 305. The quality of cut is so much better. Its constant reel speed and ability to better follow ground contours have made all our fairways more uniform."

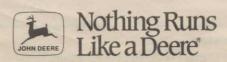
Bryant also uses a John Deere 855 Tractor, 1650 Tractor, 151 Vacuum Sweeper and two 22-inch Walking Greens Mowers at his course.

"Parts back-up has been a big factor in our decision to continue buying John Deere equipment," says Bryant. "We get almost all our parts in one day - and that means a lot in this business."

Talk to your John Deere distributor today for more information on all we have to offer. Or write John Deere, Dept. 956, Moline, IL for free literature. We know, like Al Bryant, you're going to like what you see.



Other John Deere machines at work at Riviera CC include a 151 Vacuum Sweeper, 1650 Tractor, and two 22-inch Greens Mowers.





USGA firms up sites for annual conferences

The United States Golf Association has announced the sites of its annual meeting through 1992.

The 96th annual meeting will be held on Jan. 27, 1990, at the Hotel del Coronado in Coronado, Calif., near San Diego.

The USGA will hold its 1991 annual meeting in Minneapolis, Minn

Orlando, Fla., will be the site of the 98th USGA annual meeting in January 1992.

Lesco consolidates manufacturing

Lesco Inc. has reported it will close and sell its Elyria, Ohio, plant and consolidate equipment manufacturing at its Sebring, Fla., facility.

The Cleveland-based Lesco also said it expects toraise prices on many products to boost profits.

The spreaders, sprayers and turfrenovators made at Elyria will now be produced at the Sebring plant, where the company makes walk-behind and riding mowers for golf courses, Lesco said.

Meanwhile, Chairman and Chief Executive Officer James I. FitzGibbon said Lesco had increased sales of \$15,335,000 in the first quarter, which ended Feb. 28, and lost \$1,833,000, or 45 cents per share. In 1988, Lesco had sales of \$14,454,000 and a loss of \$754,000.

"Our first quarter is traditionally the slowest of the year and not expected to generate earnings," FitzGibbon said. "The higher loss in this year's first quarter, despite increased sales, is due largely to

costs related to the opening of new Lesco Service Centers, the addition of Lesco sales trucks, and current overhead required to meet future increased customer demand for product."

He said the price increases are due to general cost increases experienced throughout the industry, and Lesco's increases are expected to have a positive impact on profits the rest of the year.

FitzGibbon said sales improved for the quarter at the s 42 "stores-on-wheels."

Turf profs recruiting in Japan

Horry-Georgetown Technical College in Myrtle Beach, S. C., was one of only 29 schools selected to participate in the inaugural U. S. Two-Year College Fair in Tokyo April 29-30.

Of the 240 schools that applied, Horry-Georgetown was picked by Japan's International Cultural Studies Group and the American Association of Community and Junior Colleges for its outstanding program in Golf Course Management.

Ed Zahler, head of the GCM program, and Dr. Paul Alexander, an instructor, will represent the school.

In two six-hour sessions, the men hope to sign up at least six Japanese students for next year.

"I don't know of any turf-management programs at all in Japan," said Alexander, a globe-trotting agronomist recently retired from Clemson University. "And they sure have a lot of golf courses."

Cushman expanding Florida plant

The Cushman Division of Outboard Marine Corp. is already expanding the Edgewater, Fla., manufacturing facilities of the former Noland Car Co., Inc., which Cushman bought in March.

A Cushman official announced the expansion and said the firm will use its acquisition of Noland to extend the Cushman product line.

Manager Stuart Rafos said the Cushman Division's line will now include "a basic, low-cost maintenance vehicle as well as a wide variety of specialty vehicles."

"It's a natural extension of our business," Rafos said, "one that will help us better meet the needs of the markets we now serve, plus ... move into new markets."

Noland vehicles are already being marketed under the Cushman name.

Ryder raises contribution

The Ryder System has increased from \$10,000 to \$15,000 its annual contribution to The Golf Writers Association of America Scholarship Fund.

This means, said scholarship committee chairman Marino Parascenzo of the Pittsburgh Post Gazette, that each of the five scholarship recipients will begin his senior year with \$3,000 for the fall term.

Ransomes sets record

Ransomes Sims & Jefferies PLC has reported record 1988 sales exceeding \$160 million.

The sales are up 25 percent over 1987 figures and mark the sixth consecutive year of record sales and profit growth for the firm, which manufactures commercial and turfgrass mowing equipment.



LETTERS

Value to industry

To the editor:

Thanks for the copy of your new publication. I have been through it cover-to-cover and believe you have put together a most beneficial journal. Although I don't like the size, it is attractive and should be of value to the industry.

Sincerely, Professor C. Richard Skogley Turfgrass Mgmt. Specialist University of Rhode Island

Letters to the editor are welcomed. Please address them to: Letters, Golf Course News, P.O. Box 767, Yarmouth, Maine 04096.

'Northern Texas Golfer' cited

The Northern Texas PGA's Northern Texas Golfer 1988 Annual magazine and the Wisconsin Golf Course Superintendents Association's The Grass Roots are among publications cited for excellence by the National Golf Foun-

Northern Texas Golfer, under Executive Director James McAfee, was cited for overall excellence among state and regional professional association magazines. In that category Shaw Publishing, Inc.'s PGA World Golf Hall

of Fame Magazine, under associate publisher Sam Rogers, was given special merit.

The top club magazine, according to the NGF, was Wilshire Club News and Golf Divots of Los Angeles, under general manager Roland Frankel.

The Grass Roots, edited by Monroe S. Miller, won the overall excellence award in the state and regional professional association newsletter category.

Cited for special merit in that category were the Midwest Association of Golf Course Superintendents' The Bull Sheet, edited by Fred D. Opperman; Golf Course Superintendents Association of New Jersey's The Greensider, edited by Ilona F. Gray; and Southern California Section PGA's SCPGA News, supervised by Director Donald L. Sandefur.

NGF selected Hallbrook Country Club (Kansas) Newsletter for overall excellence among club newsletters, and gave special merit to Moon Valley (Ariz.) Newsletter, Sawgrass Country Club and Oak Bridge Club (Fla.) Newsletter, and Valley Views by Huntingdon Valley Country Club (Pa.).

Overall excellence in the state and regional amateur association newsletter class went to Arkansas Golfer, published by Arkansas State Golf Association under Executive Director Charles E. (Monk) Wade. Special merit was awarded the Houston Golf Association's Greater Houston Golfer, Pacific Northwest Golf Association's PNGA News, South Dakota Golf Association's Tee-to-Green, and Wisconsin State Golf Association's Wisconsin Amateur Golfer's Newsletter.

The Georgia State Golf Association's Golf Georgia, under Executive Director StephenF. Mona, won overall excellence in the category for state and regional amateur association magazines. Special merit was awarded the National Amputee Golf Association's Amputee Golfer, Southern California Golf Association's FORE Magazine, and Northern California Golf Association's NCGA News.

The NGF chose the Minnesota Section PGA, under Executive Director Don Waryan, to receive the overall excellence award for its 1988 Minnesota PGA Golf Annual — the best among the annual state and regional professional association directories. Special merit picks were the 1988 Michigan PGA Yearbook and 1988 Michigan PGA Roster/Media Guide of the Michigan PGA Corp.; New England Section PGA Yearbook 1988 of the New England PGA Inc; and Sun Country Section PGA Directory of Sun Country Section PGA.

Annual state and regional amateur association directories were headed by overall excellence winner 1988 Annual Report by Golf Association of Michigan, under Executive Director Jeff Rivard. Special merit was awarded the Kansas Golf Association 1988 Annual; Metropolitan Golf Association Annual Report; and Wisconsin State Golf Association 1988

Veteran writer Smith dies

Vince Smith, veteran golf writer for the Fort Myers, Fla., News-Press, died last February.

Smith had been scheduled to deliver the eulogy at a memorial service for Herb Graffis, founder of the Golf Writers Association of America and the National Golf Foundation.



gave the LESCO 5000 an "A": So we gave it Introducing the LESCO 500D Fairway Mower. It's the new diesel mower that makes the grade in lightweight fairway mowing. The result is smooth, close-cut fairways with the look and character of the finest putting greens.

weight fairway mowing.

First, the LESCO 500 Fairway Mower proved lightweight fairway mowing could be practical and economical. Now the 500D goes a step further and delivers the efficiency and endurance of diesel power on a new heavy-duty frame.

The unique versatility of the 500D permits simple conversion from fivegang to three-gang operation. And the mower's new heavy-duty reels and bedknives are engineered for day-in and day-out precision cutting.

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The LESCO 500D features a new heavy-duty cutting unit.

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BPA Audit applied for 3/89.

Oregon critical to golf industry

Recently I had the opportunity to visit the West Coast to make advertising calls on primary prospective clients for *Golf Course News*. My plan was to visit Southern California early in the week, and on to the great Northwest toward week's end.

The obvious reason for visiting the Northwest was to present *Golf Course News* to the seed and turf producers in that great part of our country.

In preparing my itinerary, I called Dave and Leah Nelson of

the Oregon Fine Fescue Commission to make an appointment. Leah explained that Dave was so busy working with the legislature that he could not find the time to meet.

Further questions and discussion led me to hear of the possible regulation of the seed and sod industry in Oregon.

During my two-day visit to Oregon, I had the pleasure of driving south from Portland to Halsey, with stops in Hubbard and Albany.

One cannot help but appreciate the open greenery and beauty of

the seed and sod farms in this area. Hundreds of thousands of acres support this growing industry, of which a good percentage goes to the development of golf facilities.

After speaking to several interested parties in Oregon, I contacted our managing editor, Mark Leslie, to give him some background and perhaps develop a story.

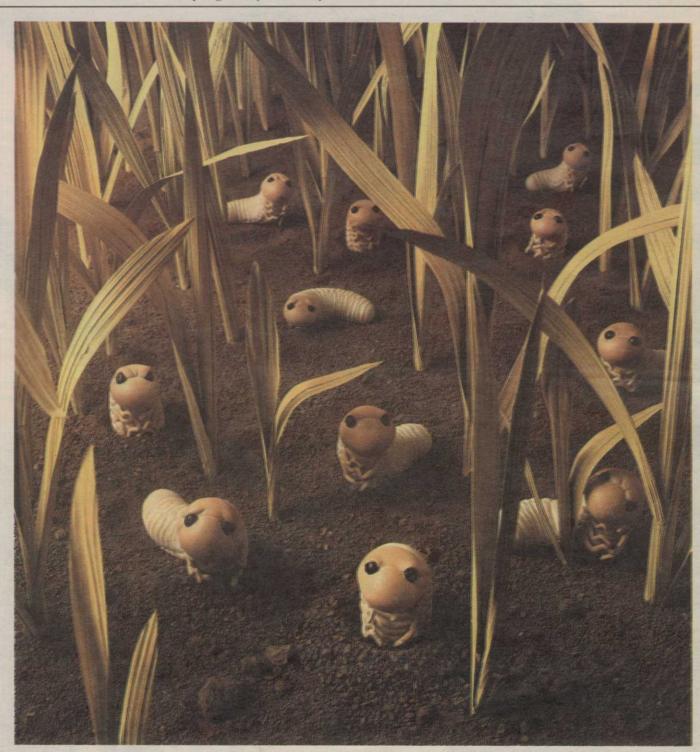
Needless to say, the story developed, and Mark and editorial director Brook Taliaferro feel, as I do, that it is important and the story will continue to develop while

the Oregon legislature is in session

As our industry continues to prosper we plan to keep you informed of national and regional news developments which will have an effect on the future development of golf courses.

Incidentally, if you ever have an opportunity to visit Halsey, Ore. (population 684), don't miss breakfast at the Edson Country Inn.

Charles E. von Brecht Publisher



Handle your grub situation fast, before things get really ugly.

At the very first sign of grub damage, apply DYLOX® insecticide. Nothing kills all species of white grubs faster. Within hours, the grubs are dying and the turf is recovering. When grubs threaten, aet fast.

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ASSOCIATION NEWS

Florida Irrigation Society picks Swanson president

John Swanson of Hydro-Tech Pumping Systems in Pinellas Park is the new president of the Florida Irrigation Society.

Swanson, who said his top priority is completing agricultural irrigation standards, heads a new slate

of officers that includes Vice President Dick Dunn of R&D Associates in Delray Beach; Secretary Jerry Robey of Toro Co. in Palm Harbor; and Treasurer Brian McMahon of Boyle Engineering Corp in Orlando.

ASGCA officers take posts

Robert Trent Jones Jr. of Palo Alto, Calif., heads a new slate of officers of the American Society of Golf Course Architects who assumed their posts at the group's 43rd annual meeting in Pinehurst, N.C.

Jones' father is a past president and the only living founding member of the ASGCA, and his brother, Rees, is also a past president of the society.

Dan Maples of Pinehurst was elected vice president, while Tom

Clark of Wheaton, Md., was elected secretary and Arthur Hills of Toledo, Ohio, treasurer.

Elected to the Board of Governors were Jeff Brauer of Arlington, Texas, Keith Evens of Montclair, N.J., Tom Fazio of Jupiter, Fla., Robert Muir Graves of Walnut Creek, Calif., Denis Griffiths of Norcross, Ga.

Also, Gary Kern of St. Louis, Mo., and Ed Seay of Ponte Vedra Beach, Fla.

Previously elected governors

are Tom Clark, Pete Dye, Arthur Hills, Robert Trent Jones Jr., Maples and Robert Walker.

Jones Jr. has designed more than 150 courses in 20 countries, including The Links at Spanish Bay in Pebble Beach, Calif., Poppy Hills Golf Course in Monterey, Calif., Coto de Caza Golf Course in Orange County, Calif., Sugarloaf Golf Course in Carrabassett, Maine; Desert Dunes Golf Course in Palm Springs, Calif.; and the National Golf Club in Australia.

Wholesalers' education to expand

Ernie Hodas, president of Century Rain Aid in Madison Heights, Mich., has been elected chairman of the board of the National Association of Wholesaler-Distributors.

Hodas said he aims to expand NAW's efforts to educate its members' employees, vendors, customers and the general public about free enterprise and the economic power of wholesale distribution.

NAW monitors federal government actions in Washington, D.C., for its 121 national wholesale distribution industry trade associations.

It represents 45,000 wholesale distribution companies.

Hodas is a past president of the Irrigation Association.

AIMRA leader: reps narrowing product lines

Bill Stephenson is the new president of the Agricultural and Industrial Manufacturers Representatives Association (AIMRA).

Stephenson, of Stephenson's Agri Sales Co., Inc. in Poultney, Vt., reflected on changes in the industry at the group's annual convention in Reno, Nev.

"More reps are narrowing their lines," he said. "They are more inclined to carry three or four lines rather than eight or 10 — without expanding their territories.

"One result is that there is room for more reps to meet the needs of the other manufacturers who are not retained by the established rep firm."

AIMRA's convention featured a panel discussion on "romancing your principle"; a seminar for manufacturers on "how to market through reps"; an address on selling to rental yards; a session on retail financing; and a presentation on electronic mail.

AIMRA is headquartered at Mission, Kan.

Rossi heads GCBA

Don Rossi, the executive director of the Golf Course Builders of America, was omitted from the list of GCBA officers in the April issue.



Hoffman promises response to grassroot needs at CMA

Edward L. Hoffman, general manager of Racine (Wis.) Country Club, has taken over as president of the Club Managers Association of America for one year and promises a drive toward more grassroots leadership.

Hoffman, a CMAA member since 1961, heads a slate of officers that includes Kenneth W. Brown, general manager at Indianapolis (Ind.) Athletic Club, as the new vice president and James D. Pearce, general manager of the Dallas (Texas) Club, who won a three-man race for the secretary-treasurer's post.

New members of board of directors are Richard Kolasa from Skyline Country Club in Tucson, Ariz.; Norman J. Spitzig Jr. of Fort Wayne (Ind.) Country Club; and Randall Gudanowski of Indian Trail Club in Franklin Lakes, N.J.

Hoffman's drive for grassroots involvement has already begun with the appointment of 13 regional representatives who give members "one more link with the board," Hoffman said.

"We have 13 national directors as well, and it's my conception and feeling that we will not only double the number of people involved in the leadership, but by virtue of taking somebody right from the grassroots they would perhaps get a more unbiased opinion than national directors."

Hoffman said that by appointing the regional representatives, CMAA is freeing up the national directors. Faced with fewer chapter visitations, they can now be more active in committees and receive valuable training for future officerships.

"Also, I feel the regional representatives will be in training to be future national directors," he said.



Edward Hoffman

CMAA has announced a new tiered dues structure for clubs with multiple memberships, which offers the clubs better opportunity to have more of their management people deriving the benefits of membership in CMAA.

Hoffman said one of "the biggest and most important things" CMAA plans this year is expanding its Business Management Institute to include sessions preparing members for their master's degree and for the master club manager designation.

The organization also announced that Commerce Publishing Co. of St. Louis, which publishes CMAA's "Club Management," will not publish beyond its contract which expires Nov. 1.

