What's new in the newsletter:

- **ISK Biotech unifies global operations**
- **GolfCorp eyes acquisitions, adds staff**
- **Matrix, Golf Business Advisors join forces**
- **Club Car reports fourth-quarter earnings**
- **Superintendents association has joined RISE**
- **Turf program makes grade at Fla. high school**
- **Off the Record: Disease diagnosis in a bottle**
- **Europeans create pro-active Ecology Unit**
- **Golf Asia '94 is history. Architects are busy**

**Winter Kill**
Mid-Atlantic superintendents are reporting huge turf loss following the toughest winter in 16 years.

**Survey: Supers applying fewer, safer pesticides**

**Pesticide fate model may be inaccurate**

---

**Winter Kill**
Mid-Atlantic superintendents are reporting huge turf loss following the toughest winter in 16 years.

**Survey: Supers applying fewer, safer pesticides**

More than 80 percent of golf course superintendents surveyed by the Gallup Organization indicated they have altered their maintenance practices compared to three years ago, citing pressure from government regulation, economic factors and environmental concerns.

**Sandoz National Environmental Poll 1994**

Superintendents Responding

- Compared to five years ago, are you making fewer applications of pest control products?
  - Yes — 61%
  - No — 36%
  - Never — 1%

- Do people in your industry use safer pest control products when available?
  - Always — 72%
  - Sometimes — 27%
  - Never — 1%

- Compared to three years ago, are you doing things differently regarding use of pest control products?
  - Yes — 67%
  - No — 30%

**Pesticide fate model may be inaccurate**

By **Dr. Mike Kenna**

GRiffin, Ga. — Researchers here at the Georgia Agriculture Experiment Station have suggested that one of the mathematical models used by environmental regulators and scientists to predict the fate of pesticides will need a major overhaul before it accurately represents what happens on golf course turf.

"Results indicate that the GLEAMS model, with the defined parameters of our study, overestimated the actual values received from lysimeters for the potential of 2,4-D to move through putting green root zones," reported Dr. Al Smith, University of Georgia.

The GLEAMS (Groundwater Loading Effects of Agriculture Management Systems) mathematical model is commonly used to help identify chemical and soil properties, as well as plant and meteorological factors influencing the transport of pesticides.

---

**Winter Kill**
Mid-Atlantic superintendents are reporting huge turf loss following the toughest winter in 16 years.

---

**Survey: Supers applying fewer, safer pesticides**

More than 80 percent of golf course superintendents surveyed by the Gallup Organization indicated they have altered their maintenance practices compared to three years ago, citing pressure from government regulation, economic factors and environmental concerns.

**Sandoz National Environmental Poll 1994**

Superintendents Responding

- Compared to five years ago, are you making fewer applications of pest control products?
  - Yes — 61%
  - No — 36%
  - Never — 1%

- Do people in your industry use safer pest control products when available?
  - Always — 72%
  - Sometimes — 27%
  - Never — 1%

- Compared to three years ago, are you doing things differently regarding use of pest control products?
  - Yes — 67%
  - No — 30%

**Pesticide fate model may be inaccurate**

By **Dr. Mike Kenna**

GRiffin, Ga. — Researchers here at the Georgia Agriculture Experiment Station have suggested that one of the mathematical models used by environmental regulators and scientists to predict the fate of pesticides will need a major overhaul before it accurately represents what happens on golf course turf.

"Results indicate that the GLEAMS model, with the defined parameters of our study, overestimated the actual values received from lysimeters for the potential of 2,4-D to move through putting green root zones," reported Dr. Al Smith, University of Georgia.

The GLEAMS (Groundwater Loading Effects of Agriculture Management Systems) mathematical model is commonly used to help identify chemical and soil properties, as well as plant and meteorological factors influencing the transport of pesticides.
Dependable, economical post-emergent control

Crabgrass, Nutsedge

Plus the truly hard-to-control broadleaves

Read how Trimec® Plus, with its unparalleled broad spectrum control, fast action, and gentleness to desirable grass, is helping turf professionals improve their environmental stewardship and reduce their chemical costs.

Everett Mealman
Chairman and
Chief Executive Officer
PBI/Gordon Corporation

The environmental age weed control program being used by Roger Albrecht is typical of progressive turf professionals. Albrecht is president of Nitro-Green Corporation, which has 38 lawn care franchisees scattered over 15 different states, and he manages two locations in California for his own hands-on experience.

“Our goal is to eliminate all broadcast spraying of herbicides on the ornamental turf we manage, and replace it with spot treatment as necessary,” says Albrecht. “We want to be proactive on environmental issues and be able to assure our customers that we are using the absolute minimum requirement of chemicals.”

Albrecht goes on to explain that such a program takes time to implement because the turf needs to be so healthy and thick that weeds cannot easily germinate.

“The elimination of the broadcast applications of pre-emergent herbicides is the critical step,” says Albrecht, “because, no matter what, some crabgrass is going to appear, and since crabgrass is a major cause of complaints, we must be able to eliminate it fast with no discoloration.”

Trimec Plus provides the safety net that enables Albrecht to eventually eliminate broadcast applications of pre-emergent herbicides. “We have absolute confidence in Trimec Plus to handle any crabgrass or nutsedge that shows up,” says Albrecht.

And, of course, the same spot sprayer filled with Trimec Plus that Albrecht uses to control crabgrass and nutsedge also controls the other grassy and broadleaf weeds that can germinate throughout the year. “Having one herbicide for all of our spot treatments is a major factor in our program,” says Albrecht.

But if Trimec Plus is ideal for spot treatments, it is also unsurpassed for broadcast applications when the need exists. Listen to George Toma, the executive turf consultant for the Royals, Chiefs, and NFL:

“My son, Chip, the groundskeeper for the Truman Sports Complex, used broadcast applications of Trimec Plus on the out-of-sight, unirrigated perimeters of the complex which was loaded with every conceivable weed, and Trimec Plus absolutely took out everything except the bluegrass.”

According to Toma, it would have taken four different selective herbicides to do the job that Trimec Plus was able to do... but even more important, Toma says that Trimec Plus did a better job on all of the individual species than a narrow spectrum selective could have done.

Now also approved for use in zoysia and tall fescue

Trimec Plus is a unique formulation of Trimec Broadleaf Herbicide and MSMA in a stable, uniform suspension that is as easy to work with as any other Trimec Complex.

And now it is labeled for use in turf-type tall fescues and zoysiagrass, as well as established bluegrass and bermudagrass.

So, by all means, give Trimec Plus a trial this season... especially on crabgrass, nutsedge and clover. We assure you that your experience with Trimec Plus will give you the confidence you need to start working toward the elimination of broadcasting.
NEWS IN BRIEF

Palm Beach, Fla. — An alligator was trapped and killed in mid-April at Palm Beach Polo & Country Club here after the reptile bit a diver attempting to collect golf balls from an on-course pond. The diver was hospitalized with a puncture wound in the foot, said club officials. Lee Wilson, a licensed trapper, was called in to apprehend the 350-pounder.

Scottsdale, Ariz. — With a grand opening slated for January 1995, construction on the 18-hole, par-72 Legend Trail golf course and its 6,000-square-foot clubhouse will begin immediately. Formerly named Desert Ranch, developers have sold the golf course property within the 573-acre Legend Trail community project to New York-based Ziff Communications and golf professional Al Mengert.