"We are evaluating the relative merits of finding a new publisher or publishing our

'It's my conception and feeling that we will not only double the number of people involved in the leadership, but by virtue of taking somebody right from the grassroots they would perhaps get a more unbiased opinion than national directors.'

- Edward Hoffman

own magazine," Hoffman said. "In any event, we will continue with a publication."

CMAA also is looking for a new building. It sold its building in Bethesda and wants a new site, preferably in Alexandria, Va.

Hoffman, who has been Racine CC general manager since 1984, has been a national director of CMAA since 1983, and served as treasurer in 1987 and vice president in 1988.

He has been general manager of Green Acres Country Club in Northbrook, Ill., Chestnut Hill Country Club in Newton, Mass., and Thomson Club in North Reading, Mass., among other positions, including being part-owning of restaurants at three Holiday Inns.

His wife, Bonnie, is also a CMAA memper.

Regional representatives

CMAA's 13 regional representatives re:

Carol A. Edwards, American Club in China, 47 Pei An Road, Box 17-36, Taipei Taiwan, R.O.C.

Steve K. Hathaway, Riviera CC, 1250 Capri Drive, Pacific Palisades, Calif.

Pasquale J. LaRocca, Oakmont CC, 1233 Hulton Road, Oakmont, Pa. 15139.

Frank A. Voogd, Washington Athletic Club, Box 1709, 1325 6th Ave., Seattle, Wash. 98101.

Albert R. Armstrong, Columbia Club, 121 Monument Circle, Indianapolis, Ind. 46204.

Raymond C. Johnson, Oakland Hills CC, Box 111, Birmingham, Mich. 48012.

JohnR. O'Meara, City Club of Lafayette, 600 Jefferson St., 16th floor, Lafayette, La. 70501.

Merle Worman, Ft. Orange Club, 110 Washington Ave., Albany, N.Y. 12210.

Martha C. Bonk, The Tower Club, 20 N. Wacker Drive, Chicago, Ill. 60606. John A. Jordan, Cherokee Town & Country Club, 155 W. Paces Ferry Road, N.W., Atlanta, Ga. 30363.

Paul K. Skelton, Troon Golf and Country Club, 25000 N. Windy Walk Drive, Scottsdale, Ariz. 85255.

Michael V. Carroll, Blue Hills CC, 777 W. Burning Tree Drive, Kansas City, Mo. 64145.

Howard J. Kahn, Salisbury CC, 13620 Salisbury Road, Midlothian, Va. 23113.

Frank T. Stover, Harvard Club of Boston, 374 Commonwealth Ave., Boston, Mass. 02215.

American Seed Trade Association sets eyes on D.C.

Federal government speakers and a congressional reception will highlight the 106th Annual Convention of the American Seed Trade Association, June 24-28 in Washington, D.C.

ASTA President Don McGillivray and a convention committee led by Hugh and Phyllis MacWilliam have organized a conference filled with committee meetings and with tours and entertainment centered around the nation's capital. All the ASTA divisions and most committees will deliberate on the progress and problems facing the association and to chart the course of their activities for the coming year.

Following various committee meetings and tennis and golf tournaments Saturday and Sunday (June 24-25), the opening general session will begin at 9 a.m. Monday. Invited speakers include Vice President Dan Quayle and House Agricultural Committee Chairman Kika de laGarza.

The congressional meeting will be from 5 to 6:30 p.m. Tuesday. The Grand Banquet at 7:30 p.m. Wednesday, at which new officers will be installed, will close the general convention. All meetings will be conducted at

Let us know

Golf Course News is asking all organizations affiliated with golf courses to let us know about news events, issues or conferences concerning them. If yours has elected officers, released a report or announced new plans let us know by writing to: Golf Course News, P.O. Box 767, Yarmouth, Maine 04096.

the headquarters hotel, J.W. Marriott at Pennsylvania Avenue and 14th Street.

The schedule includes annual meetings

of the Lawn Institute at 1 p.m. Sunday, the ASRF at 1:30 p.m. Tuesday and the NCCPB at 10 a.m. Wednesday.

People must register by May 25 through the ASTA, Suite 964, 1030 15th St., N.W., Washington, D.C. 20005.

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For Free Information Circle No 126

Got some swampland you want converted?

BY VERN PUTNEY

Buying swampland in Florida long has been a standing joke.

Felix C. Paguaga, now course superintendent at Boca Rio Golf Club in Boca Raton, Fla., in 1969 went one step farther in treacherous footing.

Paguaga left a comfortable post at the prestigious El Conquistador Hotel & Club in Farjardo, Puerto Rico, to take over "The Fountains Country Club" in Lake Worth.

The street address for the "golf course" was a vacant tomato farm, with empty fields and abandoned migrant housing units. The Fountains existed, if at all, strictly on paper or in the minds of developers.

When Paguaga in 1986 departed The Fountains for his current post, that complex had become 54 holes of exceptionally well-groomed holes, three challenging 18-hole layouts highlighted by a need for demanding shots over and around devilishly designed water pitfalls.

In addition, the complex seven miles south of West Palm Beach is a valuable piece of real estate. Member condominiums abound and in places block out spectacular course views.

Settled nicely at Boca Rio, in a "delightful" atmosphere featuring very special treatment by members in one of the best jobs in the Sunshine State, Paguaga now smiles at his shocking introduction to The (mythical?) Fountains.

After details were settled, Paguaga set about correcting onsite problems, hiring a crew, planning a location for the maintenance crew, etc.

The remainder of the year involved the problems of construction, planting, irrigation and growing-in period.

"Grand Opening" came in October 1970.

The second 27 holes was



Felix Paguaga gets ready to test one of the greens at Boca Rio.

completed during the 1972-73 recesssion under a second ownership. The property changed hands several times in the years ahead.

In 1971, Paguaga was asked to take on the care of the course at Dorado Hilton. He shuttled between Florida and Puerto Rico as courses supervisor until the Puerto Rico course was sold a year later

Landscaping challenge

In the late 1970s, Paguaga was immersed in planning and planting of "landscaping" for the Fountains clubhouse, entryways and court yards for the residential units.

It was commonplace to find Paguaga at the sales office, huddling with the staff to solve problems for a customer concerning a view or absence of view, some special treatment such as planting of trees, shrubs or flowers.

Sales personnel credited much of their spectacular success to the cooperation of Paguaga and his department.

In 1981-82 Paguaga was occupied with moving and transferring a "nursery" in order to build an additional 18 holes. The work was completed in 1983, and the next three years were as routine as shepherding 54 holes can be.

At this time, members bought out the developer's interest and took control of the club and operations.

SUPER FOCUS

Paguaga, invited in 1967 to be the first superintendent at Boca Rio, in August 1986 accepted the opportunity to work at that smaller club.

Boca Rio is in "beautiful shape" and recently was rated by "Golf Digest" as the No. 13 course in Florida. Designed by Robert Von Hagge, Boca Rio is considered a demanding but fair test.

Coincidentally, Von Hagge also designed the three Fountains courses.

Boca Rio has 150 members, is par 72 and measures 7,037 yards from the back tees. Jay Bechtold is the head pro.

Paguaga and Irma, his wife of 32 years, share a home provided by Boca Rio. Three grandchildren at times enliven the surroundings.

The Paguagas met while he was studying at the University of Florida in 1956. After he graduated with a bachelor's degree in agriculture, they married and returned to his native Republic of Honduras, where he became a government agronomist.

His job consisted of marketing, planning of conservation and storage for grains and cereals, and the pest control of those grains. He also was involved with planning a "Common Market for Central America."

A new beginning

Shortly after the birth of daughter Vicki, Irma confessed to homesickness. In late 1960, Paguaga sent wife and baby back to Florida and followed them six months later. (Other children are Rolando and Ricardo. Both are in military service.)

After many months of rejections, Paguaga was offered a job as golf course superintendent for a club in Delray Beach. He was hired the next morning by club owner Warren Grimes, returned to Gainesville and collected his family for the move to South Florida.

Although he knew little about the game or maintenance of a golf course, he felt he could grow strong and healthy grass. The course quickly responded to his care and treatment, and took on a new and green appearance.

Making many new friends among players and professionals, Paguaga was encouraged to learn to play golf. By learning everything he could about "golf" and by playing the course, Paguaga believed he could better understand and anticipate difficulties before they became "problems" or a major source of trouble.

About this time, Paguaga became friends with Dr. G.C. Horn of the University of Florida, prominent in the South Florida Turf Association, and Von Hagge. They were instrumental in his early career. Horn advised on technical

problems and Von Hagge contributed suggestions on learning to play with skill.

After Delray Beach CC was sold, Paguaga worked at the Royal Palm Yacht Club in Boca Raton until 1967. Von Hagge was designing a course in Farjardo and wanted Paguaga to undertake construction.

The course was located in the rolling and rock hills surrounding El Conquistador, overlooking the Caribbean and the Atlantic Ocean.

In many areas, the topsoil was barely one-eighth inch, covering solid rock underneath and an insufficient water supply.

Meeting the stars

However, the course was finished in time to host "Shell's Wonderful World of Golf." Chi Chi Rodriguez, Gay Brewer and Arnold Palmer were the featured performers.

El Conquistador was chosen because of its panoramic beauty, uniqueness and challenge.

Many show business stars and celebrities performing at the nearby El San Juan Hotel played El Conquistador. One attractive "perk" was, as "super" and a player, being tapped to complete a foursome.

While there, Paguaga met Robert Cloughen, a rising young professional from Danbury, Conn. They were reunited as pro and super at The Fountains in 1972.

Cloughen, now Fountains director of golf, termed Paguaga "a most talented man in the field of preventive course medicine. He detects potential difficulty early, and sprays when it is most effective."

Many changes have taken place in Paguaga's 27 years as superintendent. More responsibility and liability is placed on environmental protection, the use of pesticides and labor problems.

Today's superintendents walk a fine line in the balancing act. They are involved with public relations, budgeting matters and the need to communicate and instruct effectively.

Over the years, Paguaga has helped many aspiring course supers. He feels the best advice he can give is to echo Von Hagge's urging: Learn the game, try to play it well to understand the player viewpoint on course problems, and try to play portions of the course at least every other day.

It means first-hand observation, he says, and the manner in which problems can be recognized is uncanny. The next morning, the maintenance staff can be on top of the situation.

One thing as "super" hasn't changed: the long hours and dedication. Paguaga maintains that tradition.

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Dodgertown's"C.H." Thomas name to remember



DODGERTOWN

BY VERN PUTNEY

Kathy Switzer became the first woman to run in the Boston Marathon by forwarding her application as K. Switzer.

Carol Hall Thomas used that twist to get her foot in the door as course superintendent at Dodger Pines Country Club in Vero Beach, Fla.

Her 1986 resume was written as C.H. Thomas.

The Los Angeles Dodgers management was impressed with the person's credentials, wasn't taken aback when gender was revealed, and felt it picked the right "man" to head the maintenance course team.

Now the 1988 World Champion Dodgers, from starpitcher Orel Hershiser to Manager Tommy Lasorda, enjoy playing Thomas' courses while at spring training.

Quick promotion

Originally, Thomas was hired to supervise maintenance for the 18-hole Dodger Pines CC, the nine-hole Dodgertown Golf Club facility, landscape operations for the two clubhouses and general grounds maintenance for the 47-home residential community on the 450-acre complex.

Eighteen months later, she assumed entire grounds maintenance operation, which also includes five baseball practice fields and a 90-unit residential villa requiring landscape maintenance.

Her employees range from 35 to 60, and facilities operate year-round.

"I learned not to stick my hand on the hot stove twice," said Thomas as she noted an earlier resume rebuff directly linked to sex discrimination.

A superintendent at a small private club termed her qualifications "outstanding," but said membership never would hire a woman. He added that while the green committee was composed of men who actually verbalized all major golf decisions, he felt they did nothing without wifely approval.

He said he would encourage his daughters to work toward being superintendents because he believed a day would come when narrow-minded men would no longer have the majority of power.

While those sympathetic words didn't help Thomas get the job, they inspired her not to give up.

A different job approach paid off.

How do people react to Thomas as a woman in the job? Curiosity is the first word. "How did she get the job, and why does she like this type of work?"

Keeping the job has not been difficult, she says. "I work with an excellent management team that simply wants good people, and they recognize me as one of those.

"I can hold my own in any situation. Very little intimidates me because I've dealt with so many problems, and have paid attention to my mistakes."

A strong academic and professional background helped surmount many hurdles.



Carol Hall Thomas

She earned a bachelor's degree in microbiology at the University of Central Florida, and an masters in microbiology with a toxicology minor at North Carolina State.

She had teaching assistantships for microbiology and general biology with additional technical seminars and turfgrass courses from local junior colleges

Thomas was employed for 2 1/2 years with the University of Florida Agricultural Research and Education Center in Ft. Lauderdale as a biological technician working with a plant pathologist on diseases of ornamentals and turfgrasses.

She then spent five years at Inverrary Country Club, a 54-hole facility at Lauderhill, Fla., as club horticulturist, and entered the Club Corp. of America's assistant superintendent's training program.

She's a member of the Florida Turfgrass Association, Golf Course Superintendents Association of America, Florida State GCSA, Sports Turf Manager's Association, and a Florida certified nursery professional, and is on the board of directors of the Treasure Coast Golf CSA.

Her job has expanded to include longrange planning for golf and baseball areas, most hiring of employees, capital equipment purchases, and major purchase of chemicals and fertilizers.

She helped the local high school with its new baseball field, and interacts with golf members, baseball coaches and other staff members as problems or questions arise.

'Women as capable'

This venture into an expanded sports realm is novel. An estimated 200 women belong to the 8,000-member GCSAA, and up to 100 more are employed in course superintendent capacity.

"In a modern grounds maintenance operation," states Thomas, "there's no reason a woman would be less capable of doing the job than a man. With today's technology, the days of having to be 'strong as a bull' to operate the equipment or run an operation such as mine are gone.

"Most equipment is hydraulically operated, has power steering, electronic start ignition, et cetera, all of which make even the largest equipment operate fairly easily."

In fact, Thomas claims, "Women as a whole, once properly trained on how to use equipment, tend to be better operators. They tend not to handle equipment roughly, are more apt to report equipment malfunctions, are less reluctant to admit if they damage equipment, and clean up the equipment better.

"Women who are serious about moving

ON THE LINKS

up to higher positions try to work harder than most men so that they will be better recognized. They feel they must prove their capabilities more than the average man.

"They also seem to complain less about job assignments because they don't expect special treatment."

Thomas says many maual labor jobs now are easier. The new lighter-weight push mowers start and run easily. Weed eaters, hedge trimmers and other small hand-held motorized equipment no longer require exceptional arm strength.

"Even the hard digging that once was standard has been replaced by larger equipment with attachments capable of more finely detailed work," she says. "The shovels, rakes and hoes still are used, but for more tedious jobs such as irrigation work that may involve repairs requiring a finer, lighter touch, a woman operator might be the preferred choice.

"With soaring chemical costs and increasing environmental regulations, one must keep pace and be aware of happenings in those areas.

"I've seen veterans once referred to as greenkeepers replaced by younger people because they lacked the technical knowledge required in today's society. Their practical experience was good, but they were unable to modernize their thought processes."

"Women are capable of absorbing technical knowledge. They are able to keep written records, obtain proper licensing and interact with members or the public as well as any man," Thomas says. "Fortunately, more intelligent, less prejudiced, more innovative and progressive individuals are doing the majority of hiring. These people want the best person for the job.

Equal treatment

"I've hired the majority of my current staff

which includes but two women. I believe that men are more open with me about personal problems that occur at work, particularly dealing with other employees, than they would be with a male superintendent.

"One male employee, after a year of employment, 'confessed' that he originally had his doubts about working for a woman, but I had turned out to be a fair and competent individual."

She relies heavily on chief aide Steve Carlsward, "a valuable right-hand man."

"Dealing with club members has been interesting," she said. "To my surprise, most accept my status. In fact, women members have told me they welcome the idea of women in the field, and wish they had had such an opportunity.

"As a whole, men members are fairly agreeable, particularly those who have taken the time to know me personally. Those from the ancient school simply are not going to change.

"They think if something goes wrong the biggest reason is because she shouldn't be doing that type of work in the first place.

"On the other hand, there are enough men, in fact the majority, as all women are lucky to have, that simply like women, want to see me do well and are very supportive."

Thomas says she "loses out" with the men by not being able to talk with them in the locker room. "It's the one place they are more apt to carry on personal conversations," she says, while "in the women's locker room, it's amazing how much information is offered."

"I've been a member of two local supers' chapters. It's taken a while to feel like 'one of the guys'

"Most large technical meetings list few women attendees. That doesn't bother me. At least the restrooms never are crowded!"

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This acreage presents an unusual opportunity for golf course development. Located in Citrus County, approximately 50 miles north of the Tampa-St. Pete metro area. Utilities available. Majority of acreage zoned for single-family use with significant vested development rights. The land has dramatic topographical characteristics with distinctive rolling hills and mature pine forest covering much of the property. This property is offered for sale for \$5,000 per acre. For complete information on this acreage, Contact:

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Hills' Arizona course will challenge golfers with wetlands, topography

The latest Arizona project for golf course architects Arthur Hills and Associates of Toledo, Ohio, is a testing layout for Fairfield Retirement Communities at Green Valley, just south of Tucson.

"The back nine will play to 6,700 yards from the back tees," said associate Keith Foster. "It is completely shaped, and irrigation is being installed. We are now shaping the first three holes."

Foster points to the par 5 l3th hole which, from an elevated tee with a mountainous backdrop, will dogleg left around two lakes.

Grassing will take place this summer, with opening due in late fall.

Arthur Hills is well along with work on a daily-fee course in suburban Henderson, Nev. Much of the original lava rock site has been retained for a beautiful contrast and to emphasize significant elevation changes.

Grassing is due this summer, with opening due in the winter season.

Also well underway is a daily fee-type course at Harbour Pointe in Schnomish County, near Seattle, Wash.

On the outward nine, marshlands are the predominant — and punishing — feature, while on the back nine huge evergreens and bolder topography, reminiscent of the Olympic Club in San Francisco, prevail.

NEW COURSES

Eglin AFB's new nine retains environment

A nine-hole addition to Eglin Air Force Base's golf course in Fort Walton Beach, Fla., is scheduled for opening this summer, bringing the total golf complex to 36 championship holes.

Course architect Charles F. Ankrom of

Stuart, Fla., believes the layout may be among the best of all military bases in the United States.

Grassing was completed last October. On rolling terrain, and divided by spring-fed Mill Creek, the site's elevation changes about 100 feet.

Mill Creek was discovered to be populated by the environmentally endangered Okaloosa Darter (a small fish). All efforts were made to retain the stream wetlands in their natural state, with minimum disturbance

The expansion nine, in addition to the existing nine, will play at 6,789 yards from the blue tees, 6,262 from the whites, and 5,501 from the reds. Par is 72.

Many terraces were created on protruding sand ridges; tees were placed to carry shots over the stream valley ravine; and woody sandy terrain was carved to create a variety of topographic rolling features with much diversification.

A five-acre lake was created on holes 7 and 8, and the fill used to create numerous bold mounding features in the upland level areas.

Ankrom said the result is a dramatic contoured golf course unusual to Florida property, featuring terraces, pot bunkers, ledge traps, environmentally vegetated ravines, and rolls, knolls and contours in many areas typical to a combination of a mountain course and Scottish terrain.

Championship course faces McCumber

An 18-hole championship golf course to be known as Osprey Cove Golf and Country Club is slated for construction in a planned residential community in St. Marys, Ga.

The \$11-million project is the first such undertaking for the Gilman Paper Co., which operates a division in St. Marys.

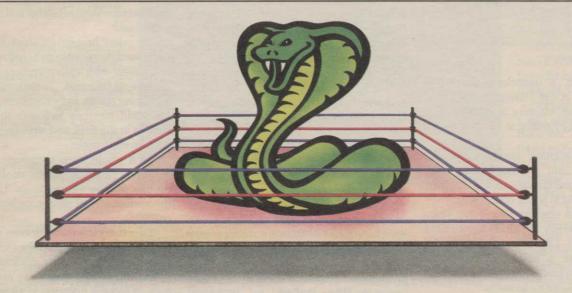
Osprey Cove GCC will be located on a 600-acre tract of land that includes and surrounds the existing St. Marys GCC on St. Marys Road, two miles east of Interstate 95 in Camden County.

Mark McCumber & Associates of Middleburg, Fla., has been commissioned to design and construct the course.

Michael D. Beebe, McCumber vice president, said, "Plans are expected to include five or six holes that play along and showcase the picturesque tidal marshes of the St. Marys River, creating a windswept, open feeling. The remaining holes will be situated in areas of typical south Georgia vegetation consisting of pines and palmetto, with a strong water orientation created by a series of man-made lakes."

The clubhouse is expected to be situated on an area offering a spectacular view of the marsh and St. Marys River and also overlooking holes 9 and 18, which finish to a double green situated on the edge of the marsh

Approximately 530 home sites will be available. Other amenities are expected to include tennis courts, swim complex, docking area for boats and a marina.



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For Free Information Circle No 128

Matthews integrates forest, course

Adensely forested 192 acres over rolling topography challenged architect Jerry Matthews of Matthews & Associates in his design of Timber Ridge Golf Course in Bath Township of East Lansing, Mich.

Timber Ridge Development Co. plans to open the 18-hole, par-72 public course

The course covers 6,655 yards on the back tees, 6,260 on middle and 5,245 on forward tees.

Matthews points to the course's picturesque views, especially from the elevated 10th and 17th tees, and the privacy along the heavily forested area, as unique features.

Two natural ponds mean three water holes on the front nine and four on the back nine. And the site includes an 88foot elevation change and 61 bunkers.



Jerry Matthews designed this scenic 18-hole Timber Ridgecourse amid a heavily wooded 192 acres.

Kidwell, Hurdzan finish courses

Several golf courses around the country designed by Kidwell & Hurdzan, Inc. will open this year - from the resurrected Carolina Trace course in West Harrison, Ind., to the 27 holes in a tidewater area for the Hampton (Va.) Roads Golf Course.

Kidwell & Hurdzan courses in the growing stages awaiting warm-weather openings include the Hampton course; Carolina Trace, now called Grand Oak; Baker Reserve Golf Course in Minneapolis, Minn.; Shamrock Golf Club in Powell, Ohio; Cedarbrook Golf Course in Belle Vernon, Pa.; Boone Links in Florence, Ky.; Link at Renaissance in Cleveland, Ohio; and Hillcrest Country Club in Batesville, Ind.

The city of Hampton and GRC Golf Contractors of Fort Pierce, Fla., coordinated by Can-Am Golf, built the Hampton course. Fourteen of its holes are built on a landfill and were designed in the rolling linksland style, while the other 13 holes were built in a mature woods, with four holes across ponds

near Cincinnati, was originally built in the and Associates signed an agreement that 1960s but went out of business. Urged on by gave Boone County the land for the course PGA pro Paul Bessler, a group of investors in exchange for the right to integrate housdecided to have the near-mountainous site ing among the new holes. The course featotally redesigned.

around existing wetlands, silviculture test ar- workhouse. eas and specimen vegetation. Eight holes were rebuilt and 10 new holes added on the acreage where ducks and deer still live.

Free-form landscapes and large tees and ity greens highlight the Shamrock course that was built by Salvers Golf Course Construc- mercial driving range, short game learning tion. The course is expected to open around Memorial Day.

ating two public golf courses, added another border a creek which in turn bisects the site 27 holes with the steep Cedarbrook course.

Construction built the course which includes earthsculpture, short in yardage but very a tunnel under Interstate 70.

Boone Links' nine new holes was a unique Grand Oak, along the Ohio-Indiana border development in that the Ralph Drees Co. tures a waterfall along with several stone Baker Reserve was strategically routed walls built by prisoners from the county

> Links at Renaissance, a contemporarylooking par-64 executive course, was built around the perimeter of a health-care facil-

> The course is complemented by a comcenter and pay-by-the-hour putting green.

Hillcrest's nine new holes, built by Stam-Pittsburgh's Stawovy family, already oper- baugh, traverse very intense slopes that down its long axis. Kidwell and Hurdzan feel Willard Stambaugh of Quality Golf Course the course offers "a dramatic departure in demanding in shot value."

Please keep us informed

Each month, Golf Course News - in cooperation with the American Society of Golf Course Architects - will publish news stories on new golf courses being built in the United States.

We are asking people who are planning or have begun construction of new courses, or rebuilding or expansion of existing ones, to write to

Golf Course News, P.O. Box 767, Yarmouth, Maine 04096.

Golf Course News is particularly interested in:

- The city and state of the course.
- · The owner, builder and architect.
- · The number of holes and total yards.
- · Whether the course is private, daily fee or municipal.
- The target date for completion.
- · The type of terrain or any outstanding features of the layout of the course.
- · Color or black and white photos of unique holes.

Two Carrick courses take shape in Ontario

Douglas Carrick of Robinson & Carrick Associates Ltd. has designed two new courses that are being built in Ontario, Canada — one involving pro Curtis Strange as a design adviser for the first time in North America.

Both courses are scheduled to be completed in August and to open in 1990.

Strange is involved with Carrick in designing the King Valley Golf and Country Club course in Snowball. The 18-hole 6,891yard layout traverses wooded and rolling terrain, and water is in play on seven holes.

Bruce S. Evans is building the course for the owner, King Valley Investments.

Rolling terrain at the base of the Niagara escarpment is Carrick's challenge for the Greystones Golf and Country Club in Milton, Ontario,

The 18-hole, 6,800-yard course will be owned by Marcel Gasparetto and George

Lohman helping on back 9 at Settler's Hill Golf Club

Lohmann Golf Designs of Crystal Lake, Ill., has announced it will assist in designing and building the back nine at Settler's Hill Golf Club in Batavia, Ill.

Tim Miles, president of John Jacob's Golf Management, will oversee design and constuction.

Bob Lohmann feels the result of the combined efforts of Miles and Lohmann Golf Designs will be a challenging and

The course is the first in Illinois to be

built on a landfill.

Waste Management, Inc. dedicated the landfill, the Kane County Forest Preserve and the first nine holes at Settler's Hill to the city of Batavia last October.

Lohmann Golf Designs is also working with Fuzzy Zoeller to design Boulder Ridge Country Club in Crystal Lake.

Settler's Hill Golf Course will be managed by John Jacobs Golf Manage-

"We need to build one golf course every day until the year 2000"

Does one belong in your community?

in the U.S. is such that some 4,500 new courses will be needed by the Year 2000.

tunately, the current rate is closer to 125



keeping pace with demand . . . especially in the public/municipal sector where the bulk of the demand is occurring.

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GOVERNMENT UPDATE

criminal to allow such a great por-

tion of our water resources to be

controlled by individuals who have

never been certified as competent."

expressed policy or code that ad-

dresses installation and fabrication

of complete irrigation systems.

McGee said the state has no

Florida bill would mandate irrigation

A bill reportedly will be introduced in the next Florida legislative session that would mandate testing and licensing for all irrigation contractors.

The Florida Irrigation Society supports the bill, according to FIS Executive Director Fred McGee.

Saying that as much as 75 percent of Florida's water usage is directed toward irrigation of some type, McGee said, "It's almost

Oregon

Continued from page 1

That brought a renewed burst of legislative action by environmentalists and others. The Oregon Senate and House are hearing three bills, all of which would ban field burning. One would stop field burning and propane-flame sanitation immediately; the others would stop it in one year or two years, respectively.

Seed industry officials involved in the issue feel a final negotiated bill will be passed by the first of July.

It is a serious issue for the seed industry and the golf courses and others who depend on the seeds in their businesses.

"This cause a reduction in yield and ... a significant problem for the industry in controlling diseases and weeds that may infest grass seed fields," said David Nelson, executive director of the Oregon Fine Fescue Commission in Salem, Ore. "It would give us major quality-control headaches."

Nelson said if the ban is passed, prices of quality seeds will rise and supply will decrease.

He added that the "significant numbers" of Oregon seed companies, which employ about 10,000 people, would look to move to other places.

Washington supplies the bulk of U.S.-produced bluegrass but little else. Argentina wants to grow seed, and China "desperately" wants to get into the seed business, Nelson said. "I don't know where, but there's another place somewhere in the world that could grow seed like Oregon."

Nelson said he sees all three bills as "vehicles to use for rewriting the final bill — whatever that may be — after a negotiation process.

But he said there's little to negotiate.

"There's not too much we can do," he said. "There are a few things we have learned how to do: For instance, propane flaming is a substitutable alternative (to burning) for some of the newer turftype ryegrasses."

The Oregon Seed Council, Oregon Seed Trade Association and Oregon State University

Continued on page 15

NCA hires Washington veteran

The National Club Association has appointed Thomas M. Walsh director of government relations, according to NCA Executive Vice President Gerard F. Hurley.

"With his unique background in legal, legislative and tax matters (Walsh) is a valuable asset to the association and the private club community," Hurley said.

Walsh, an adjunct professor of political science at Catholic University, joins NCA after four years of extensive legal and legislative work in private practice. He served as tax counsel for the U.S. Senate Committee on Small Business in 1984-85, advising the committee and its members on tax and energy issues.

From 1978-84 Walsh provided legislative assistance to U.S. Sen. Dale Bumpers. He advised Bumpers and the Senate Committee on Eenrgy and Natural Resources on all energy matters coming before committees and the Senate.

Walsh also served two years as senior tax attorney for the U.S. Department of Justice, a post he took after four years as attorney for the Office of the Solicitor at the

Federal Power Commission, now the Federal Energy Regulatory Commission.

Walsh said he looks forward "to applying my experience to the challenges that lie ahead in furthering the association's interest and protecting the rights of the nation's private clubs."

NCA is composed of 1,000 private social, athletic and recreational clubs, including 700 golf facilities, and is the only trade association serving the business, legal and legislative interests of private clubs nationwide.



More playability.

III. ruling puts some at risk

More vigorous state criminal prosecution of safety and health violations in the workplace is in prospect.

An Illinois Supreme Court decision on Feb. 2 exposes corporate officials to increased risk ofimprisonment and/or monetary fines for such violations.

The American Seed Trade Association, 1030 15th St., N. W. Washington, D. C., 20005, has copies of the ruling report prepared by ASTA legal counsel.

Weed stance toughened after Argentine problem

The Animal Plant Health Inspection Service (APHIS) has toughened its stand on noxious weeds found in imported seeds.

The agency announced on Feb. 7 that:

"Any weed or imported weed seed listed in the Federal Noxious Weed Act Regulations is subject to the FNWA even if occurs in a shipment of agricultural or vegetable seed."

Prompting this decision was

discovery of Serrated Tussock (Nassella trichotoma) in lots of grass seed mixtures containing tall fescue imported from Argentina.

Previously, only those nine noxious weeds listed in Title III of the Federal Seed Act were cause for concern in imported

The Federal Noxious Weed Act Regulations list many more seeds.

Oregon

Continued from page 14

Agronomy Unit have all said that without burning it would be difficult to maintain the seed industry as it exists today.

John Powell of Powell & Associates in Salem, who lobbies for the Oregon Seed Trade Association, said, "It's an extremely emotionalissue." Some 500 people - "a majority of them from the farming community" - attended a public hearing on one bill on April 11, he said.

Powell said he has been negotiating with the governor's office, legislators and opponents of burning since late October and he expects a compromise to be worked out. "The fact is, the hearings usually don't change any minds," he said.

Jim Carnes, president of International Seeds and immediate past president of the American Seed Trade Association, said, "I do not feel there will be a ban at this time.

"The governor (Neil Goldschmidt) has said he will veto a ban. He wants action taken but the seed industry to survive."

Carnes said the seed industry has offered these compromises:

- Reducing the cap on burnable acres statewide from 250,000 to 165,000.
- · A five-year phaseout of burning, but allowing growers to continue to burn stacks if they can't sell the straw. "We've proved less than 10 percent of the smoke is generated from stack-burning because it's a much hotter fire," he
- Increasing fees that growers pay per acre that they burn, with the money used for research on straw use and alternative ways to sanitize fields.
- · The five-year phaseout be law "providing we have workable alternatives in place, certified by the Department of Agriculture and the Oregon Environmental

Powell said an immediate ban would surely not pass.

"If it did, it would shut down the industry as we know it because no known way exists to even give the straw away," he said.

He said the prospects of negotiating a limited burning are good.

"There are two major questions," he said. "One, how many acres will be allowed to be open-burned? Two - and this really worries the farmers — will there be a definite cutoff date in the future?"

Open-field burning has been an issue in Oregon for nearly 20 years.

The state legislature in 1971 banned open-field burning effective in 1975; but the 1975 legislature set a four-year phaseout. Then the 1979 legislature stopped the phaseout at 250,000 acres statewide.

Since then the seed growers have portioned out the 250,000 acres among their total 345,000

The legislative battle is "going to be difficult," said the Oregon Fine Fescue Commission's

"We just have to work through the process... Our opponents want to bring the issue up on the 1990 legislative ballot."

But the seed growers just released a poll that indicates that 65 percent of the Oregonians polled oppose a ban on field burning.

Another 31 percent supports the ban and 4 percent are undecided, the poll found.

This is where perfect lies start on your fairway. New Cutless 50W from Elanco.

Unlike other turf growth regulators, new Cutless doesn't stop the development of warm and cool season turfgrass. Instead, it

reduces or slows your turfgrass's growth rate by shortening the internodes of the growth stem with no adverse effects on their roots. The result is improved turf quality and more playable fairways.

With Cutless, your turfgrass appears thicker and stronger for a denser, more consistent playing surface. Golf balls just naturally sit up better.