Lee's Summit, Kan. — The Lee County Commission has approved the zoning changes necessary for more than 300 acres of south Lee County farmland to become Grand Island Golf Course and subdivision. The decision allows Ledo Properties, which owns the land, to begin construction on the county's first golf course. John Gay, managing partner for Ledo Properties, hopes the course will open for play by late summer.

Shawnee Mission, Kan. — A woman has sued a golfer at Mission Hills Country Club here after she was struck in the face by an errant shot while sitting in her car. Filed at the Johnson County, Kan., district court, the suit alleged golf was an "abnormally dangerous activity." U.S. District Court Judge John Lungstrum disagreed, but did rule the woman's suit "sufficiently stated claim for negligence and is entitled to the opportunity (however slight) to prove defendant golfer failed to exercise reasonable care in striking the golf ball."

Watson warns ASGCA of impending water trouble

Architects meet by the Bay: Dr. Watson honored; Knott succeeds President Matthews

By Mark Leslie and Peter Blais

San Francisco — Green areas, especially golf courses, are a national treasure and must be preserved, effectively maintained and expanded, according to Dr. James R. Watson, who received the Donald Ross Award from the American Society of Golf Course Architects during its annual meeting here in late April.

Watson — founder of International Turfgrass Society and the USGA Green Section Turfgrass Research Committee — challenged the architects to continue as industry pioneers in the agronomic sense, as well as the artistic sense.

He reminded them that Robert Trent Jones Sr. and other led the way in improving the greens mix from the old standard — one-third peat, one-third sand, one-third soil. These forward-looking architects, he said, began to recognize the one-third mixture was inadequate to support the increased play and moved the industry toward an 80:20 sand-peat mix, even before agronomists proved it was the best solution.

"As technology expands, as golfers and builders demand preciseness, as environmental demands become more stringent and water conservation becomes mandatory, I think it will become incumbent on anyone who builds golf courses of any type to follow very rigid specifications," said Watson. "Whether they are USGA specifications or not, remains to be seen. These specs are changing and being revised as new technology becomes available."

Environmental concerns, wetlands legislation, increased play and moved the industry toward an 80:20 sand-peat mix, even before agronomists proved it was the best solution.

"As technology expands, as golfers and builders demand preciseness, as environmental demands become more stringent and water conservation becomes mandatory, I think it will become incumbent on anyone who builds golf courses of any type to follow very rigid specifications," said Watson. "Whether they are USGA specifications or not, remains to be seen. These specs are changing and being revised as new technology becomes available."

Environmental concerns, wetlands legislation, increased play and moved the industry toward an 80:20 sand-peat mix, even before agronomists proved it was the best solution.

"As technology expands, as golfers and builders demand preciseness, as environmental demands become more stringent and water conservation becomes mandatory, I think it will become incumbent on anyone who builds golf courses of any type to follow very rigid specifications," said Watson. "Whether they are USGA specifications or not, remains to be seen. These specs are changing and being revised as new technology becomes available."

Environmental concerns, wetlands legislation, increased play and moved the industry toward an 80:20 sand-peat mix, even before agronomists proved it was the best solution.

"As technology expands, as golfers and builders demand preciseness, as environmental demands become more stringent and water conservation becomes mandatory, I think it will become incumbent on anyone who builds golf courses of any type to follow very rigid specifications," said Watson. "Whether they are USGA specifications or not, remains to be seen. These specs are changing and being revised as new technology becomes available."

Environmental concerns, wetlands legislation, increased play and moved the industry toward an 80:20 sand-peat mix, even before agronomists proved it was the best solution.

Continued on page 10

ROY DYE, 1929-1994

Architect Roy Dye, who joined brother Pete in a golf course design practice in the late 1960s and 70s before working on his own, died after a long illness early on April 18, in Phoenix. Colleagues gathered in San Francisco for the ASGCA meeting to mourn Mr. Dye's passing prior to sessions held Monday afternoon.

Born in Springfield, Ohio, Roy Dye was a chemical engineer by trade. After assisting his brother early in their partnership, Roy Dye handled many projects on his own, most notably Waterwood National GC in Huntsville, Texas, and the CC of Colorado in Colorado Springs.

C-LOC

Developed and introduced the first vinyl plastic interlocking panels for soil retention applications

Panel Features:
- Attractive appearance
- Ease of installation
- Proven performance in any natural environment

To find out more about C-LOC, call or write today:
C-LOC Retention Systems, Inc.
P.O. Box 180283 • Utica, MI 48318
(313) 731-9511 • FAX (313) 731-9516

Just add Water.

Quick. Easy. Add the beauty of water to any landscape project with an EPI pond liner. Tough, durable and flexible, it cost-effectively provides a leak-free body of water. Send us your site plan and we'll custom fabricate to fit any size, shape or application.

Environmental Protection, Inc.
P.O. Box 333 • Marcelina, Michigan 48659
Call: 800-34-LINER; Outside the U.S.: 616-587-9108
Fax: 616-587-8020

May 1994 3

GOLF COURSE NEWS

CIRCLE #102 CIRCLE #103
Some things just aren't meant to go together. For example, well-hit baseballs and windows, Bush and broccoli, postal delivery persons and neighborhood dogs. No matter how hard you try, they just don't fit together.

On the other hand, some things are meant to go together: beer and pretzels, football and Thanksgiving, peanut butter and jelly, kids and puppies.

When it comes to disease control on turfgrasses — especially brown patch, leaf spot, dollar spot, and summer patch — there are two products that go together pretty well, too.

Diseases Controlled By A Tank Mix Of Banner And Daconil 2787.

- Anthracnose
- Brown Patch
- Copper Spot
- Dollar Spot
- Gray Snow Mold
- Leaf Spot
- Pink Snow Mold
- Powdery Mildew
- Red Thread
- Rust
- Spring Dead Spot
- Stripe Smut
- Summer Patch

So well, that it's as if they were almost created especially to be used in a tank-mix combination: Banner® and Daconil 2787®

They Work Better Together.

When these two remarkable products are used together in a tank mix, they provide even more remarkable results on turf diseases. Such as:

- Broader control
- Longer control
- Lower rates

Banner and Daconil 2787, when used at their lowest labeled rates, provide excellent control of all major turf diseases (except Pythium) when used on a typical 14- to 21-day program.

Better control, in fact, than you can get with the highest rates of either product when used alone.

Use Less Active Ingredient.

These low rates minimize the amount of active ingredient that you have to apply to the turf, yet provide both longer disease control and a spectrum of control that would not have been possible with either one of the products alone.
Because this tank mix offers two different modes of action, there is less chance of disease recurrence. It also minimizes the development of insensitivity.

Results for the performance of this tank mix are based on extensive research conducted at universities and golf courses all across the country.

Stay Ahead Of Disease.

The results are conclusive: Tank mixing Banner and Daconil 2787 can let you stay effectively ahead of diseases — while allowing you to use the lowest labeled rates for more cost efficiency.

If disease becomes established, you often have to throw a lot of money at the problem to make it go away. This is because treating diseases once they are established usually requires using a lot of different individual products to control the various diseases.

Preventive Vs. Curative.

A preventive approach works better.

Using a preventive instead of a strictly curative approach to disease control has several advantages.