Cutless also reduces your water use, resulting in less turf wilt. And lower irrigation costs.

But Cutless does more than that. Much more. It also gives your turf a rich, darker green color.

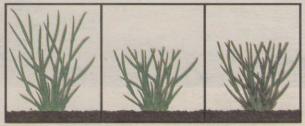


Because Cutlesstreated grass grows at a slower rate, there's also a dramatic reduction in clippings. Up to 50% less. With less mowing frequency. Also up to 50% less. You not only save time and labor costs, you

can also manage your hard-to-mow areas more

efficiently.

Here's another added benefit with Cutless. As your turfgrass grows up thicker and more competitive, there's less room for troublesome weeds to interfere. Cutless also helps crowd out Poa annua for conversion to a more desirable turfgrass such as bentgrass.



Sprig of grass in normal state.

even to 10 days after Cutless application, mowed sprig some times exhibits slight discoloration of treated area and leaf

3. Growth reduction peaks between third and eighth weeks, accompanied by darker green coloration and increased tillering.

Don't just take our word for Cutless. Take it from Scott Niven:



Superintendent, Stanwich Club Greenwich, Conn.

"I've reduced clippings 30 to 50% when we mow fairways. My guys don't have to empty the baskets as much, so we save time and money on labor. But I think the best advantage is the reduction in the amount of water you have using Cutless. It's a marked difference.

'Initially, you get so little discoloration with Cutless that a golfer would never notice it. But after 4 weeks, the differ-

ence was between night and day on how dark green the Cutless turf was.

"Cutless helped us convert from 80% Poa annua to over 95% bentgrass within five years. But I'm just as impressed with how Cutless creates a much thicker turf. It makes the grass as tough as nails, helps the ball sit up higher for our golfers."

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Columbus course boom

Financing varies from private moneys to municipal bonds in Ohio golf course explosion

BY JEFF GROEZINGER

Boom (n) — What happens when a large demand for a product is met with an insufficient supply, leading a variety of developers, government officials and private individuals to spend large amounts of money to buy and develop large plots of land in order to satisfy a clamoring public.

While this definition didn't quite come out of Mr. Webster's Dictionary, had the esteemed compiler of words and meanings been in Columbus, Ohio, for the past two years, he may well have seen fit to include this description of "boom" in his book. For it has been over the past two years that Columbus has been the center of a golf course development boom that few areas outside of the Sunbelt and the Southwest have ever

No less than nine golf courses (and an additional nine holes at an existing course) either have been built, are under construction, designed or planned in the last 24 months within a 20-mile radius of Ohio's capital city. The sheer number of courses is notable enough, but adding to the surprising number is the equally surprising variety of development plans bringing these dreams to fruition.

Looking back

Why Columbus? Most notable is the fact that even though Columbus' population has increased from 1 million to 1.5 million over the past 18 years (according to the Chamber of Commerce), not one golf course has been built within the Greater Columbus area.

The subject of a recent Newsweek article picking 10 of America's best cities to live in, Columbus brings a blend of good-paying service-industry employment, fairly low crime rates and rapid population expansion.

Meanwhile, the country's population is aging, and more and more, the older population is finding the less rigorous demands of golf are a pleasant alternative to running up and down a basketball court.

Demand for golf, both public and private, is growing by sheer increases in population



Jeff Groezinger photo

A view from the front left of the 10th green shows the depth of the bunkering. The course is designed by the Kidwell/Hurdzan firm of Columbus.

as well as in percentage of population.

Thus it was just a matter of time before public golf course operators found they were able to increase fees without dramatically affecting a steadily increasing play. Public courses of even marginal quality of design and service have been experiencing a strong demand from area golfers since there are simply not enough facilities to play.

Courses of higher quality are finding oneto two-hour waits virtually every week day. Private clubs that once offered low or no initiation fees have now found that a \$5,000 or \$10,000 fee hasn't shortened a waiting list ranging from eight to 25 years.

Residential developments

Area developers are using many approaches to exploit this pent-up demand, but these methods primarily fall into one of three categories.

Two developers, Planned Communities and the Day Brothers, are following the lead of developers around the country and using top-quality private country clubs as an attraction to their residential developments.

Planned Communities' project, the Lakes Club, is well into its development as nine holes are ready for seeding, the clubhouse foundation has been laid, and the second nine holes are under construction.

The Highland Lakes project represents the highly respected, Columbus-based developing company's first effort at combining residences (Highland Lakes) and golf courses (the Lakes Club) into one community. The company's recent residential projects have been in the upscale market, but having a premier country club as an attraction to prospective residents represents a new marketing tactic.

Former PGA Tour player and Columbus native Ed Sneed was enlisted to design a course that will challenge the better players with its design rather than length. The less-than-brutal yardage is also meant to attract the average player who Planned Communities feels will be the typical member and resident.

The entire development is somewhat unusual in that two adjacent public golf courses and some surrounding property totaling 664 acres (owned by one individual) will become the site of the golf course

and very upscale housing. The first phase of the development will offer approximately 65 lots with prices ranging from a low of \$80,000 to in excess of \$250,000.

The new course will retain none of the original holes, and Planned Communities is funding the entire project with no public debt.

The Day Brothers' development is highlighted by Wedgewood Country Club and is located in Powell, a Northwest Columbus suburb and a five-minute drive from Muirfield Village. Another successful local developer, the company has engaged Robert Trent Jones Jr. to convert the rolling and treestudded property into a country club capable of attracting real-estate buyers and upscale golfers who are tired of being on waiting lists at clubs that might be inferior in design and amenities.

Though not as far along in construction as Highland Lakes, the Wedgewood project has been designed and plotted, preliminary construction is underway, and residential lots are being offered for sale.

The Wedgewood development will be similar to Highland Lakes in that both communities will feature luxury, single-family residences intertwined with a golf course that will appeal to almost anyone. And both are capitalizing on Columbus' explosive growth to the north, northwest and northeast.

Two other quite similar residential/golf course developments are in the preliminary planning stages.

Awaiting all the various aspects related to putting an entire development together, is a

championship golf course that will become the focal point of the Villages at Rocky Fork, being developed by The Limited CEO Les Wexner. The name most often mentioned as the course's designer is Columbus' Jack Nicklaus.

The Rocky Fork project will feature possibly the most exclusive and expensive residential development in the area, eclipsing even Muirfield Village with homes that will range from \$300,000 to more than \$1 million.

The last of these combination developments was the first one to be announced. Governmental regulations and reluctant neighbors have added many delays to the progress of the project known as Heron Lakes. Jim Fazio has been contracted to design the golf course on a 235-acre site near a major reservoir two miles east of Highland Lakes.

The development, a project of Floridian John Murphy, will feature more than 1,000 luxury single-family residences, but also many cluster homes, with price tags in the range of \$200,000.

Different motivation

Another private club being developed has a different motivating force behind its genesis. The course is actually a product of a membership desiring a new location. The original Winding Hollow Country Club was a nine-hole course built in 1928.

In 1951, the club engaged Robert Trent Jones Sr. to redesign the original nine holes and build another nine. Almost 40 years have seen Columbus expand so much that the rolling course on the city's north side has been squeezed in by primaruily low-income housing.

Yearning for a quieter setting, the club's members have sold the course to the city for \$2 million.

The proceeds will be used to build a new, Arthur Hills-designed club near New Albany, a suburb 10 miles east of Columbus.

The course has been designed, center lines of the fairways staked, and as soon as the weather breaks, construction will begin. Estimates call for the club to be opened in 1992, the 500th anniversary of a sailor named Christopher landing on the shores of a new world.

In return, the city will most likely assume operation of the venerable Winding Hollow layout in 1991 or 1992, depending on when the new course is completed. At that time, the city will begin operating what will surely be one of the country's finest municipal facilities.

A new municipal

Along with Winding Hollow, the city is developing another municipal course near the city's east suburb of Pickerington. To be known as Turnberry Golf Club, the course

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Summary of Columbus' golf boom

Course	Architect	Туре	Funding
The Lakes Club	Ed Sneed	Private/resid.	Private
Heron Lakes	Jim Fazio	Private/resid.	Private
Shamrock	Kidwell/Hurdzan	Public	Private
Arrowhead Lakes	Kidwell/Hurdzan	Public	Private
Winding Hollow	Arthur Hills	Private	Private
Bolton Field	Arthur Hills	Municipal	Government
Wedgewood	R. T. Jones Jr.	Private/resid.	Private
Rocky Fork	Jack Nicklaus	Private/resid.	Private
Bent Tree	Denis Griffiths	Semi-private	Private

covers all the bases

will be the first new municipal course since Bolton Field Golf Course was built in 1971. Arthur Hills again is the architect of the course which will feature upscale amenities (and green fees) in relation to the other municipal courses in the area.

The final municipal project is the addition of nine holes to Bolton Field Golf Course on the city's far west side. According to Allan McKnight of the Parks and Recreation Department, all that needs to be accomplished is to iron out the clearances needed with the adjoining Bolton Field Airport.

"We're hoping we can get that all accomplished so that construction could begin as early as this fall," said McKnight. Though

no architect has been contracted, preliminary discussionshave been held with the Kidwell/Hurdzan firm of Columbus.

A microcosm

With the exception of the Winding Hollow situation, these courses exemplify most new course development in the country today. Typically, most private courses are part of a residential development where the course helps sell lots, and when the lots are all sold, the members sustain the clubs with dues and assessments.

On the public side, some level of government, with its access to bond or tax money, finances public golf courses to benefit the



Jeff Groezinger photo

The main irrigation lake and pump house for Arrowhead Lakes are on the left here, looking

NGF hot spots

	mated Number	Total Golfer
Metropolitan Statistical Area	of Golfers	Per 18 Hole
New York, N.Y.	758,113	9,245
Los Angeles-Long Beach, Calif.	817,099	7,895
San Francisco, Calif.	155,678	5,766
El Paso, Texas	44,401	5,224
Chicago, Ill.	759,688	5,168
San Jose, Calif.	138,515	4,947
Anaheim-Santa Ana, Calif.	214,029	4,653
Albuquerque, N.M.	59,658	4,419
Salt Lake City-Ogden, Utah	142,193	4,245
Oakland, Calif.	191,606	4,211
Visalia-Tulare-Porterville, Calif.	28,517	4,074
Wichita, Kan.	59,921	3,995
Fresno, Calif.	57,879	3,992
Miami-Hialeah, Fla.	165,291	3,983
Seattle, Wash.	181,095	3,937
San Antonio, Texas	99,721	3,911
Milwaukee, Wis.	221,263	3,882
Detroit, Mich.	648,139	3,835
Sacramento, Calif.	128,262	3,829
Las Vegas, Nev.	54,824	3,781
Spokane, Wash.	36,884	3,688
	217,948	
Cleveland, Ohio		3,663
Madison, Wis.	54,495	3,633
Davenport-Rock Island-Moline, Iowa-Ill.	56,124	3,621
Oxnard-Ventura, Calif.	61,113	3,595
St. Louis, MoIll.	191,929	3,576
Baltimore, Md.	165,809	3,491
Houston, Texas	257,606	3,435
Provo-Orem, Utah	34,302	3,430
McAllen-Edinburg-Mission, Texas	28,756	3,383
Fayetteville, N.C.	26,849	3,356
Cedar Rapids, Iowa	25,009	3,335
Stockton, Calif.	41,610	3,329
Portland, Ore.	124,857	3,286
Denver, Colo.	189,021	3,284
Green Bay, Wis.	29,531	3,281
Racine, Wis.	27,660	3,254
Minneapolis-St. Paul, MinnWis.	341,293	3,235
Springfield, Ill.	24,135	3,218
Dallas, Texas	189,527	3,185
Boulder-Longmont, Colo.	24,937	3,117
Toledo, Ohio	72,300	3,077
Tacoma, Wash.	55,342	3,075
Corpus Christi, Texas	29,138	3,067
Manchester-Nashua, N.H.	32,101	3,057
New Haven-Waterbury-Meriden, Conn.	74,671	3,048
Salem, Ore.	28,239	2,973
Boston-Lawrence-Lowell-Brockton, Mass		2,970
San Diego, Calif.	218,000	2,966
Bergen-Passaic, N.J.	91,464	2,950

According to National Golf Foundation research, these are the 50 areas in the United States with the greatest opportunity for both public and private golf course development. NGF researchers first analyzed all 317 Metropolitan Statistical Areas within the United States, and each MSA was compared in terms of total number of golfers per 18 holes of golf. Researchers then factored in economic and other important variables within the MSAs to reach their final determination. The asterisks denote those areas that are also among the top 25 in the country when MSAs are analyzed in terms of public golf course needs.

TOTAL

area's citizens. The fact that the courses usually make money also enhances their image in city officials' eyes.

Unique developer

An unusual element in Columbus' golf boom is the addition of a third type of developer. This developer is capitalizing on the economics of the golf industry in central Ohio and is using private (or non-public) debt to build public golf courses.

Bill Parker was the first to exploit the under-developed public market in Columbus. Parker, an experienced golf course builder and operator, already owned a fine public course in Cable, Ohio, about 45 miles west of Columbus. He bought 167 acres near Delaware, about 10 miles north of Columbus on which he built a course that was planned to fit in a niche between a highquality public course and a country club.

As a result, Bent Tree Golf Club features bentgrass tees, fairways and greens, plenty of water and traps, and an enjoyable vet demanding layout.

Designed by Denis Griffiths, Bent Tree was opened last June, becoming the first public golf course to open in the area since Bolton Field. Early reviews of the course were complimentary and play has steadilty increased.

Parker's idea is that a high-quality course can ask (and receive) a higher fee. As a result, Bent Tree's fees (which include mandatory car) were \$35 in 1988 and are expected to go to \$39 this year.

Helping fincance the course's estimated \$4 million cost was the sale of seven residential lots (five are still available) and 100 10year memberships which entitle the holder to unlimited fees and cars for the period. These memberships started at \$15,000 and over one-half were sold before the course was finished.

Another public course being built along the lines of Bent Tree is Shamrock Golf Club, located near Wedgewood Golf Club on the northwest side of Columbus. The Day Brothers are again part of the developing team bringing a top-quality public golf course to Columbus.

Shamrock was designed by the Kidwell/ Hurdzan firm, and construction has proceeded to the point that, given reasonable weather, the layout will open this summer. Since it was located on 104 acres, a premium will once again be placed on accuracy rather than length.

The higher quality design and amenities will also bring along a higher daily fee estimated to be \$25 (typical fees in the area range from \$9 to \$12) and cars will be mandatory on the weekends.

2.642

The third privately developed, public golf course is again being designed by Kidwell/

Hurdzan. Jim Groezinger, who has operated Minerva Lake Golf Course (a privately owned, public course) for 10 years is making the switch from operator to owner as he is developing a nine-hole course and driving range 8 miles north of Columbus.

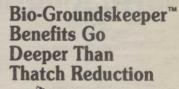
Called Arrowhead Lakes Golf Club, the course will measure more than 3,200 yards and feature mounding and six lakes to provide all the challenges a golf-hungry public could desire.

When completed, it may be the finest nine-hole course in the area and perhaps go a long way towards removing any negative preconceptions people may have towards nine-hole or executive-length courses.

Ohio's mild winter allowed the crew an opportunity to almost completely install the irrigation system and, given a cooperative spring, the course should be open for play by September.

Long-range plans for Arrowhead include the possible addition of another nine holes depending on land availability and suitabil-

Columbus is truly a synopsis of a golf boom, fueled by a strong demand that shows no sign of abating. Private developers and government are coming to the foreground in an effort to satisfy an old marketing axiom with a slightly different twist: "Give the customer what he wants ... a golf course!"





66 In the past...we have never had roots over four inches. Now, the roots on the greens and tees are eight inches or better.

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For Free Information Circle No 132

nnovations make more color

To flower or not to flower: the question is controversial if nothing else for golf course developers, architects and superintendents as well as seed companies.

Now, two innovations have added a new dimension - and new questions - to wildflower use on golf courses.

"Color is king and this is a way to achieve color," says John R., Thomas of Wildseed Inc. in Eagle Lake, Texas, whose J-Thom 42 wildflower drill seeder has added a new, cost-effective method of adding dynamic color to large areas of rough for some regions of the coun-

And Norm Poppe of Applewood Seed Co. in Arvada, Colo., whose company is producing a new carpet loaded with wildflowers, says, "There's a lot of good interest" in wildflowers from golf course superintendents, but mostly for special, small areas.

Yet there are warnings.

Lesco, Inc. Vice President for Research and Development Art Wick says, "Wildflowers are not for everyone. They are not for the guy who lays his money down and says, 'I want results tomorrow.' "

Architect Jeffrey D. Brauer of GolfScapes in Arlington, Texas, said of using wildflowers on a course: "The key phrase is 'in particular places. We as architects like the visual high-contrast stuff but you go and play with the typical player and he likes the more traditional things. They like to hit the golf ball and have it land in normal turf and they don't care for the wild stuff. They don't mind it if they can hit in it, that's what it boils down to."