Turf that has not been weakened by disease is stronger, and better able to handle other stresses during the year. The turf generally stays healthier, as well.

But perhaps the main advantage of the preventive approach is that undamaged turf looks a whole lot better than turf that has suffered an attack by disease.

This alone is reason enough to try a Banner plus Daconil 2787 tank mix to prevent disease from ever getting a foothold on your turf. And it's available for use on both golf courses and residential lawns.

A More Practical Approach.

A tank mix of Banner and Daconil 2787 is so economical and effective, it makes taking a preventive approach to controlling turf diseases totally practical — whether on a private or public golf course, or on residential lawns being serviced by a lawn care professional. Even on a tight budget.

In fact, this new tank mix is so practical, we’re sure you’ll believe as we do that Banner and Daconil 2787 applied in combination are the greatest thing since sliced bread (and butter!).

©1994 Ciba-Geigy Corporation, Turf and Ornamental Products, Box 18300, Greensboro, NC 27409.
Banner is a registered trademark of Ciba-Geigy Corporation. Daconil 2787 is a registered trademark of ISK Biotech.
Always read and follow label directions.
Note-leaving course vandal remains at large

BODEGA, Calif. — Since September, a vandal has wreaked havoc on the Bodega Harbour Golf Links with a string of attacks that he vows to continue until his sleep is not disturbed by the sound of lawn mowers grooming the fairways at dawn. The vandal has poisoned nine greens, posted numerous threatening letters around the 18-hole course and a fire of suspicious origin has burned the maintenance building.

"We've set up random stakeouts, increased our community watch programs and increased our private security service," Bodega Harbour golf director Dennis Kalkowski told the Fort Worth Star-Telegram. "In spite of everything, the advantage is to the one who has issue with you."

"You must be tired of hiding people in vehicles, rentals and bushes by now," the vandal wrote in one note. "It won't work and it's very expensive."

Other notes have demanded an end to early-morning maintenance noise and an end to the placing of "cart crossing" and other signs along the streets.

Officials put the course damage at about $10,000 so far.

Eagle Ridge Inn plans to expand with third 18

GALENA TERRITORY, Ill. — Eagle Ridge Inn and Resort is making plans to build a third 18-hole golf course. Work on the course, designed by Andy North and Roger Packard, will start this spring with the course open for play in fall 1995.

Jon Duelman, Eagle Ridge president, said it's his goal to make Eagle Ridge the finest golf resort in the Midwest, similar to what Pinehurst means to its region.

According to John Osmanski, Eagle Ridge manager, the 7,000-plus yard course will feature four sets of tees. It will also have a new club house with 40-seat lounge, a driving range, practice range and putting green.

TURKS OPPOSE MINN. COURSE

AURORO, Minn. — The Turk family here began a petition against the construction of the $8.9 million 18-hole golf course proposed for Giants Ridge Recreation Area in Biwabik. Construction is set to start this spring. Rick Turk called the petition a "last-ditch effort" to save the family cabin, the proposed center of the 17th green. The Turks also do not believe the course will be financially viable.

Illinois judge backs state park projects

STERLING, Ill. — A judge has dismissed two lawsuits seeking to keep the Park District from buying the Emerald Hill Country Club. The plaintiffs of both lawsuits said they are considering more legal action opposing the deal.

Both plaintiffs contend the Park District exceeded its bonding authority by more than $1 million when it offered to buy the country club for $1.3 million in early January. The district also plans to sell another $4.4 million in bonds for renovations. The lawsuits also asked the sale be stopped because the cost was excessive.

Judge Timothy Slavin disagreed. "Reasonable citizens may differ over the appropriateness of the purchase price," he said. "But ... such does not amount to the reasonableness required."

Miss. park blazing trail with success

McCOMB, Miss. — Adding golf courses at Percy Quin State Park here, and at John Kyle state parks near Sardis, is part of a $30.6 million parks renovation bill passed by the Mississippi House this year.

Currently, the only state park golf course is a nine-hole layout at LeFleur's Bluff State Park in mid-Jackson, which has proven lucrative for the park system.

The new courses are included in the bill partly to raise revenues. "When you look at the activities of our parks... that golf course makes more profit than any other one activity in any one park," said Bob Tyler, the system's director of parks and recreation. Golf grossed $271,503 in fiscal year 1993 — 65 percent of LeFleur Bluff's total revenues.

Some residents say there is another good reason to build the public golf courses: Opening another recreational outlet for blacks, who historically have been denied access to the state's mostly private country clubs.
Wetlands hold up Michigan project

NEW BUFFALO, Mich. — The long-planned $155 million Whittaker Woods golf course and residential development here has one more hurdle to jump before construction can begin.

Owner Peter O’Brien said the 402-acre, 273-home project will soon have its permits from the Michigan Department of Natural Resources (DNR).

Last year, members of the Galien River Watershed Council objected to O’Brien’s plans to fill nine acres of wetlands and modify a survey to determine if the project threatens endangered species.

Albert Massey, the DNR’s Region III land and water management supervisor, said O’Brien scaled back his planned wetlands changes and developed a satisfactory storm drain plan.

Massey said although the permit is ready to be signed, O’Brien and the DNR will still have to work out a survey to determine if the project threatens endangered species.

Operator, not satisfied with lease, may buy Air Force course

SAN BERNARDINO, Calif. — The Inland Valley Development Agency, which has already agreed to lease and operate Norton Air Force Base’s 170-acre Palm Meadows Golf Course, said it will submit a “significantly” higher offer to the Air Force to buy the course.

Last January, the Air Force rejected a $2 million bid from the agency to acquire the course, which may have to move as many as four holes to accommodate commercial air service. Portions of the site are also tainted with toxic hot spots.

The higher offer came after a financial review of the course operations indicated it would generate a better cash flow than first projected, said Bill Bopf, agency executive director. The agency wants to retain the course so it can control development on property that has been earmarked as an intermodal transportation zone where containerized cargo is loaded from planes onto trucks and rail cars.

Also interested in the Norton course is the San Manuel Band of Mission Indians, a 150-member tribe that operates a bingo parlor in Highland. The tribe already has filed a letter of intent to buy 50 acres of mostly barren property in the northeast corner of the base.

Deciding not to file a formal application for the course, the San Manuel Indians are waiting to see what happens with the agency’s bid.

Flood-ravaged course to reopen this summer?

DAVENPORT, Iowa — With the Great Flood of 93 destroying Davenport’s Credit Island Park, there is a growing movement to reseed the park’s golf course with an eye toward opening it for play later this summer.

Several city aldermen said they are leaning toward reseeding the golf course, but people will be able to play golf.

“Toro Sand Pro® two decades ago. And now offer three models, including our new Toro Sand Pro® two decades ago. And now offer three models, including our new line to master every kind of bunker condition.

Each Sand Pro® quietly provides consistently fine grooming as well as maximum operator comfort and performance.

The Toro Sand Pro® Another innovation based on our 60 year partnership with golf course superintendents. Working together to create the ultimate in playability.

Not to mention a well groomed appearance.
New York proposal goes public

STILLWATER, N.Y. — Plans for an 18-hole golf course here have been disclosed.

According to a map presented by C. Michael Ingersoll, an engineer for the LA Group, the course will be situated on a 511-acre parcel of property and will include a 14-lot subdivision.

The land is currently zoned for residential use and could accommodate 200 housing units, Ingersoll said.

The construction of the golf course would require a zone change to planned recreation development.

The project also includes plans for a 150-car parking lot with room for expansion, and a 3,000-square-foot club house with pro shop and grill.

Ingersoll said rough clearing of the land could begin this month, with construction starting in the summer. The Luther Forest Corporation of Malta is the owner and developer of the land.

The golf course would be open by the spring of 1996.

Mass. residents question cost of proposed muni

NORWELL, Mass. — Opponents of a proposal to build a town golf course on the Stetson Meadows conservation land said the course would cost more than twice as much as the Golf Course Committee estimates.

Figures presented to the committee by The Friends of Norwell, a group of residents organized in 1988 to oppose the course, estimate the project would cost $4 million to $5 million to build. The golf course study committee has estimated it would cost $1.5 million to $2 million to build the course.

The additional costs come from a variety of sources, according to Richard Meyer, a representative of the Friends group. This includes $150,000 for 10 wells that would have to be dug for irrigation, $170,000 to build a road, $40,000 for a parking lot, and $113,000 for lighting.

Depending on bond terms, the Friends concluded the course would not break even for about seven years.

Judge refuses to stop construction

COVINGTON, Ky. — A state appellate judge has refused to stop construction of the golf course expansion now under way here in Devou Park. In allowing the construction of nine new holes to continue, Judge Wil Schroder denied an emergency request by opponents of the expansion to stop the course’s development.

Schroder’s ruling did not come as a surprise to city officials. “It’s what we expected,” City Attorney Joe Condit said. The city approved the expansion last May in order to increase use of the park and acquire a more lucrative contract with the golf course’s operator.

Chas Brannen, a representative of the opponents to expansion — who believe the expanded course would destroy the park’s natural beauty and close most of it off the general public — said he is unsure of what the next step will be.

The group could ask the state Supreme Court to overrule Schroder, or it could simply allow the normal appeals process to continue.

See the art and science of overseeding Oakmont C.C. fairways for the 1994 U.S. Open with Penneagle in our free how-to booklet.

Penneagle is part of Oakmont’s rich heritage, including the 1978 PGA Championship, the 1983 and 1994 U.S. Opens

"Penneagle has been a part of the tradition here at Oakmont since 1977 when the Poa annua fairways were overseeded in preparation for the ’78 PGA Championship. Since then, our 28 acres of fairways have been overseeded with Penneagle after each April and September aerification.

And the entire course is kept in play during the procedure. Ask for the free brochure and I’ll show you how I do it."

Mark D. Kuhrs, Superintendent
California & Federal EPA working in concert

The Environmental Protection Agency and the California Department of Pesticide Regulation (DPR) have begun more closely coordinating federal and state pesticide programs, particularly in the area of registering pesticides.

EPA and DPR have worked closely for years. The new initiative formalizes that relationship, and calls for increased communication along with development of projects to resolve differences between the two.

The agencies have agreed to more closely harmonize state and federal registration processes to minimize potential for conflicting regulations; simplify procedures for registering reduced-risk pesticides and for revoking the registration of high-risk pesticides; and exchange EPA and DPR work products such as the re-registration of old pesticides in order to reduce duplicating efforts and use resources more effectively.

Several projects designed to meet these objectives are already underway. EPA will provide DPR with all EPA data reviews and risk assessments of new active ingredients. DPR will provide EPA with acute data reviews for products containing active ingredients subject to federal reregistration. This effort will assist EPA in expediting the re-registration process.

EPA and DPR will also compare respective risk assessments, both for an old pesticide and for a series of new active ingredients. The agencies will identify differences in the way studies are selected for review and conclusions are drawn from data.

EPA has proposed adding 170 new pesticides that must be reported by manufacturers when released into water or air. Under the 1986 Emergency Planning and Right-to-Know Act, EPA could add 317 chemicals to its annual toxic release report. There are already 320 chemicals, including 24 pesticides, on the list. Pesticide manufacturers and processors could be affected.

Charles Clarke has been named regional administrator with the EPA's Region 10, representing Alaska, Idaho, Oregon and Washington.

Clarke has 17 years experience in the public sector, most recently as agency secretary for the Vermont Agency of Natural Resources. He worked for the state of Washington from 1976 to 1992 with the Department of Ecology and Department of Community Development.

Clarke is a resident of both Washington and Vermont. He earned a masters degree in business administration and a bachelors degree in biology from Pacific Lutheran University.

EPA ROUND-UP

With Curalan, Long Lasting Control Is Par For The Course.

Finally, there's a turf treatment that works as hard as you do to keep your golf course looking its best. It's Curalanfungicide. With Curalan you can control eight tough turf diseases including brown patch, dollar spot, leaf spot, Fusarium patch and snow molds three to four times longer than other fungicides — up to 28 days.

And that's not all. Curalan's long lasting control is specifically designed to work on any kind of turf, at any stage of its growth, as a preventive or curative treatment.

So, whether you want to keep spots, patches or molds from invading your turf, or you need to clear up an existing problem with brown patch or dollar spot, a treatment with Curalan can do it. This year, go for a new course record in disease control. Call 1-800-878-8060.

Simple Solutions To Complex Problems

BASF

NAVY FULL SPEED AHEAD ON DAIRY FARM PROJECT

ANNAPOLIS, Md. — The U.S. Naval Academy is moving forward with plans to turn the bulk of its 862-acre dairy farm in Gambrills into a golf course.

Although there has been no final decision on a golf course, academy officials have decided to award an architectural contract to create a concept drawing of a course.

This decision is based on a $7,000 feasibility study conducted last September by PGA Tour Golf Course Properties. The Florida company recommended a $19.5 million semiprivate facility with 2,000 members.

The Naval Academy already has a 18-hole golf course.

LOCKHEED IN MARKET FOR A DEVELOPER

PALMDALE, Calif. — The Lockheed Corp. is trying to make a profit from the 632 acres of vacant land it owns by selling it or developing it as a business-industrial park that would feature a public golf course, according to a Lockheed consultant.

The 238-acre golf course is planned for the part of the site on which buildings are outlawed due to Air Force noise.

The course would be a "fee-for-play" course open to the public. Lockheed is doing preliminary planning for the park site. Although Lockheed probably won't be developing the park, company officials figure the land will be more attractive to potential buyers if Lockheed has already secured the city's permission to build a business park on the land, company spokesman Paul Haney said.

With Curalan, Long Lasting Control Is Par For The Course.

Finally, there's a turf treatment that works as hard as you do to keep your golf course looking its best. It's Curalan™ fungicide. With Curalan you can control eight tough turf diseases including brown patch, dollar spot, leaf spot, Fusarium patch and snow molds three to four times longer than other fungicides — up to 28 days.

And that's not all. Curalan's long lasting control is specifically designed to work on any kind of turf, at any stage of its growth, as a preventive or curative treatment.

So, whether you want to keep spots, patches or molds from invading your turf, or you need to clear up an existing problem with brown patch or dollar spot, a treatment with Curalan can do it. This year, go for a new course record in disease control. Call 1-800-878-8060.