Tony Halterlein, curator of horticulture for American Horticulture

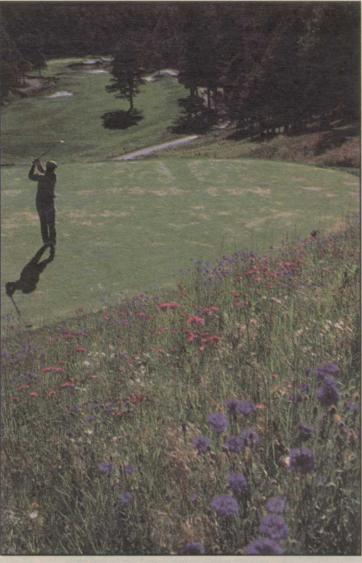


Photo courtesy of Applewood Seed Co. Wildflowers provide a pleasant surrounding as a golfer tees off at Forest Highland Golf Course in Arizona.

Society in Virginia, said wildflower use is "a new area in the last six or seven years. We don't even have any specialist in that area on the staff here."

Wick of the Ohio-based Lesco said interest in wildflowers among

golf course superintendents peaked two to three years ago.

But Marie Pompei of the New Jersey-headquartered Lofts Seed Inc. said, "Yes, interest peaked out West and in the Midwest awhile ago, but in the East they're hot."

Most people in the seed industry produce answers for particular problems, and the variety of those answers suggests golf course superintendents should closely scrutinize their options.

Drill seeding possible

Sharlotta Krupala, horticulture and forestry superviser for the Arlington, Texas, Parks and Recreation Department, is sold on the J-Thom 42 and how it has helped beautify her city.

Three years ago she started using the tractor-drawn machine, which implants wildflower seeds into the soil, along the median strip on the highway loop around the city. "Then we started in some of our parks that are very open, very natural," she said. "And we've just expanded it. This is the first year on the golf course."

Krupala last fall sowed 11 varieties of seed on five areas covering five acres of roughs on the Chester W. Ditto Golf Course at a cost of \$1,000.

Although a couple of severe storms hurt some of the wildflower growth this winter, she is happy with her three-year experiment and promises to plant on other areas of the Ditto course as well as Arlington's second municipal course.

Krupala stressed that wildflowers must be seeded while the turfgrasses are dormant, so that they can germinate and grow during the winter and get a head start on the grass come spring.

Then, while the flowers are blooming in the spring, the grass is just starting to green up," she said. "And for the most part your flowers are going to thrive and grow before your grass really gets aggressive and thick. So by the time your flowers are starting to dry out, your grass is coming n and you have anice green carpet of grass." You just mow the wildflow-

Wildseed's Thomas, who invented the J-Thom 42, said more non-native wildflowers are being used now than native varieties because "non-natives are less expensive, give a great deal of color, and can be trimmed and mowed after they bloom" and the annuals among the native varieties must go to seed to get a crop the next year "and they look pretty scruffy when they go to seed."

His machine is unique, Thomas said, because it will plant wildflowersthrough the existing turf. "Now they (superintendents) have the best of two worlds," he said, "seed into existing turf, get a colorful show of flowers and, after the bloom cycle ends, cut the wildflowers and you're back to turf."

Others say the Truax, Tye and Befco drill seeders can also be modified with different calibration boxes to plant wildflowers.

Thomas said that if a superintendent wants color for a longer time, they can use more varieties. The J-Thom 42 can plant up to nine varieties that will bloom over a period of three to four months.

"Most golf courses are planting from October to December so the flowers will bloom from starting in early spring, say from early March to June," he said. "In the North you would plant in the spring and get color later in the summer and fall."

The J-Thom 42 can be bought for \$8,500 or Wildseed can contract to do the planting.

Thomas gave as an example of the cost: If you decided on using corn poppy (\$50 to seed an acre) and corn flower (\$25), and then contracted with Thomas to seed, would run about \$350 per acre. Add more varieties and the cost goes up, such as \$100 per acre for the African daisy.

Dave Oatis, a USGA Green Section agronomist in the Mid-Atlantic Region, said he had never seen such a large planting and would have to reserve judgment on the procedure.

"The wildflowers, if they're tall enough to grow quicker than the grass (when the warm weather arrives), they're going to make a splash of color the first year," Otis said. "But then you are going to have to do it again the next year... Hopefully you'll get good enough germination with the wildflowers that they will be more apparent than the grass...

"It's hard to say, there are so many variables," ne adds.

Pompei said the South, where the J-Thom 42 has been used, does not have the problems of the East where "everything grows so lush it's hard to keep the weeds down and keep the area in wildflowers."

In the East, Pompei recommends eliminating the cover on the area and preparing the site just as you would a new grass seeding, minus the fertilizing or liming.

North American wildflower seed producers

Wildflower seed producers in North America include the follow-

Adams-Briscoe Seed Co. P.O. Box 18 Jackson, Ga. 30233 Tel. 404-775-7826 Circle No 260

Agway, Inc. Box 4741, 333 Butternut Dr. Syracuse, N.Y. 13221 Tel. 315-449-6682 Circle No 261

Amcorn Hybrids-Amturf Seeds 1093 129th Ave. Bradley, Mich. 49311 Tel. 616-792-2241 Circle No 262

Anderson Seed Co., Inc. Box 1017 Lamar, Colo. 81052 Tel. 719-336-2226 Circle No 263

Andrews Seed Co. 580 S. Oregon St. Ontario, Ore. 97914 Tel. 503-889-9109 Circle No 264

Applewood Seed Co. 5380 Vivian St. Arvada, Colo. 80002 Tel. 303-431-6283 Circle No 265

Arkansas Valley Seed Co. 4625 Colorado Blvd. Denver, Colo. 80216 Tel. 303-320-7500 Circle No 266

Browning Seed, Inc. Box 1836 Plainview, Texas 79072-1836 Tel. 806-293-5271 Circle No 267

CRM Ecosystems, Inc. Prairie Ridge Nursery 9738 Overland Road Mt. Horeb, Wisc. 53572 Tel. 608-437-5245 Circle No 268

Carter Seed 475 Mar Vista Dr. Vista, Calif. 92083

Tel. 800-624-5700 (Calif.) 800-872-7711 Circle No 269

Comstock, Ferre & Co. 263 Main St., P.O. Box 125 Wethersfield, Conn. 06109 Tel. 203-529-3319 Circle No 270

Conlee Seed Co. P.O. Box 23219 Waco, Texas 76702-3219 Tel. 817-772-5680 Circle No 271

Daehnfeldt, Inc. P.O. Box 947 Albany, Ore. 97321 Tel. 503-928-5581 Circle No 272

Environmental Seed Producers P.O. Box 5904 El Monte, Calif. 91734 Tel. 818-442-3330 Circle No 273

Ferry-Morse Seed Co. P.O. Box 4938 555 Codoni Ave Modesto, Calif. 95354 Tel. 209-579-7333 Circle No 274

Garden Aid 1840 Howell Ave. P.O. Box 17298 Dayton, Ohio 45417 Tel. 513-268-1212 Circle No 275

Garrison Seed & Co., Inc. P.O. Drawer 2420 Hereford, Texas 79045 Tel. 806-364-0560 Circle No 276

Great Western Seed Co. P.O. Box 387 810 Jackson St. Albany, Ore. 97321 Tel. 503-928-3100 Circle No 277

Jonathan Green & Sons, Inc. P.O. Box 326 Farmingdale, N.J. 07727 Tel. 201-938-7007 1-800-526-2303 (outside N.J.) Circle No 278

Harris Moran Seed Co. 3670 Buffalo Road Rochester, N.Y. 14624 Tel. 716-594-9411 Circle No 279 Continued on page 19

achievable for golf courses

Even if successful on the large scale, the J-Thom 42—or the Truax drill seeder— is not for those areas superintendents who have traditionally beautified with flowers.

Wildflowers, Pompei said, have "caught a lot of interest from superintendents who are looking to get a lot of color for low-maintenance areas, out-of-play ares, hard-tomaintain slopes, maintenance areas, and in the roughs."

Dr. David Northington, director of the National Wildflower Research Center in Austin, Texas, advised, "Be aware that wherever you are there are natural open areas, and look at the true natives (varieties) and pick a good grouping of species of grasses and flowers so that you have a natural community. Then they will be so successful and so thick, if you establish them properly, that not much of anything will grow in that's weedy."

A carpet with color

Applewood for the first time this year outside the Denver area is offering a wildflower carpet, a fiber mat similar to grass sod.

Applewood's Poppe said the most substantial expense is transporting the carpet.

"The shipping price is a large factor," he said. Without shipping, to buy it on pallets in 250-foot increments costs \$1.25 per square foot, which translates to \$48,696 per acre. Thus its forecasted use in smaller areas.

"We foresee it being used in high-traffic, high-visibility areas where people want to get immediate vegetation and to color fairly rapidly so it is an area that looks finished," Poppe said.

"We've also seen where people will fringe an area with sod, and seed in the background to reduce the overall cost; also areas with steep slopes where seeding doesn't work well."

Dr. Northington said of the carpet, "I think it has some potential. It's a new product and needs to be played with a little bit, but it puts an awful lot of plant out there awful thickly and there's a lot of self-elimination just because of how thick they are."

Northington said some people are suggesting that the carpet be cut into 2-inch squares and planted a short distance apart, and "I think that's a good idea."

"For the type of use some people want, it's ideal," he said. "They want it to color, they want it to work the first year, and they don't mind replugging or replanting af-

Some replanting is necessary because the mat is perennials, and some of them won't re-establish themselves, he said.

Be choosy

While color may be king — and wildflowers the royal deliveryman — in some regions at least caution is suggested.

Lesco's Wick said that in his



Photo courtesy of Applewood Applewood Seed Co.'s wildflower carpet arrives with flowers 2 to 3 inches high.

experience "the interest has leveled off because many of the people who tried it either didn't do it correctly in their planning procedures or didn't understand they were going to have weed competition. They expected more than what they got and many people have backed away from the use.

"Likewise, " he added," there are many who have had good results and are happy with it and add to their plantings each season. It's something that takes a heck of a

lot more planning and ground preparation than many people think. You have to prepare a seed bed just like you were seeding a lawn."

Wick said the region west of the 100th meridian (located from central Texas along central Nebraska and central Kansas) is more successful because of lower rainfall and therefore less weed competition.

Wick said courses that have tried wildflowers in the West have had "a reasonably high level of success. You get into the semi-arid areas like western Kansas, western Texas, Colorado, the mountain states, California, they're able to produce good-quality wildflower areas."

His suggestion to people who wanted wildflowers has been "to buy a bunch of nursery containers like chrysanthemum pots which are relatively shallow and set them outside, side by side, and throw the top-dressing mix that they might use for their greens, assuming they are using a mix that contains some soil... and broadcast wildflower seeds right down over them. Let them grow in the pots, let them get well established, go out with a shovel and plant them in blotches all over the place..."

Wick said his suggestion to superintendents is:

Most wildflower seed companies are putting together specialty mixes — from concentrating on natives of particular areas to mixes of cut flowers, mall perennials, annuals, shade, and full sun.

• "If you are in a lower-rainfall area I'd say your chances are pretty good to prepare a good seed bed, water it and moderately fertilize it to get it established. If you're east of that (rainfall) line I'd say, Are you willing to kill the existing vegetation and the possible spot-weed volunteer stuff that comes up after you've seeded in that dead vegetation?

"Be prepared to reseed in year number two if your catch in the first year isn't to the degree of density you want. Many supers say that's too much of a hassle."

• Get a sample kit of what the seed company has available and plant simple straight rows15 feet long of the individual varieties. Then observe what varieties do well and what ones don't.

From that information the company can prepare a custom blend for the course.

Dr. Northington said most wildflower seed companies are putting together specialty mixes — from concentrating on natives of particular areas to mixes of cut flowers, mall perennials, annuals, shade, and full sun.

"There's all kinds of combinations of species that are supposed to work in certain situations," he said.

"They will often also mix in other varieties that have a chance of making it anywhere, but the natives will come back the second year, the non-natives won't."

Many golf course superintendents may not want to wait the six or eight months it takes to establish plants.

Some may decide the color is worth the wait. Some may indeed dig deep and pay for instant beautification.

Still others may stick with grass and grass alone.

"We can't forget it's out there to be a golf course. And most golfers are going to think of a golf course in terms of memorability and playability," says architect Brauer. "Most golfers count up the number of balls they lose at the end of a round, too, and you can't steal their balls."

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Hobby Gardener Seed, Inc. P.O. Box 6342, St. A Toronto, Ontario Canada Tel. 416-624-1532 Circle No 281

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Wildseed, Inc. P.O. Box 308 Eagle Lake, TX 77434 Tel. 800-848-0078 Circle No 315

Willamette Seed Co. 220 N. Jefferson P.O. Box 791 Albany, Ore. 97321 Tel. 503-491-3675 Circle No 316

Slow play crucial to golfers, owners

COMMENT

TV and pros have led many to painstaking sluggardness

BY VERN PUTNEY

Greg Norman and Mark O'Meara last December at Pebble Beach, Calif., made a great run—or brisk walk—at the unofficial time record for 18 holes on the PGA Tour.

However, their mark must be accompanied by an asterisk. They failed the essential element in any golf speed test. Playing faster should mean playing better. Their ballooned scores of 79 each reflected inability to adjust to abrupt change.

In mid-April Norman led the PGA Tour with a 69.21 average, while O'Meara was in sixth place at 70.07.

Norman and O'Meara were at the rear of



last-day qualifiers, so, as a lark, they set off into the sunrise to provide a fine example in a setting notorious for slow play. They sliced five minutes from the 1:29 clocking of tour pros Bill Mallon

and Gary McCord, who both shot par in 1976 at the Heritage Classic's Harbour Town Golf Links in Hilton Head Island, S. C.

But Commissioner Deane Beman reprimanded Norman and O'Meara and threatened a fine for making a travesty of the game. The scores refuted that charge.

Since the oh-so-deliberate days of Ralph Guldahl a half-century ago, to the current snail's pace of most Tour players, completing the course in a reasonable hour has been a problem.

Behind the admitted gimmickry and showmanship of exceptionally fast play is a serious theme — how to combat a course condition that has become far more than irritant. It's the game's No. 1 problem and reaches into every facet of the industry.

From the course superintendents' standpoint, the slowpoke foursome becomes a maintenance headache. It's hard to keep work crews on an orderly schedule when there is inordinate congestion in one area, open space in another.

Management has even higher stakes in this course plague. It's money — frequently the difference between club prosperity and insolvency.

The simple economic fact is that the more rounds played, the more revenue. The more golf carts turned around for afternoon play, the more green fees, the healthier a club's financial status.

And fast play-good play is provable.

Contrast Norman and O'Meara's time and scores with a couple of average amateurs from Maine who in August 1963 set out to show the Maine Open field how to move—and score.

Eight handicapper Bill Sears and I, a sixhandicapper, set goals of less than an hour and a half for 18 holes, and fewer strokes than combined handicaps — 72 times two for 144, plus l4 for 158.

Playing from tourney tees, Sears carded 78. I stumbled in close the last two holes for



bogeys and a 79. Sears wheeled his own bag while I had the luxury of caddie. Total tally was 157. It was as easy as 1:23, the elapsed time.

The message of the next-day story sank in. The field finished well before darkness. Sadly, soon came return of the links laggard.

Faces are new, but the pace is familiar — tortoise slow.

Norman and O'Meara may have had a clearer track than the Riverside pair, but they had to contend with more than just 500 yards of extra territory. The four toughest holes on the 1988 PGA Tour, and seven of the most difficult 17, were at Pebble Beach's three layouts.

Still, too much time is wasted, despite extreme efforts by PGA Tour officials. Tournaments are policed like no others, players are hurried and fined. They must play by the (watched) clock or else.

However, the one thing the Tour has not done is invoke stroke penalties. That's the most significant imposition and the one that would really hurt. It's under consideration.

Is there any solution to this game-threatening situation?

From a background as caddie, caddiemaster, caddie school director, state tournament director, assistant professional, ranger, starter and for 35 years golf chronicler and observer, I offer some suggestions.

Foremost is: Discover the joy of fast play. Golf should be a pleasant and exhilarating experience. It is much more fun when breezing along.

Earl Cushman perhaps was the best example of relaxed and rewarding round. Play-

ing with fellow Greater Portlanders Dr. M. Carman Pettapiece, Tom Wentworth and me in the 1982 American Cancer Society's "Longest Day of Golf," a 5 a.m. to 9 p.m. marathon, a casual Cushman in his third round carded an eight-under-par 64. He closed with six straight threes. Wentworth had 73, Putney 74 and Dr. Pettapiece, in his 70s, 81. The foursome was 20 shots under combined handicaps.

Though Riverside has been under assault by several top shotmakers the past 55 years, there have been only two scores lower than Cushman's 64. Cushman followed with rounds of 66 and 68. Then came his first frown. As course play picked up, "Longest Day" foursome progress slowed. Cushman's game "deteriorated" to around par golf in the 174-hole cruise.