Simple Solutions To Complex Problems

BASF

CIRCLE #107

May 1994 9
State EPA blocks $35m Ohio resort project

CEDAR LAKE, Ohio—An Ohio Environmental Protection Agency (OEPA) decision has blocked the proposed development of a $35 million resort here, which includes an 18-hole golf course, 2,500 homes, a marina, lodge and other amenities.

Developer U.S. Concord Inc. of Mount Vernon said the project is too important to the company and the Adams County economy to drop.

“We will pursue all avenues available, including the courts if necessary, to see this project through to its completion,” Concord President Brian Emler told the Dayton Daily News.

OEPA Director Donald Schregardus rejected the company’s request to dam Brush Creek to create a 1,100-acre lake because it would violate Ohio water quality standards and would alter the creek’s animal habitat enough “to eliminate or significantly decrease the relative abundance of 23 of the 37 species collected in or near the proposed project area.” The proposed lake is the centerpiece of U.S. Concord’s project.

Critics of the project, led by the Ohio Historical Society, hailed the decision. They believe the resort would damage or destroy the famed Serpent Mound, a 1,348-foot land earthwork that snakes back and forth before reaching a head that appears to be swallowing an egg.

Adams County business leaders and the Adams County/Ohio Valley Local School District support the plan. They say the jobs and taxes generated by the resort would far outweigh any possible damage to the ancient Serpent Mound.

ASGCA meeting

Continued from page 3

will be able to totally supplant the role of water in the care and maintenance of a golf course.”

Announcing the selection of Watson for the Ross Award, Rees Jones cited him as “the practical voice” among turfgrass organizations.

Outgoing President Jerry Matthews called him “a true friend of the golf industry for 42 years, in all phases. He has worked with the turf industry, irrigation people, fertilization, seed development — any part of it. He has simply, quietly been helping all of us in the golf industry, making golf a better place to be, making golf courses better places to build, grow grass and maintain grass.”

Donald Knott of Robert Trent Jones II International of Palo Alto, Calif., succeeded Matthews as ASGCA president during the San Francisco meeting.

Longtime ASGCA member Ted Robinson was also elected fellow in the association. The humble Robinson accepted the honor, saying it was given as “primarily a process of survival.”

Speaking during an ASGCA session on the Americans with Disabilities Act, architect Richard Phelps said the society is working with representatives of the PGA Tour and Golf Course Superintendents Association of America to develop guidelines regarding course design.

The guidelines will be submitted to the federal government by July and be published in the Federal Register for a public comment period. Specific laws aren’t expected to be in place until sometime in 1995, Phelps said.

Phelps added that ASGCA is recommending that, on new construction, disabled-golfer access be designed into at least one tee and the green. It would be up to the disabled golfer to negotiate his or her way around the remainder of the course, although architects should strive to make as much of the layout as accessible as possible, he said.

The first flotation

You never have to worry about sinking below the surface when you’re in a John Deere Gator™ Utility Vehicle.

The reason is quite simple: high-flotation/low-compaction tires. They’re standard features on both the Gator 4x2 and the Gator 6x4. With only 7.1 to 7.5 pounds per square inch, these utility vehicles will barely bend the blades on your delicate turf.

This low psi also helps the Gators out in muddy, swampy situations. And when extra traction is called for, simply reach down for the differential lock, conveniently located next to the shift control.

You’ll also appreciate the fact that the Gator Utility Vehicles go easy on the ears as well. Large capacity, one-piece mufflers, lower engine rpm’s, and, on the
Anonymous backer funds project

FRONTENAC, Kan. — A golf course proposed here came a step closer to reality as an unnamed financier from Tennessee has agreed to fund the course. The course will cost between $5.2 and $5.3 million, significantly higher than the original estimate of $3.5 million.

Southern Golf Development of Houston will build the course and Kansas Golf will manage the course on a lease agreement. After 15 years, the city would become owner of the course since it will be located on city-annexed property.

The financial package has been finalized, with construction set to begin around May. Depending on the weather, construction would take about 16 months with a proposed completion date of 1995.

"The course will be certified by Golf Digest and could be ranked among the top 50 golf courses in the country," said a confident Jeff Gazaway of Kansas Golf Development.

 Council okays Dakota development

VERMILLION, S.D. — Both an 18-hole golf course and a 100-building residential site should be in place here by next year. The city council gave its unanimous approval to the $3.4 million project in February.

"The city originally looked at 11 sites for the project and has chosen property owned by Dave Smith and Mark Quam," City Manager Jeff Pederson told the Yankton Daily Press and Dakotan. The council made the decision, Pederson said, using the results of a feasibility study by THK Associates, Greenwood Village, Colo.

The new golf course will replace the current nine-hole municipal course, which will be sold by the city.

"Our target date for the golf course is mid- to late-1995," Pederson said. The city has been working with Rapid City course designer Pat Wyss.

The council has developed a financing package which is designed to cover the costs of the project. The package includes three parts: revenue from the golf course, such as green fees, will help pay for the course; revenue from lot sales will help pay off the debt; and the creation of a tax increment financing district will allow tax revenues to accrue over a number of years and help pay for the housing units.

The THK plan estimates the project will raise $4.9 million over 15 years compared to the $3.4 million expense.

State and federal agencies approve Superfund project

ANACONDA, Mont. — State and federal environmental agencies have signed off on a Superfund cleanup plan for this city's original smelter works area which allows for construction of a Jack Nicklaus-designed golf course.

Anaconda-Deer Lodge County now has the major responsibility for regulating the site.

ARCO, the company held responsible for this federal Superfund site, plans to deed all 1,500 acres of the site to the county. In return for accepting the burden of monitoring and regulating the land, the city gets a golf course and the chance to bring commercial development to a former waste land.

Allowing a luxury golf course as a cap over mine tailings and other wastes signals a change in policy by the federal environmental protection agency. "This is the first in the nation," County Chief Executive Cheryl Beatty told the Montana Standard. "This is a major step because we are going to make wasteland into usable land for the future."

PENN. PROJECT UNVEILED

SPRINGFIELD TOWNSHIP, Pa. — A proposed housing development here would include 189 homes and an 18-hole golf course.

If everything goes smoothly, the golf course will be built in about two years and not used until the year after that, according to project engineer Alan Wright.

device for land

6x4, a liquid-cooled engine, result in extremely low sound levels.

And as light as the Gators are on their feet, they possess solid bodies. A heavy-duty, arc-welded frame. Bolt-on cast-aluminum rear axle housings. Internal wet-disk brakes. And a rugged front suspension.

They're not lightweights when it comes to towing. The 4x2 has a 900-pound capacity; the 6x4, 1,200 pounds.

To see firsthand why a Gator Utility Vehicle rises above the rest, visit your local John Deere dealer.

NOTHING RUNS LIKE A DEERE®

CIRCLE #108
Montana resort plan heard in Havre

HAVRE, Mont. — Construction of a 245-acre resort, which will include an 18-hole golf course, could begin as early as this spring, according to developers who presented their proposal to the Havre Area Chamber of Commerce this spring.

Ted Morris, president of Quantum V, said development plans call for a golf course, hotel, condos, recreational vehicle park, convenience store and truck stop. The entire complex will be located just east of Havre.

Morris acknowledged funding from private sources has been only partially secured. The developer added that local, state and federal funding will also be sought for the resort.

Vernon Hills project to include 18 holes

VERNON HILLS, Ill. — A new 18-hole golf course and 2,121 housing units are included in a plan to develop the Cuneo farm here. The proposal would increase the village's size by one-third and its population by as much as 6,000. Open space in the plan includes two lakes, the 200-acre municipal course and 90 acres of park.

Theft reported at Illinois course

CARPENTERSVILLE, Ill. — Due to the stealing of more than $55,000 in cash and merchandise from Dundee Township Park District's two golf courses, park officials say this year's scheduled improvements at the courses could be reduced.

Executive Director Tom Mammoser discovered shortages of at least $37,814 in cash and $17,835 in various pro shop merchandise and clothing at both Randall Oaks and Bonnie Dundee golf courses.

President Al Huffman told The Courier News, "Where it might hurt is that there will be that much less money to do some of the improvements we had scheduled at Randall and Bonnie."

The Kane County sheriff's office is investigating former park district employees as the leading suspects in the case. All five full-time employees were suspended from their duties while district officials interviewed them.

Control of Helminthosporium leaf spot and Melting Out, Dollar Spot, Brown Patch, Fusarium Blight and Red Thread, CHIPCO® 26019 is simply the best investment you can make to ensure the quality and playability of all your turfgrasses. It even protects against

A TURFS-EYE VIEW OF

What's really frightening about this vision is that every year your turf is seeing more of them. And it's this increased traffic that's making even your hardest varieties more vulnerable to disease damage.

That's where CHIPCO® brand 26019 fungicide comes in. With its unsurpassed control of Helminthosporium Leaf Spot and Melting Out, Dollar Spot, Brown Patch, Fusarium Blight and Red Thread, CHIPCO® 26019 is simply the best investment you can make to ensure the quality and playability of all your turfgrasses. It even protects against

Rhône-Poulenc Ag Company, 2 U.S. Alexander Drive, Research Triangle Park, NC 27709. For additional product information, please call

AGC expands centralized reservations

SANTA MONICA, Calif. — American Golf Corp. has expanded its centralized reservation tee time service into Los Angeles.

By calling 310-829-GOLF, golfers are able to book tee times at six golf courses currently on the system. The courses include Brookside, Camarillo Springs, Fullerton, Mountain Meadows, Vista Valencia and Westchester.

Two courses in the Palm Springs area, Mesquite Country Club and Desert Dunes Golf Course, have been added to the reservation center.

American Golf developed its centralized reservation tee time service in Phoenix in 1992 to handle seven of its resort and public courses. The reservation center was conceived to aid resident golfers, travel agents, hospitality industry employees and inbound Arizona tourists, allowing easy accessibility to make tee times up to sixty days in advance.

"Over the past number of years it has become increasingly difficult to book tee times in these two popular destination resort markets," said American Golf's President of the Resort and Public Division, Kevin Roberts. "Our goal is to simply make it easier and more convenient for the public to gain accessibility to a tee time that fits their schedule."

Golfers throughout the country are now able to access American Golf's Arizona courses by dialing 1-800-GO-TRY-18.
Superintendents plan conference 'Down Under'

ADELAIDE, Australia — The 13th annual Australian Turfgrass Conference and Trade Exhibition, sponsored by the Australian Golf Course Superintendents Association (AGCSA), will be held July 10-14, here at the Adelaide Convention Center.

A diverse and knowledgeable roster of speakers will address the largest audience in the event's history, said Euan Laird, chief executive officer of the AGCSA. Five hundred delegates had signed up during the first three weeks of registration, said Laird, trebling the count from previous years.

Representatives of the Australian Turfgrass Research Institute, Turfgrass Technology, and the Australian Irrigation Technology Centre all grace the speakers list, in addition to practical turf managers from the country's top golf courses. American presenters include noted turfgrass experts Dr. Tom Watchke of Penn State University, Dr. Robert Carrow of the University of Georgia and Michigan State University's Dr. Paul Reike.

Laird said registration is US$454. For more information, contact him at Golf Australia House, 155 Cecil Street, South Melbourne, 3205; or call 61-3-696-6871; or fax 61-3-699-8516. • • •

Meanwhile, the AGCSA has pulled together end user groups involved with turf to form the Australian, Turfgrass Research and Development Council (ATRDC).

According to Laird, the aim was to create a "peak industry body to coordinate and represent the turf industry in matters of research, education and development."

The ATRDC was formed following a meeting last year in Canberra, where the Australian superintendents' association was charged with forming the council. Laird said the ATRDC hopes to have at least two research projects underway by the close of 1994, complementing the US$500,000 worth of turf research now conducted by the Horticultural Research and Development Corp. (HRDC).

The council members include The Australian Golf Union, Australian Bowls Council, Australian Jockey Club, AGCSA, Royal Australian Institute of Parks and Recreation, Turfgrass Association of Australia, sod Growers Association, Irrigation Association of Australia, Melbourne Cricket Club, Bowling Greenkeepers Association of Australia, and the HRDC.

Laird said for further ATRDC information, call 61-3-696-6871 for further

THE AVERAGE GOLFER.

Pink and Gray Snow Mold and Fusarium Patch.

And because CHIPCO® brand 26019 provides long-lasting control, it is registered for use on a wide variety of high-value ornamentals, you can keep more of your course disease-free all season long.

This year, take the bite out of traffic pressure with the proven disease protection of CHIPCO® brand 26019 fungicide. Available in wettable powder and smooth-pouring flowable formulations.
Different media, same result: Communication

It's called communication, and two industry members have showed a flair for it this spring. To wit:
• Sandoz Agro sponsors a survey of chemical applicators every two years and golf course superintendents were included for the first time in the 1994 poll. The results — compiled by the Gallup Organization — make for pretty interesting reading (see story, page 1).
We applaud the inclusion of survey data — not just for the Gallup Organization — but for the industry as a whole. Surveys can lead to better communication of industry needs.

Letters

THE NUMBERS JUST DON'T ADD UP

To the editor:

As a golf course consultant, I just couldn't resist commenting on the article, "Golf could be profitable for Utah city, study says" in your April issue (page 9). Hopefully, the conclusions drawn, namely that the present 240,000 rounds played at the nine existing courses and gross fees of $9 and $15 could make $607,000 per year are misreported rather than the conclusions of the consultant.

Simple math tells me that 240,000 rounds spread across nine different courses equals 26,666 rounds per course, which is certainly not crowded conditions indicating under supply. If we then add another course the average declines to 24,000 per course. At an average green fee of $12, this equates to a loss of approximately $240,000 per course — not profit.

Where's the consultant's $607,000 coming from? By my reckoning, even if carts are mandated to $10 per person, that would add only $240,000 to the total revenue — still short of the $607,000 indicated to be profit.

This then leads to two possible conclusions:
1) The article was incomplete and didn't mention other revenue sources or rationale.
2) The consultant is incompetent.

Hopefully, the proper conclusion #1. Otherwise, all of us in consulting may be painted with this brush.

Scott Krause golf consultant Muskego, Wis.

Ed. While we would never assert #2, we stand by the figures reported in the story — thereby discounting conclusion #1. Krause's numeric points are well taken. However, the numbers themselves don't seem to add up to a large figure. Peter Elzi of THK Associates Inc., not Golf Course News. In Elzi's defense, the $607,000 figure was merely to represent third-year revenue, not profit.