Cushman's scoring secret was tied to turning his back on fashionable television practices. These include: painstaking pacing of the fairways for yardage purposes and meticulous greens survey in a mysterious ritual known as "plumb bobbing." This practice is particularly puzzling to the old golf guard.

Tour pros coming to grips with strange courses have some justification for endless stalking of terrain. Members and course regulars don't. They've hit the same club for years. They're as comfortable with putting lines and greens swings.

As tournament director for the Maine Seniors' Golf Association in 1987, Putney had access to player ages. The Seniors' field of 208 at the demanding Portland Country Club course averaged 66.7 in age, approximately 40 years older per man than the

Ideas to ponder

- · Rediscover the joy of the game.
- Plumb bobbing Allow only the first to putt permitted this flagrant timewaster.
 - Stalking the green Same setup.
- Pacing A no-no, either fairway to green and vice versa.
- Give tournament contestants course map, listing distances to the front of the green from recognizable fairway

Maine Open field of 216.

Both began play at 7:45 a.m. Seniors finished at 6 p.m. The final Open foursome groped home at 8:30 p.m. despite a generous sprinkling of time-aiding caddies.

How come such a disparity? The Seniors played a somewhat shorter course and had two less foursomes, but 2 1/2 hours?

Do the figures reflect either sadly out-ofshape young men or in-shape seniors unfettered by modern methods?

The answer is simple. The young tigers are saddled by what they perceive to be the way the game is played. They were raised in the TV era.

As a course-cluttering cure, which in the 1987 Maine Open featured an hour's delay between nines, I volunteered some ideas to minimize, if not stamp out, time-consuming practices:

- Plumb bobbing Only the first to putt permitted this flagrant time-waster. Other group members must be ready to putt when it's their turn. Violations would be jotted down. A violator noted twice in one round to be assessed one stroke.
- Stalking the green Same setup, same enalty.,
- Pacing Fairway to green and vice versa. Same penalty.
- Contestants are to receive a large-scale course map, listing distances to the front of the green from recognizable fairway spots. (The New England PGA forbids pacing.)

Contestants without exception point the accusing finger at other groups as time offenders. Would they accept a majority-rule vote to invoke such novel measures as a means of getting around?

Unlikely, though employing such procedures would enable tourney officials to maneuver 240 players daily.

Maine Open officials' answer to such revolutionary recommendations was predictable. The 1989 field was cut back to 180. It made for a tidy tournament. So what if the purse was \$6,000 less than it might have been through 60 more entry fees? Factually, most competitors return year after year because of the pleasant atmosphere, area activities and hospitality. Money seems secondary.

Unless there is a return to the "Miss 'Em Quick" practice of the late Ernest W. Newnham, veteran Portland, Maine, CC pro and holder of six Maine Open titles, five in succession, the game will be forever plagued by links lizards.

In his 60s, former National Seniors' champion Newnham took one last desperation step as personal protest to the Maine Open slowdown. He packed it in.

That was a shame. Another generation was deprived of marveling as a slight gentleman stepped to the tee and in almost the same motion split the fairway with a crisp drive. He would be off the tee and in full stride before his tee hit the ground.

CALENDAR

12 - New England Section PGA's E.J. Manley Merchandising Seminar, Colonial at Lynnfield, Mass.

21-22 — California GCSA meeting at Pala Mesa Resort.

22-25 - The American Forage and Grassland Conference will be held on the University of Guelph campus in Guelph, Ontario, Canada. Additional information is available from Dr. E. Ann Clark of the university at 519-824-4120, Ext. 2508.

28-31 - FIS (International Federation of Seedsmen) Congress will be held at the Ramada Renaissance Hotel in Jerusalem, Israel. Register with Arlinda Dorsett, Secretary to International Marketing Director, American Seed Trade Association, 1030 15th St., N.W., Suite 964, Washington, D. C. 20005.

June

1-2 - ASSINSEL (International Association of Plant Breeders for the Protection of Varieties) Congress at the Ramada Renaissance Hotel in Jerusalem, Israel. Register with Arlinda Dorsett, Secretary to International Marketing Director, American Seed Trade Association, 1030 15th St., N.W., Suite 964, Washington, D. C. 20005.

7-8 - Landscape Industries Exhibition at the National Agricultural Centre in England. Telephone 0203-696969 in England.

12-15 — Australian Water Technology Exhibition, Sydney, Australia. For more information contact International Conferences and Exhibitions, Ltd., 29 Deering St., London W1R 9AA, United Kingdom.

25-29 - American Seed Trade Association meeting, including election of officers, at J.W. Marriott Hotel in Washington, D.C. Contact ASTA at Suite 964, Executive Building, 1030 15th St., N.W., Washington, D.C. 20005; 202-223-4080.

July

30-Aug. 2 — 44th annual meeting of the Soil and Water Conservation Society, Edmonton, Alberta, Canada. For information telephone 515-289-2331.

September

19-21 - Royal Windsor '89 Institute of Groundsmanship Sports and Leisure World Trade Exhibition at the Royal Windsor Racecourse in England. Telephone 0908-311856 for information.

October

4-6 — Golf Course Europe, an international exhibition and conference on the design, construction and maintenance of golf courses and on golf club management, at Rhein/Main Halls, Wiesbaden, West Germany. For more information contact Allard J. Hoogland at Expoconsult, P.O. Box 200, 3600 AE Maarssen, Holland; telephone 03465-73777.

November

4 — Lawn Seed Conference at Crown Center Hotel in Kansas City, Mo. For more information contact the American Seed Trade Association, 1030 15th St., N.W., Suite 964, Washington, D. C. 20005.

12-15 — International Irrigation Exposition and Technical Conference in Anaheim, Calif. For information contact Ann Sheridan, Irrigation Association, 1911 North Fort Myer Drive, Suite 1009, Arlington, Va. 22209; 703-524-1200.

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ON THE MOVE

Stonecreek reports appointments

Phoenix, Ariz., has announced appointment of LPGA Tour professional Heather Farr as a member of its Tour staff and Craig Harrison as an instructor.

Harrison, 29, will teach alongside DIrector ofInstruction Mike LaBauve, Sandy LaBauve and

Stonecreek, The Golf Club, in Hank Gardner. A St. Louis, Mo., native, Harrison has more than seven years of professional teaching experience.

> Farr, whose home course is Stonecreek, will represent the Arthur Hills-designed course in the 26 LPGA Tour events she will enter this year.

Olson picked to head E-Z-GO



Ralph J. Olson

Ralph J. Olson, who served as president of The Interlake Companies, Inc.'s Materials Handling Division since 1984, has been appointed president of Textron's E-Z-GO golf car division.

Textron Chairman, President and Chief Executive Officer B.F. Dolan said Olson succeeds John R. Dwyer Jr., interim president who becomes chairman of E-Z-GO.

Prior to Interlake, an Oak Brook, Ill., firm specializing in material handling automation and engineered materials, Olson was president and general manager of the Metal Container Division of Sherwin-Williams Corp. and vice president of Diversified Containers, Inc., a wholly owned subsidiary of PepsiCo Corp.

Earlier in his career, Olson held design and engineering positions with Crown, Cork & Seal, Butterworth Manufacturing Co. and FMC

He received a bachelor's degree in engineering from Pennsylvania State University

E-Z-GO is based in Augusta, Ga., and is a leading producer of utility vehicles for sports and industry.



Paul Grosh

Grosh Lebanon sales manager

Lebanon Total Turf Care of Lebanon, Pa., has promoted Paul Grosh to sales manager of the Southern and mid-Atlantic Sales Division.

Lebanon's manager of marketing and sales, Paul Mengle, announced the promotion of Grosh and three sales representatives in turf and garden accounts - Mark A. McClure, Paul L. Olson and William Smith.

Grosh joined the company in October 1987 as a sales representative covering accounts through upper New York state. He will be responsible for market development, pricing, sales training, account assessment and assignment, and other duties in cooperation with the Company 20 manager.

Before joining Lebanon, Grosh held positions in golf course management, landscape management and design, and nursery management, and was branch manager for a major lawn-care firm in the North-

He holds a bachelor's degree in botany from Ohio Wesleyan University.

McClure will be responsible for sales and service of accounts throughout upper New York state, while Olson will handle the upper Midwest Great Lakes region and Smith the southeast Pennsylvania and central New Jersey region.

McClure previously was a branch manager for a chemical lawn applicator in Rochester, N.Y., and owned and managed a landscaping service.

Olson, previously an assistant store manager for a major turfproducts manufacturer in Minnesota, holds a bachelor's degree in horticultural science, and agricultural and applied economics from the University of Minnesota.

Smith worked for a New Jersey fertilizer company and for 10 years owned a landscaping business.

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> Golf Course News is being published monthly in 1989. Twenty issues are planned in 1990. Golf Course News is edited for the busy reader with to-the-point articles and departments of high interest. Government Update. New Courses, Equipment News, New Products and Literature, Moves and Promotions, Superintendent Focus. It's fast-paced. Wide ranging. And designed to fill a void in the field that will provide the ideal environment for your product or service.

> Call Charlie von Brecht, publisher, today for more information and advertising plans that save you money. Advertising deadline for the June issue is May 19th. We'll help you come to grips with your sales projections.



7901 Fourth Street, Suite 311 St. Petersburg, FL 33702 (813) 576-7077



Left to right, Jacobsen President Robert Reid, Indiana Turf President Robert Zwart and Jacobsen customer relations manager John Oldenburg.

Toro inducts 'Partners'

The Toro Co.'s Irrigation Division has inducted 14 general line distributors into its Partner's Club, recognizing their outstanding customer service, participation in key industry organizations and active support of Toro products.

Inducted were Mark Agnew, Sprinkler Irrigation Specialists of Novato, Calif.; Bob Marsan, Marsan Turf & Irrigation Supply, Inc. of San Dimas, Calif.

Also, John Morrow, Hyatt Sprin-

EQUIPMENT NEWS

Ramey, Boston Irrigation Supply of Dedham, Mass.; Ed Santalone, Atlantic Irrigation Supply of Deer Park, N.Y.

Don Smith, Smith Pipe & Supply, Inc., of Newbury Park, Calif.; Ray York, Ewing Irrigation Products of San Leandro, Calif.; Clayton Arnold, Coastal Wholesale, Inc. of West Palm Beach, Fla.; Bob Barry, R.E. Barry Pump of Cranston, R.I.; George Ecks, Swan Pump & Supply of Freehold, N.J.; Phil Lack, Pipe 'N Heads, Inc. of Dallas, Texas.

23

Barbara and Kelvin Nimmo, Central Pump & Irrigation of Palm Bay, Fla.; Tommy Thompson, Dade-Broward Supply Co. of Miami, Fla.; and Bob Tiglio, Art Arns and Archie Humphries, Hydro-Scape Products of San Diego, Calif.

Jacobsen honors distributors

Indiana Turf Equipment Co., Indianapolis, recently received the prestigious Professor Jake Award.

The highest service award given by Jacobsen Division of Textron, Racine, Wis., it is presented for outstanding performance and service support of Jacobsen professional turf care equipment.

Mike Hannigan, Sawtelle Brothers, Inc., Lawrence, Mass., received the Pacesetter Award, for outstanding new account sales, sale of new products and selling the complete Jacobsen line.

Two members of Jacobsen's Golden Reel Club received Outstanding Member awards for sales significantly above set goals.

Debra Turfand Industrial Equipment Co., Fort Lauderdale, Fla., and Porter Brothers, Inc., Shelby, N. C., as former six-time winners of Jacobsen's Distributor of the Year awards become Golden Reel Club members.

Distributor of the Year honors went to Wilfred MacDonald, Inc., Clinton, N. J.; S. V. Moffett Co., West Henrietta, N. Y.; Brandt Industries, Ltd., Regina, Saskatchewan, and Ontario Turf Equipment Co., London, Ontario.

Distinguished Service award recipients were Eastern Turf Products, Inc., Dartmouth, N. S.; Malvese Mowers and Equipment Co., Hicksville, Long Island, N.Y.; Tieco, Inc., Birmingham, Ala.; Pacific Products, Inc., National City, Calif.; Illinois Lawn Equipment Co., Orland Park, Ill., and Baker Vehicle Systems, Inc., Macedonia, Ohio.

Irrometer buys rights to Watermark

Manufacturing and marketing rights to the Watermark soil moisture sensor from G.F. Larson Co. have been acquired by Irrometer Co. Inc. of Riverside,

Irrometer Co. President Bill Pogue said, "The Watermark gives us a proven, patented soil moisture sensor which is effective over a much broader soil moisture range than our tensiometer."

has been Irrometer manufactfuring soil moisture indicators since 1951.



memorate "40 Wondrous Years of Irrigation" than in the wonderful, star-studded city of Anaheim, California.

You are invited to participate in one of the Irrigation Association's most significant contributions to the industry: The Annual International Irrigation Exposition &

Technical Conference, Nov. 12-15, at the Anaheim Convention Center. The world's largest show devoted

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Country	Tel/Telex/Fa	ax

For Free Information Circle No 144

From scenery to grasses, book chronicles courses

Vermont, New Hampshire courses detailed

BY VERN PUTNEY

Bob Labbance and David Cornwell mainly are in the food service business.

However, to serve up in short order for keen playing appetites far-spaced golf courses in Vermont and New Hampshire, they undertook Cook's Tours that consumed eight summers of Monday strolls.

The fruit of their two-state walkathon odyssey is detailed in two books.

The latest, "The Golf Courses of New Hampshire, From the Mountains to the Sea," became available in April. A revision of "Vermont Golf Courses: A Player's Guide" hits the book shelves in June.

It is of little use for the course superintendent to groom a course beautifully, only to have the starved-for-action playing public drive aimlessly around the countryside trying to find links nestled in scenic, hideaway spots.

That was precisely the problem Vermont residents Labbance and Cornwell encountered when in 1980 they renewed their college ties (Bates College in Lewiston, Maine, Class of '74) and hit upon golf as their recreational link.

Tremendous void

They found guides on almost every social or sporting activity in the Green Mountain State. Golf courses, however, were conspicuously absent.

Six years, 7,500 miles of travel and 54 courses later, Vermont courses and locations had been catalogued in painstaking detail.

The pair plunged into New Hampshire the next summer and, at 5:33 p.m. Monday, Sept. 26, 1988, at Amherst Country Club completed their 72nd public golf course round – and blanketed their second state.

Total golf holes for the two states was more than 1,700.

"Two Down and One To Go" was their original travel battle cry, meaning Maine was the next target.

That idea's on hold, though. The Pine Tree State spans 500 miles from Fort Kentto Kittery, and there may be 140 courses to cover.

Maine is a far piece from Labbance's bailiwick. Stockbridge is more than rural. The road Labbance and wife Kathie live on deadends at the Appalachian Trail.

Cornwell resides in Thetford Center, close by the New Hampshire border but still far from Maine.

The "Maine Golf Guide" may have to await appearance of the elusive wealthy patron. Still, Cornwell is researching and has a file on the number of Maine courses.

Meanwhile, both must give priority to the workaday world.

Labbance manages the food and beverage departments for Vermont



Photo by Stephanie Wolff/Valley News Bob Labbance, left, and David Cornwell ready for yet another round of golf in their whirlwind tour.

Law School. Cornwell, after culinary school in Paris and years of work in high-priced (and high pressure) restaurants, is the head chef at Dartmouth College's Faculty Club

Even more than appeal to Vermont palates to whom they cater has been their sparkling service to the golf industry in two states.

Instead of frustrating turns and twists and frequent tossing in of travel towels, golfers armed with these informative books can make a bee line for the first tee.

It's been worth it, they say, to have endured in one day 100-degree heat, violent thunderstorms and ravenous mosquitoes.

Offsetting traffic jams and driving around in circles looking for courses hidden in trailer parks or buried in residential neighborhoods have been moments of unsurpassed spectacular scenery.

Stirring settings in New Hampshire surely include The Balsams Grand Resort in the White Mountains and Mount Washington. Among the grand views are Waumbek in Jefferson, Mountain View in Whitefield and Profile Club in Franconia.

Barre, Sugarbush and Equinox country clubs are among Vermont scenic standouts.

Venturing from Vermont into the Granite State, Labbance and Cornwell cite discovery of architectural gems from course designers of the past.

New Hampshire native Ralph Martin Barton's nine-hole Lisbon Village Golf Club may look flat and boring from the road. However, it is challenging, scenic, well designed and exciting to play.

Whip-Poor-Will CC in Hudson is a nine-hole layout for which Manny Francis rates a salute. Francis developed his Vesper Velvet at nearby Vesper CC, Tyngsboro, Mass.

The fine-bladed German

bentgrass suitable to mid-New England forms a luxurious carpet that putts true and fast, say Labbance and Cornwell.

Hooper CC in Walpole is an excellent monument to Wayne Stiles and John Van Kleek. This team from the 1920s blended esthetics with enjoyable golfing.