When it comes to restrooms, equal rights go down the toilet

A lot of you who have struggled with figuring your golfing handicap, we'll need your help (and commiseration) with this update on Societal Deviation and its effects on the golf industry.

First, the nation had civil rights (to ensure his-her-their personal "lifestyle we'll need your help (and color). Then we had gay rights (basically, that means no outlawed against a person for skin color). Then we had societally deviant (that is, discrimination is outlawed against a person for skin color). Now, in order to make the show more interesting, the view is that the entire industry is discriminating against the entire industry — businesses, restaurants — and we need education when it comes to safe application practices.

And our second "Great Communicator" is the Golf Course Superintendents Association of America. Yes, you read that right. GCSCAA. The superintendents association has produced a new 30-second television show, now airing on the PRIME Network in syndication (see story, page 21).

It's called "For the Course," and it's the only golf program on television that views the game from an environmentally positive perspective: Nature walks on golf courses. Ron Dodson speaking about the Audubon Society's Sanctuary Program. Superintendents speaking authoritatively and articulately on environmental issues. Even Jim Snow, director of the United States Golf Association Green Section, made a cameo appearance in April's episode (and, of course, be the GCSCAA has actually begun to work with the USGA!).

The show is well-produced and pretty darn slick — I even noticed a hand-held, herky-jerky camera style made famous by MTV (and beaten to death by ESPN). Kudos to GCSCAA Public Relations Manager Scott Smith, who co-produces the series with host Duke Frye. In order to make the show consumer-palatable, GCSCAA has made some concessions. Golf industry and travel pieces are indeed, par for the course on 99 percent of cable's many 30-minute golf programs.

Despite all this, "For the Course" is an idea whose time has come. Nothing communicates or creates exposure like television (just ask the PGA Tour). But golfing programs need to see superintendents talking like the environmentalists we already know them to be.

• • •

Just returned from Singapore, where I attended Golf Asia '94. This year's show was a departure from Golf Asia '93, and you can bet next year's exhibition and trade show will again break the mold. The show's architecture, hand-held, herky-jerky camera style made famous by MTV (and beaten to death by ESPN). What remains rock solid is...
The European golf development market is not what you think

BY DR. FALK BILLION

Five years ago, as the 1990s began, the Old World seemed to be a sleeping one in terms of golf course development. While in the New World, the National Golf Foundation was promoting nationwide targets like "one new golf course per day," nothing like that had been heard from across the Atlantic ocean. Traveling golfers still told the same old story about the same classic courses all over the British Isles and parts of the continent, and just some of the American golf course architects discussed the design of new courses in European regions.

This impression is wrong! In the four years beginning in 1990, no less than 1,111 new golf courses have opened all over Europe. This is a growth of nearly 32 percent compared to 1990. In the '90s, Europe has witnessed the opening of 576 new golf courses per year (which is not quite one new course per day, but in any case equals three quarters of a course per day). In respect to golf course developments, England takes the lead with 242 new courses, followed by France with 171, Sweden with 142 and Germany with 109 new golf courses per the last four years.

This rapid golf course development clearly is concent-

Dr. Falk Billion, PhD, is a golf course developer and consultant based in Munich, Germany. He concentrates on golf course market and feasibility studies, golf course operations consulting, and project management for new golf courses.
POWERFUL CONTROL, PERFECTLY PACKAGED.

For years, Fungo® has met your needs for effective control of key turf and ornamental diseases.

Now Fungo is in water soluble bags, responding to your demands for safety and ease of use.

And Fungo WSB is an ideal replacement for Benlate. Its active ingredient, Thiophanate-Methyl, is a direct substitute.

Thanks to its systemic action, a single application of Fungo WSB provides up to 14 days of control of major turf and ornamental diseases, including Brown Patch, Summer Patch, Necrotic Ring Spot, Red Thread, Dollar Spot, Diplodia, and Anthracnose.

And Fungo WSB is very versatile. It's labeled for use on major turf varieties along with spray applications for roses, shade trees and woody ornamentals. You can also use it as a drench on annuals and perennials.

Get Fungo WSB from your Scotts distributor today. Or call us toll-free at 1-800-492-8255.

Fungo in water soluble bags—the perfect package for controlling disease.

Note: Fungo WSB is not yet registered for sale in California. ©1994 The Scotts Company, Marysville, Ohio 43040. Fungo is a registered trademark of The Scotts Company.
**PESTICIDE GUIDE PUBLISHED**

**FRESNO, Calif.** — The Users Reference Guide to Pesticides, aimed at agricultural and horticultural users, has been released by Thomson Publications. The 200-page book lists products registered in the United States by generic name, followed by different formulations with their tank-mix, adjuvant and compatibility recommendations. It is available from Thomson at P.O. Box 9335, Fresno, Calif. 93791; telephone 209-435-2163.

**ASHS ELECTS CLEMSON'S KELLY**

CLEMSON, S.C. — The head of Clemson University's Horticulture Department has been chosen research and professional accomplishments. He has served in nine years and department head since 9335, Fresno, Calif. 93791; telephone 209-435-2163.

**TESTS CONFIRM TURF COVERS HELP**

Turf development research conducted at Texas A&M University is the subject of a new report from Contech Construction Products Inc. Results of the studies confirm that sensitive turfgrasses can be readily protected against winter elements. One of the objectives of the research conducted by Dr. M.C. Engleke, associate professor of turfgrass breeding, was to reduce winter dormancy or the emergence of healthier turf after winter seasons. Free copies of the report are available from Contech, Dept. GCH-102, 33 Greenwood Lane, Springboro, Ohio 45066; telephone 800-538-1122 (in Ohio, 800-752-1899).

**SOD HOTLINE INSTALLED**

Turf Resource Center, a toll-free telephone service, now is available to the American Sod Producers Association's office. The phone (1-800-405-TURF) emphasizes ASPA's developing public relations and education program. Organizations, publications, and individuals are available to obtain listings of sod producers in their area of interest, tips on sodding, and information for possible articles or other facts related to the sod industry specifically, or turfgrass generally.

---

**BRIEFS**

**WINTER KILL SERVES SPRING WAKE-UP CALL TO MID-ATLANTIC COAST SUPER**

**BY DIANE MILLER**

In the wake of the most severe winter since 1977-78, golf course superintendents from Maryland to New York are reporting the loss of as much as 30 percent of their turf on greens and up to 70 percent on fairways, and some may not open until "well into May."

The blanket of ice and snow that kept area courses closed for as long as two to three months prevents gas exchange around the grass plants, in effect smothering the plant. Superintendents are discovering that under the layers of ice the turf is rotten and black in some areas, giving off a powerful stench once the ice is removed.

Winter injury, including extensive winter kill of poa annua and perennial ryegrass, extends from Baltimore and Washington, D.C., through the Philadelphia area, central and northern New Jersey, and into the Pocono Mountains, according to the U.S. Golf Association Green Section. Much heavier than normal snow mold damage is being reported through Ohio and Kentucky.

More than 200 golf course superintendents, assistants, greens chairmen, club officials, and course owners from the New Jersey/Philadelphia area met on March 28 at Tavistock Country Club in Haddonfield, N.J., to discuss the ramifications of the severe damage.

The joint meeting of the Golf Course Superintendents Association of New Jersey (GCSANJ) and the Philadelphia Association of Golf Course Superintendents (PAGCS) opened the line of communication between superintendents, club officials and the USGA.