Pine Meadow in New Hampton is a reminder of another era, when greens weren't green. Play is on oiled, hard-packed sand that looks like wet clay and putts like polished marble.

Grueling schedule

Labbance and Cornwell walked every Vermont course and never took a golf car, even when playing 36 holes three days in a row. There was slight concession to car use in New Hampshire because of photographic and recording equipment which had become as much a part of their round as golf clubs.

An ordinary day would begin at 7 in the morning and end at midevening.

Both also write for The Valley News, a Vermont daily with a circulation of 20,000.

Labbance used that connection in mid-March to cover the TPC Pro Tour event at Sawgrass, Ponte Vedra, Fla., play the course and donate 4 balls to the feared watersurrounded 142-yard 17th hole.

Cornwell also has covered local and national tournaments for the News. On his way south to cover the 1989 Masters, he stopped at the USGA's Golf House library to probe early Maine golf courses.

He also visited the new site of the Kemper Open, the TPC at Avenel, Potomac, Md., to check the maturation of the course with its unique zoysia fairways, and interviewed course superintendent Dave Andersen.

(To obtain either book, write to New England Golf Specialists, Box 17, Stockbridge, Vt. 05772.)

NEW LITERATURE

American Eagle features Lewis

The Lewis Line of golf course accessories is featured in the 1989 catalog of American Eagle Golf Products.

The new Preflight ball washer has but one moving part, the paddle, therefore minimizing breakdown possibility.

It is said to be the only ball washer with a quick-change brush changer, requiring but three minutes for brush replacement.

Other new products include disposable tee towel, cup cutter featuring positive stop depth adjustment which permits operator to cut exact depth every time, a solid 5-inch plastic marker color impregnated to eliminate chipping and peeling of paint, and heavy-duty chain'r rope stake. Durable powder metal coatings in white or vel-



low are 3/8 inch in diameter for extended life.

Contact American Eagle Golf Products, Inc., 205 Main St., P. O. Box 396, Woodbury, Ga. 30293. 404-553-2061. Circle No 298

CSSA explores seed moisture

The Crop Science Society of America has published "Seed Moisture" in which 13 international experts explore the facets of biological water in general, and seed moisture in particular.

Seed moisture plays a critical role in all aspects of seed science, technology and commercial trade. The underlying physiological aspects are addressed in terms of membrane systems, physiological reaction in seeds and seed imhibition.

The role of seed moisture content and development of the seed on the mother plant are also reviewed.

Edited by Phillip C. Stanwood and Miller B. McDonald, the 136-page paperback CSSA Special Publication Number 14 is available from American Seed Trade Association, 1030 15th St., N.W., Washington, D.C. 20005. Circle No 299



Overseeding, aeration explained

A 24-page manual on aeration and overseeding for lawn maintenance professionals is available from the Cushman Division of Outboard Marine Corp.—the first in a series of educational publications the company plans for the lawn-care industry.

Titled "The Dawn of a New Age in Lawn Care," the publication provides a wealth of reference information.

It covers topics from the procedures and benefits of precision core aeration to grass selections and techniques for overseeding, lawn renovation and how to profitably price and market aeration and lawn renovation services. Methods used by lawn-care experts in various parts of the country are included.

The manual also covers the newest Ryan equipment available for aeration and overseeding, along with an explanation of the research and design ideas that led to the development of this new equipment.

Robert C. Brophy, manager of lawn-care product sales for Cushman, said, "The educational aspect of meeting today's demands for supplementary lawn-care services is important ...and today's equipment must be more efficient and the people who operate it must be more knowledgeable."

Sample copies ave available free from Lawn Care Manual, Cushman Division, P.O. Box 82409, Lincoln, Neb. 68501; 1-800-228-4444. Circle No 296

Cushman manufacturing core harvester

The new Cushman Core Harvester will pick up aeration cores mechanically from golf course greens.

The Harvester mounts on a 3wheel or 4-wheel Cushman Turf-Truckster vehicle equipped with a hydraulic system and short box or flatbed with sides and tailgate.

The vehicle must have an auxiliary gear box ratio of 3.2:1, but older Turf-Truckster models may be converted to the higher ratio.

The Harvester sweeps up cores from the turf surface with two 45-inch steel blades, set at a 60-degree angle. The soil cores are "funneled" to the-center, carried up a chain elevator and dumped onto an 8-nch rubber belt cross conveyor, which dumps them into the vehicle's box.

When the box is full, the operator shuts off the Harvester with a simple "push-pull" hydraulic control, raises the core-gathering blades with an over-center hand lever, and drives the load of cores to the dump site.

The core-gathering blades cover a 55-inch-wide swath. On flat courses, the operator can make passes back and forth across the green, raising the blades to turn. If the green has sloped sides, the core-gathering blades can be offset to right or left so the operator can pick up cores with a circular driving pattern.

Contact the Sales Department, OMC Lincoln, P. O. Box 82409, Lincoln, Neb. 68501 (800) 228-4444. Circle No 232



Greensmaster cut is uniform

Because of its unique 11-blade design, the Toro Co.'s new walk greensmower known as the Greensmaster 1000 is said to combine superior grass-catching capability and more uniform quality of cut.

The smaller clip — .16 inch — makes for a smooth green. A new "loop" handle design creates maximum operator comfort and keeps necessary weight on the front of the mower, allowing more even tracking across the green.

Contact The Toro Co., Commercial Products Division, 8111 Lyndale Avenue South, Minneapolis, Minn. 55420. Circle No 233

In the April issue the photos of the Toro Greensmaster 3000-D and Ransomes gang mower were inadvertently swapped.



NEW PRODUCTS

Nu-Mulch restores faded color

A new spray-on product that restores color to old, faded mulch is available from Lesco, Inc.

One application of Nu-Mulch keeps old mulch looking fresh and new for at least two months.

This new colorant is environmentally safe, inert and non-toxic to plants.

Formulated as a concentrate to

be mixed with water, Nu-Mulch is spray-applied with either a handheld backpack or larger-gallonage sprayer.

25

One gallon will spray 150 to 300 square feet of mulch.

Contact Sally M. Lee, Lesco, Inc., 20005 Lake Road, Rocky River, Ohio 44116; (216) 333-9250. Circle No 252

BEFORE YOU BUY JUST ANY BENTGRASS, GO BY THE BOOK.



Phone 1-800-547-0255 today for your complimentary copy of the Penn Pals catalogue. You'll see why Penncross, Penneagle, PennLinks and Pennway blend set the standard for bentgrass on golf courses.

Tee-2-Green Corp.

PO Box 250, Hubbard, OR 97032 FAX 503-981-5626 1-800-547-0255

For Free information Circle No 146

Greens Plugger is a self-propelled aerator

The Classen Model 455 Greens Plugger is a new selfpropelled aerator designed especially for golf greens.

According to Larry Classen, firm marketing director, the unique design provides durable performance with electric lift to eliminate possible greens damage because of leaky hydraulic connections.

Classen's Model 455 Greens Plugger is a new selfpropelled aerator designed especially for golf greens.

The Greens Plugger has a 24-inch operating width and a capacity of 14,000 square feet per hour with standard 23/8-by 2-inch patterns at 3-inch depth.

Powered by an 8-horsepower, four-cycle Honda overhead valve engine, it also features sealed roller, bronze and ball bearings for low maintenance and trouble-free operation



Contact Classen Mfg. Inc., 1403 Pine Industrial Road,

Norfolk, Neb. 68701. (402) 371-2294. Circle No 247

Alarm system adapted for golf courses

An innovative Golf PROtector system developed by Federal Signal offers wide area warning and communications coverage that can be adapted to any golf course.

A key feature is an omnidirectional siren with both alarm and public address capabilities.

It provides a way of notifying everyone on the course of urgent, life-threatening situations such as lightning, tornadoes and other weather dangers, and environmental hazards, including pollution, flood waters and extreme temperatures.

It also serves for such needs as alert to effluent irrigation, chemical application or other maintenance operations; shotgun tournament starts and special announcements.

The system incorporates emergency stations that allows golfers to react fast in course emergencies and communicate to the clubhouse or other control center locations

Help can be summoned immediately in the event of medical emergencies.

Contact Federal Signal Corp., 2645 Federal Signal Drive, University Park, Ill. 60466; (800-548-7229). Circle No 245



Turftech designed for soil structure

Soil Technologies Corp. of Fairfield, Iowa, has released Turftech, a biological application designed to increase naturally soil aggregation and improve soil structure.

Turftech is composed of soilborne, single-celled plants packaged as a wettable powder. When spray-applied, these grow on the soil surface and produce unmanipulated plant residues (bio-polymers) beneficial to the soil without interfering with grass growth.

One of these residues is polysaccharide, a complex sugar. The sugars are capable of bonding individual soil particles and forming a soil aggregate.

Increasing soil aggregation creates additional pore space, allowing air and water to move into the soil more easily. By increasing pore space, Turftech helps compacted soils to drain. Grass is healthier and less prone to disease.

Contact Soil Technologies Corp., P. O. Box 1415, Fairfield, Iowa 52556. (515) 472-3963. Circle No 266



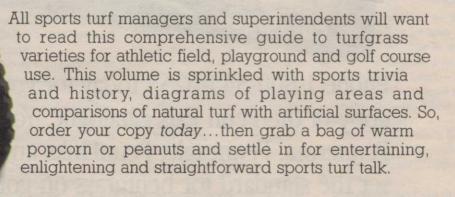
...for Turf-Seed's new

Turfin' II

guide to the proper grass for popular sports.

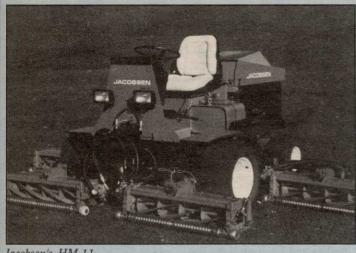


Full 8½ x 11 size, four color printing.



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Jacobsen's HM-11

Jacobsen introduces new mowers

Jacobsen has introduced several new mowers.

Its H-15 mower has seven hydraulically driven reels. Suitable for golf courses, parks and other large areas, it features outfront mowing and a 15-foot cutting width.

Front and rear wheels are steered through turns to eliminate streaking and marking on fine turf. Reels have bi-directional pivoting, to follow ground contours closely.

Reels are held by a patented

hold-down system to prevent bouncing and skipping in high speed mowing.

The HM-11 4WD five-gang mower features four-wheel drive for improved traction, a convenient electro-hydraulic reel lift control for easier cross-cutting, and state-of-the-art electronic instrumentation that informs the operator of critical machine functions. The HM-l1 has an 11foot cutting width.

The LF-100 out-front five-gang reel mower may be ordered with

on-demand four-wheel drive, for fairways with steep hills.

It cuts a 100-inch swath at speeds up to 5 mph. Of heavy duty design, it has extremely low ground pressure for less soil compaction and healthier turf.

Full-floating reels follow ground contours closely, and pivot through turns to eliminate scuffing of turf on the clean-up pass.

Contact Jacobsen Division of Textron Inc., 1721 Packard Ave., Racine, Wis. 53403; (414) 637-6711. Circle No 231

New perennial ryegrasses marketed

Saturn and Omega II are among perennial ryegrasses recently introduced by Performance Seeds.

Saturn reportedly was ranked first in overall quality among 65 varieties tested in USDA's National Perennial Ryegrass Test at 22 locations across the United States and in British Columbia.

Saturn is said to be a natural for winter overseeding of golf course tees, greens and fairways in areas where warm-season grasses go dormant for several months.

An upright, dense growth permits cleaner mowing and truer putts, Performance says.

Denser and leafier Omega II is said to maintain rich color throughout the seasons, even in low fertility areas, and resists above-ground feeding insects.

Jaguar, a turf-type tall fescue, is said to provide a finer, more attractive leaf with a moderately lowgrowing habit and greener good

Contact Performance Seeds, Garfield Williamson, Inc., Fairfield, N.J. 07006; (201) 882-7755. Circle

Putting hole color renewed

Hole-In-White offers a fast, efficient method of coloring the inside of the putting hole.

A steel device is positioned over a freshly cut hole and the can of turf whitener slides into position on the tool gimbal.

The spray nozzle is activated by pressing down on the can and turning to uniformly color the hole.

Advantages include a more visible target, play speedup and less flagstick use.

Contact Hole-In-White, Amity Station, P. O. Box 3839, Woodbridge, Conn. 06525; (203) 393-3909. Circle No 248

Ransomes has robotic welder

A robotic welder trade-named the Multistation Weld Cell is the latest product of Ransomes Inc.

The welder is said to produce repetitive welds with unmatched consistency.

Contact Mark Foree, Ransomes, Inc., Johnson Creek, Wis. 53038; (414) 699-2000, Circle No 256

NEW! TORO "4.0"

Makes Network 8000 better than ever!



Flow Control

The central schedules all irrigation in conformance with the user-specified order of watering, while maintaining sprinkler flow demand within the maximum efficiency

range of the pump station, resulting in the lowest cost-per-gallon. Flow control is retained even if communications are "cut" or the central is "out," because all of the flow control data is downloaded daily to the satellites.

Concatenation

ograms are run in the most efficient order. This means they run in the grouping order specified by the user, with minimum total

elapsed time and without gaps. In other words, they are linked together. For each program, Toro 4.0 automatically searches for the longest program running time in the next group and schedules it to follow immediately upon completion of the shortest running time of the preceding group for perfect linkage - or concatenation.

Sequential Multi-Manual

This feature provides an additional method for programming stations at satellites. Irrigation programs continue as before but now you have the flexibility to program groups

of these same satellite stations in a multi-manual format, for such nonirrigation purposes as removing frost or cooling the turf. With this feature, you can assign any station at a satellite to a sequence group (maximum of 6 to a group), and there are enough sequence groups to allow all stations to be assigned. The run time (common to all groups) may be set from 1 to 30 minutes. In cold climates, this lets you lengthen the playing day.

Remote Activation of Central System through Satellites

Up to 15 specified functions stored in the central may be initiated for the whole system from any one satellite on the golf course. You can cancel a program, call up rainholds, go into multi-manual - any or all of 15 such special situation programs, from any satellite, without returning to the central. It gives you quick-fix problem-solving capability

Excellence in Irrigation®

The Toro Company

Irrigation Division

Dept. GCN-589, P.O. Box 489

Riverside, CA 92502

Grinding wheel made modular

Mowing Machine Ltd's Base Leader has a new modular design concept. This means that the machine can be upgraded to "Auto" or "Supreme" Leader specifications at any time.

The Base Leader has a powerful 1.1-kilowatt grinding wheel motor capable of grinding cylinders in or out of frame.

Contact Mowing Machine Maintenance Ltd, Wet Moor Lane, Wathupon-Dearne, Rotherham S63 7LR, England; (0709) 873436. Circle No 268



New Ryan aerator's spacing is variable

Anewriding aerator, the Ryan GA 30, has been introduced by OMC Lincoln.

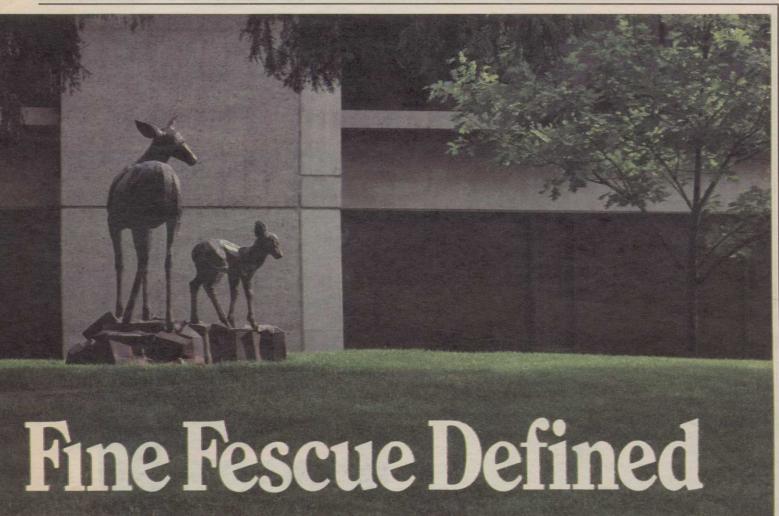
The GA 30 features variable core spacing from 2.5 by 1 inches to 2.5 by 5 inches. The operator can vary the spacing with a hand lever while aerating.

The throttle, choke and ignition switch also are hand-operated, while vehicle speed, brakes and lift control for the aerating head are controlled by foot pedals.

The GA30 features hydrostatic drive. When aerating greens, the operator can lift the tines, turn around at transport speed, and be back on the green aerating in minimum time.

Transport speed is 6 mph.

Write Ryan Sales Department, OMC Lincoln, P. O. Box 82409, Lincoln, Neb., 6850l; (800) 228-4444. Circle No 235



What are Fine Fescues and why are they so important to turf managers?

Our Fescue turfgrasses are part of most every park, golf course, industrial campus, athletic field, condominium commons and home lawn from the transition zone, Northward.

But, many people are not aware of that. Perhaps we are the most overlooked turfgrass in existence.

We feel that Fine Fescues are the best turf investment a grounds manager can make. And, we'd like to point out why.

Fine Fescues are *real* grass. And, as with all living things, there is give and take. Sure, our Fescues take water and some maintenance, but they are better *givers*. Our natural grass turns noxious gases into oxygen and is a natural air conditioner for turf users.

We feel that while artificial turf has its place on locker room floors, it has no business where *real* people work, play and relax. Our grass is just *naturally* more refreshing.

Our Chewings (Festuca rubra commutata) and creeping red (Festuca rubra rubra) Fescues are rather unique when compared with other turfgrass species. Although they have most of the features of other cool season grasses, Fescues have several distinct benefits worth noting.

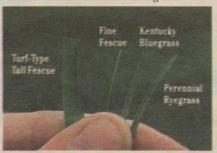
Fine Fescues are low maintenance. Our varieties require less fertilizer and water than other species. That's a big plus at today's water, fertilizer and manpower prices.

Fine Fescues fare well around trees. It seems our grass doesn't need as much sunlight, water and nutrients as other turfgrass species. Because Fescues don't compete with trees for these important elements, they're called shade grass. Our Fescues don't creep into flower beds, nor crowd out other species in a mixture.

And, because they're Oregon grown, our Fescues germinate, adapt and perform better than imported types.

You'd expect to pay a fortune for such a turfgrass, but Fescues are quite reasonable

Why don't Fescues cost a great deal? Fine Fescues have been around a long time and



For Free Information Circle No 149

have been changed very little. Why mess with a good thing? While other former "pasture" species are coming closer to looking like our old standard; receiving notoriety for their "improvements" and enjoy the price increases associated with the word "new," our Fescues have continued what they do best...support the up-and-comers. But then, Fine Fescues were meant to be stepped on.

Fine Fescues are Ideal for Recreation, Sports and Leisure

Not only do Fine Fescues excel alone or in perennial ryegrass/Kentucky bluegrass mixtures on horizontal playing surfaces; Fescues are excellent for low maintenance areas like berms, roadside banks, ski slopes and hilly spots that don't retain moisture. So, you see, Fescues are ideal all-around grasses for *all around* your recreation and sports facility. Their low maintenance requirements offer *turf managers* a chance for a little more leisure . . . and there's nothing wrong with that.

For a series of nine tech sheets on Oregon grown Chewings and creeping red Fescues, call or write:



Oregon Fine Fescue Commission

2140 Turner Road SE Salem, OR 97302-503/585-1157

Kubota hails new engine

Kubota believes that, in introducing the ACTV system engine OC60, it has achieved the ideal small diesel engine.

The Kubota-developed "Advanced Cooling Three Vortex" (ACTV) system cools the swirl chamber with oil, and the cylinder with air.

The combustion chamber is an I.D.I. type with a swirl chamber system, Kubota's "Three Vortex Combustion System" (TVCS).

The combination of ACTV and TVCS allows OC60 to minimize noise level. Furthermore, the viscosity of lubrication oil around the combustion chamber absorbs and controls noise to the level of water-cooled engines.

Contact Kubota, Ltd., 2-47, Shikitsuhigashi 1-chome, Naniwaku, Osaka, Japan. Circle No 234

Low-angle nozzles fit all

Weather-matic announces availability of the 400 Designer Series and low-angle nozzles for commercial and residential spraying applications.

The 400 Series fits all Weathermatic 30-Series Sprinkler Bodies (32P, 35P, 36P, 37P and the 95P shrub adapter).

The 100-Series low-angle shrub heads are compatible with 400-Series nozzles and may be used for ground cover and shrub applica-

Contact Weather-matic, Box 180205, Dallas, Texas 75218; (214) 278-6131. Circle No 251

Andersons testing greens fertilizers

The Andersons are test marketing Tee Time homogenous greens fertilizers 20-2-10 and 9-3-18.

A 50-pound bag of 20-2-10 treats 10,000 square feet, while a 50-pound bag of 9-3-18 treats 8,900 square feet.

Both products are designed for use on closely mowed golf course greens. All slow-release nitrogen is derived from Nitroform, the premium source of water insoluble nitrogen.

The 20-2-10 and 9-3-18 are homogenous products for quick wash down and uniformity of response.

Contact the Andersons, Lawn Fertilizer Division, P. O. Box 119, Maumee, Ohio 43537; 1-800-225-ANDY (2639). Circle No 263

Golfing public again grows

The number of golfers grew by more than 7 percent for the third straight year in 1988, according to a survey done for the National Golf Foundation.

In the survey not yet published, the NGF also reports that 211 new golf courses were opened in 1988.

The survey found that the number of golfers who played at least one round last year rose from 21.7 million to 23.4 million, up 7.8

percent. The number of frequent golfers — those who played 25 or more rounds — grew from 4.86 million to 5.62 million, up 15.6 percent.

The rounds played, which translates into money at the courses, rose from 434 million in 1987 to 487 million in 1988, or a 12.2-percent jump.

The study found that of the 2.21 million new golfers in 1988, 1.3 million were male

and 910,000 were female.

The number of facilities, which in 1987 grew by 110 to a total of 12,407, rose another 161, or 1.4 percent last year.

The NGF also estimated the number of courses under construction in 1988 at 334, up 50 percent from the 223 being built in 1987. It said another 382 courses were being planned, a 32-percent jump from the 290 in 1987



Pete Dye

Dye: Expect busy 1989

Golf course architects can expect the busiest year in a quarter century this year, according to Pete Dye, who in April completed a year as president of the American Society of Golf Course Architects.

Interest in new golf courses and remodeling projects continues to build, Dye said.

"Our members report an increasing number of inquiries for all types of projects," he said, "and society members project that 1989 will be the most active year in golf course construction and remodeling that they have seen in the past 25 years."

A recent ASGCA survey indicated that 305 new courses and 268 remodeling projects are in progress.

Dye said that while most new courses are still being built as part of residential developments and resorts, more municipal and public courses are on the drawing boards

"Our members are working diligently with municipalities and individuals interested in building good public courses to come up with cost-effective designs that will attract golfers and provide a long-term recreational benefit to the communities involved."

Dye added that well-designed and maintained public courses, if properly managed, will generate substantial profits for municipalities and owners.

Rossi happy but warns of obstacles

Golf Course Builders of America Executive Director Don Rossi is supportive but cautious of the call to build 500 new courses over the next 10 years.

"I think it's great," Rossi said from his Florida headquarters. "No question there's a demand for new courses, but people are going to have to start to face reality.

"There's a demand for public golf but

(developers) have the EPA (Environmental Protection Agency) to fight, they have the cost of land to fight, money problems to fight, politics to fight."

Rossi also noted that while there is a call for more public courses, 87 percent of the new courses actually being built are tied into real-estate developments.

Asked if the limited number of golf course

builders could keep up with the 500-coursea-year target set by American Society of Golf Course Architects President Robert Trent Jones Jr., Rossi said he wasn't sure but added, "You have to keep in mind that a nine-hole course is considered a new course and 47 percent of the courses in America are nine-hole courses" which, of course, can be built quicker than 18-holers.

Jones

demand with more and consistently better work."

Jones noted that environmental groups have targeted golf courses. "Everyone in the golf course design business is an environmentalist," said Jones, once the chairman of the California State Parks and Recreation Commission and the designer of more than 150 golf courses around the world. "But there are others who call themselves environmentalists, who can make a golf course sound like a toxic waste dump or a polluting factory.

"We need those who love the game of gol fto unite solidly and loudly proclaim that a golf course is an animal habitat. It is a bird sanctuary. It is open space. It is a greenbelt. It is that most important factor that lessens the density of a new real-estate development."

Jones pointed to the oxygen-renewal process at work through trees on golf courses and added that a golf course is "enjoyed by those who pass by as well as by those who play on the fairways."

Jones called for the architects to join with



Robert Trent Jones Jr.

the NGF, Golf Course Superintendents Association, U.S. Golf Association, Professional Golf Association, the tournament players and the golf media "to proclaim emphatically that we need 5,000 more golf courses in the next 10 years.

"Because up to 70 percent of these new courses should be public rather than private, we especially need them in the cities, suburbs and counties where a town council or board of supervisors holds sway," he said. "Instead of groundless and blind opposition, we should be finding encouragement and the anticipation of great opportunity."

He added that "in addition to the obvious beauty and recreation it provides, golf is also a great training ground for honor and integrity, and never before have more young people picked up their golf clubs looking for places to play."

Saying that a golf course has "at least a two-to three-year gestation period before it can be played," Jones said, "If we are arbitrarily slowed or stopped by the political process, and therefore unable to meet the rapidly evolving demand, I fear that the game of golf will on e day return to the elitist and expensive sport it once was, and none of us can afford that ... not this organization, not the game itself, and certainly not the precious environment of our sprawling towns and suburbs."

Jones, 49, is the son of Robert Trent Jones Sr., the only living member of the 13 golf course architects who founded the ASGCA in 1947. His father and brother, Rees, have previously served as presidents of ASGCA.

Moscow

Continued from page 1

develop with CCI (ClubCorp. International) something that would be a nice facility which would be comparable to nice facilities here in this country where Americans could when they're in that country — whether it's for a week, a month or a year — and be able to do some of the things they do here at home; and golf is one of those things. We would like to also have tennis, and swimming and other things like that that are all part of the facility."

Pellizi added, "The idea is not to have a facility just for people with Dialogue. The idea is to put a hotel there as well as have it kind of a resort complex which would incorporate a hotel, living accommodations and a club facility, so that Americans or Westerners who are going there to do business could stay there and have a place to work and live."

JV Dialogue is now building the first unit for manufacturing computer software and hardware as well as housing units for the Russian and American workers.

ClubCorp. International Chairman Richard Poole is cautious about the project. "This kind of thing at this early stage is always iffy," he said. "You pay your money and take your chances, and I don't want to blow any horns about the fact that it is a fait accompli or anything else. I've been down this road in many countries, and it's a time-consuming, slow process. So I don't want to be ... saying we're doing this exact thing on this date, until I've actually got a dozer out there moving a couple hundred thousand yards of material."

But Poole, the point man for CCI President Jim Hinckley in developing golf facilities worldwide, said the Russians and Americans involved are serious about the project and its feasibility.

"The Russians," Poole said, "are trying to emulate the West. The Americans also said this would help give stimulus to the area for (them) and would have some obvious advantage for our people as well as for others. And if we're going to do a conference center as part and parcel of our village development then this would give it some unique cache."

The 7,000-acre collective is "anxious to expand its income sources, so is selling or leasing land for extra housing for both Russians and expatriates," Poole said, adding that the Russian head of JV Dialogue, Pyotr Zrelov, asked CCI to work with the company to develop a golf course.

"Would the land be suitable, how much land does it take, how should it be designed and built, that's how our discussions have been going," Poole said. "We would manage and/or own the property to the extent that anybody owns property in the Soviet Union."

Poole said the region could have golfing six months a year at best; then the complex would feature three or four months of crosscountry skiing.

A 'catchy deal'

"It's kind of a catchy deal but I wouldn't say that's the most optimum place to put a golf course if I were starting out to do it," Poole said. "The other side of it is that the relatively large population (of Americans) in Moscow is expected to grow — the best estimate is that it's now 30,000 and it's expected to double in the next three years. There is a fairly high demand, particularly among the expatriates living there, not necessarily the tourists coming in.

"It's not particularly a conducive environment for American style of living; you have to find something to spend your time doing," he added. "They are captive there, if you will, with no facilities that we have in the United States. And there will be some Soviets who will become involved but that's a lesser number."

The golf facility will include 40,000 square feet of clubhouse and conference rooms. CCI would add to that bedroom accommodations, based just purely on what the demand will be at the time, Poole said.

Poole said "at the very best we could be pushing dirt next spring."

The major holdup is the 26 or 27 different agencies' signatures needed to get land use.

"It is just slightly more severe than passing the Southern California tests of the environmentalists ... It's hard," Poole said.

Poole said CCI will probably use 160 acres for the course. "It's good land. It's timbered land with enough roll and trees that it's a highly desirable setting," he said.

CCI hasn't chosen an architect yet, and will wait until it gets further along in the bureaucratic process.

That lengthy process may explain why other courses are not built in Russia yet. Robert Trent Jones Jr. has been chosen to build one course close to Moscow.

"There's a lot of talk, but I haven't seen anybody with ... (equipment) sitting on the land clearing the site, or anything else," Poole said.

Courses

From page 1

16, North Carolina with 14 and California and South Carolina with 12 each.

Florida also had 45 courses under construction at the end of the year, the NGF found, while 22 were being built in California, 19 in both Texas and North Carolina, and 16 in Illinois.

The NGF and others are calling for even more course construction, and NGF Executive Vice President Dr. Joseph Beditz believes there are some encouraging signs in the latest research.

"That we had a 45-percent jump in new course openings in 1988 and that 60 percent of these are public are two very positive signs," he said. "Equally encouraging is the 40-percent increase between 1987 and 1988 in the number of courses under construction ... although only 54 percent of these are public."

Beditz said building 400 or more golf courses per year is possible.

"During the 1920s there were 4,500 golf courses built over a 10- to 12-year period,"

he said. "And this happened again in the 1960s ... the second boom period for golf course development in the U.S."

According to the NGF report, the total number of courses in the country at the end of the year stood at 13,626 and the number of golf facilities was 12,582.

A facility may contain more than one course.

Florida's golf boom took the state from second place, past California into first in the nation in golf facilities with 765.

California has 745, followed by New York

with 735 courses, Texas 692 and Michigan 654.

Florida also leads in the number of courses with 932. California has 836, New York 794, Texas 761 and Michigan 721.

Researchers say that because nearly 70 percent of the golf being played today is on public courses, upwards of 65 percent of the new courses must be public facilities.

The NGF report shows that 66 percent of the new courses and 61 percent of the facilities in the United States are open to the public.

Golf Courses By State

(As of December 31, 1988)

	Daily	aily Fee Municipal		Private		Total		
State	Total	Rank*	Total	Rank*	<u>Total</u>	Rank*	Total	Rank*
Alabama	47	33	36	25	127	14	210	25
Alaska	5	49	2	49	2	51	9	50
Arizona	118	16	31	27	76	29	225	22
Arkansas	44	35	15	40	89	26	148	32
California	351	6	166	1	319	3	836	2
Colorado	58	29	68	9	65	31	191	26
Connecticut	49	32	37	24	83	28	169	28
Delaware DC	4 0	50 51	2 3	49	18	43 50	24	49 51
Florida	431	2	89	46	412	30	932	31
Georgia	84	23	38	21	175	10	297	15
Hawaii	40	36	7	44	19	42	66	44
Idaho	39	37	24	33 -	16	45	79	41
Illinois	258	- 8	132	3	207	6	597	8
Indiana	209	12	61	11	103	20	373	12
lowa	128	15	54	12	178	9	360	13
Kansas	64	27	47	16	128	13	239	20
Kentucky	84	23	31	27	97	23	212	24
Louisiana	25	44	24	33	103	20	152	30
Maine	91	22	8	43	17	44	116	35
Maryland Massachusetts	27 175	42 13	26 38	30 21	90 127	25 14	143 340	34 14
Michigan	489	10	86	7	146	14	721	5
Minnesota	216	10	77	8	94	24	387	11
Mississippi	34	38	13	42	98	22	145	33
Missouri	105	18	48	15	117	18	270	17
Montana	33	39	20	36	26	39	79	41
Nebraska	59	28	36	25	74	30	169	28
Nevada	24	45	16	38	5	49	45	48
New Hampshire	74	26	3	46	16	45	93	39
New Jersey	92	21	47	16	123	16	262	18
New Mexico	21	47	26	30	31	38	78	43
New York	409	4	116	4	269	4	794	3
North Carolina	226	9	29	29	207	_6	462	9
North Dakota Ohio	28 419	41	45	-18	33	37	106	37
Oklahoma	56	3 30	91 53	5	193 64	8 32	703	6 27
Oregon	100	19	16	38	36	36	152	30
Pennsylvania	367	5	38	21	237	5	642	7
Rhode Island	24	45	3	46	21	41	48	46
South Carolina	153	14	6	45	121	17	280	16
South Dakota	33	39	26	30	45	34	104	38
Tennessee	84	23	40	20	109	19	233	21
Texas	211	11	150	2	400	2	761	4
Utah	26	43	42	19	21	40	89	40
Vermont	46	34	0	51	11	48	57	45
Virginia	94	20	22	35	140	12	256	19
Washington West Virginia	111 50	17 31	51	14 37	59 41	33 35	221	23 36
Wisconsin	267	7	64	10	84	27	415	10
Wyoming	21	47	14	41	12	47	47	47
							-	70
Total U.S.	6,203		2,135		5,288		13,626	

*National Ranking

Source: National Golf Foundation/Golf Facilities in the U.S. (1989 Edition)

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The National Golf Foundation routinely lists golf course development. Individuals, businesses and organizations that join the NGF receive the listings free.



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