Jim Skloruy, Northeast Region agronomist for the USGA, discussed previous years' damage from upstate New York and Montreal. David Oaties, director of the Green Section's Northeast Region, discussed communication with club membership and talked about what superintendents can expect during the

Continued on page 22

**FOURTH-GRADE STUDENTS TAKE 'TEACHER' MOORE TO SCHOOL**

**BY JIM MOORE**

T ravelling around the Mid-Continent region, looking at golf courses, trying to figure out what is happening where, the endless writing of Turfgrass Advisory Service (TAS) reports, and way too many fast-food meals. Running in airports, standing in lines, glaring at the jocks who ignore boarding instructions, getting lost everywhere, and figuring out how to turn the lights on in twenty different rental cars.

On the more serious side, there is worrying about the superintendent and course that are in trouble, wishing you could come up with a magic cure, dealing with the clubs that want more but simply can't fund the improvements, and the constant balancing act between spending time "on the road" and trying to find more time to spend with the family.

After nine years of dealing with these challenges, I have decided the only means of survival (only 20 years to go) is to

Continued on page 23

**JUDGE: GOLF BALLS BELONG TO GOLFER**

**Golf balls driven into a lake belong to the original owner, according to a ruling by a judge in Vancouver, Canada.**

The decision came in a case prompted by a youth who was retrieving balls from a water hazard. He was accused of stealing the balls, but the judge ruled the balls belong to the golfer, not the course.

Mayfair Lakes Management Corp. maintains a contract with a scuba diving company to recover balls lost in its lake. These balls are valued at more than $19,000 a year.

The course is considering requiring a waiver from golfers, who would relinquish ownership of balls lost in the lake.

Continued on page 20

**MOUNT PINATUBO FALLOUT**

**ASHES TO ASHES, DUST TO DUST AT CLARK AFB COURSE**

**BY HAL PHILLIPS**

ANGELES, The Philippines — When Mount Pinatubo blew its top here in October 1991, a layer of ash blanketed the 18 holes at nearby Clark Air Force Base, which soon closed its doors for good. In the frenzied retreat from lava and ash, the course suffered another indignity. It was giving off a powerful stench once the ice is removed. Things have turned around at the site, as a private corporation — Mondragon International Philippines Inc. — will refurbish the course to anchor a new destination resort. But the ash — which Filipinos call labar — has created an agronomic poser for turf consultant Neil Noble and Honolulu-based architects Nelson, Wright, Haworth.

"They've got a real good loam underneath, but there's a four-inch layer of ash on top of everything," said Noble, an Ohio State graduate who heads Honolulu-based Environmental Turf Systems.

"The ash is real sandy because this bit fell so close to the actual volcano [about 15 miles]. From a water filtration standpoint, the eruption basically top-dressed the whole site.

"I tested the ash and came up with high levels of phosphorus, potassium and calcium," Noble continued, "which are

Continued on page 21

**COMMENTARY**

**Travel, turf trouble the consultant's lot**

**BY JIM MOORE**

T ravelling around the Mid-Continent region, looking at golf courses, trying to figure out what is happening where, the endless writing of Turfgrass Advisory Service (TAS) reports, and way too many fast-food meals. Running in airports, standing in lines, glaring at the jocks who ignore boarding instructions, getting lost everywhere, and figuring out how to turn the lights on in twenty different rental cars.

On the more serious side, there is worrying about the superintendent and course that are in trouble, wishing you could come up with a magic cure, dealing with the clubs that want more but simply can't fund the improvements, and the constant balancing act between spending time "on the road" and trying to find more time to spend with the family.

After nine years of dealing with these challenges, I have decided the only means of survival (only 20 years to go) is to

Continued on page 23

**GOLF COURSE NEWS**

**MOUNT PINATUBO FALLOUT**

**ASHES TO ASHES, DUST TO DUST AT CLARK AFB COURSE**

**BY HAL PHILLIPS**

ANGELES, The Philippines — When Mount Pinatubo blew its top here in October 1991, a layer of ash blanketed the 18 holes at nearby Clark Air Force Base, which soon closed its doors for good. In the frenzied retreat from lava and ash, the course suffered another indignity. It was giving off a powerful stench once the ice is removed. Things have turned around at the site, as a private corporation — Mondragon International Philippines Inc. — will refurbish the course to anchor a new destination resort. But the ash — which Filipinos call labar — has created an agronomic poser for turf consultant Neil Noble and Honolulu-based architects Nelson, Wright, Haworth.

"They've got a real good loam underneath, but there's a four-inch layer of ash on top of everything," said Noble, an Ohio State graduate who heads Honolulu-based Environmental Turf Systems.

"The ash is real sandy because this bit fell so close to the actual volcano [about 15 miles]. From a water filtration standpoint, the eruption basically top-dressed the whole site.

"I tested the ash and came up with high levels of phosphorus, potassium and calcium," Noble continued, "which are

Continued on page 21

**MOUNT PINATUBO FALLOUT**

**ASHES TO ASHES, DUST TO DUST AT CLARK AFB COURSE**

**BY HAL PHILLIPS**

ANGELES, The Philippines — When Mount Pinatubo blew its top here in October 1991, a layer of ash blanketed the 18 holes at nearby Clark Air Force Base, which soon closed its doors for good. In the frenzied retreat from lava and ash, the course suffered another indignity. It was giving off a powerful stench once the ice is removed. Things have turned around at the site, as a private corporation — Mondragon International Philippines Inc. — will refurbish the course to anchor a new destination resort. But the ash — which Filipinos call labar — has created an agronomic poser for turf consultant Neil Noble and Honolulu-based architects Nelson, Wright, Haworth.

"They've got a real good loam underneath, but there's a four-inch layer of ash on top of everything," said Noble, an Ohio State graduate who heads Honolulu-based Environmental Turf Systems.

"The ash is real sandy because this bit fell so close to the actual volcano [about 15 miles]. From a water filtration standpoint, the eruption basically top-dressed the whole site.

"I tested the ash and came up with high levels of phosphorus, potassium and calcium," Noble continued, "which are

Continued on page 21

**MOUNT PINATUBO FALLOUT**

**ASHES TO ASHES, DUST TO DUST AT CLARK AFB COURSE**

**BY HAL PHILLIPS**

ANGELES, The Philippines — When Mount Pinatubo blew its top here in October 1991, a layer of ash blanketed the 18 holes at nearby Clark Air Force Base, which soon closed its doors for good. In the frenzied retreat from lava and ash, the course suffered another indignity. It was giving off a powerful stench once the ice is removed. Things have turned around at the site, as a private corporation — Mondragon International Philippines Inc. — will refurbish the course to anchor a new destination resort. But the ash — which Filipinos call labar — has created an agronomic poser for turf consultant Neil Noble and Honolulu-based architects Nelson, Wright, Haworth.

"They've got a real good loam underneath, but there's a four-inch layer of ash on top of everything," said Noble, an Ohio State graduate who heads Honolulu-based Environmental Turf Systems.

"The ash is real sandy because this bit fell so close to the actual volcano [about 15 miles]. From a water filtration standpoint, the eruption basically top-dressed the whole site.

"I tested the ash and came up with high levels of phosphorus, potassium and calcium," Noble continued, "which are

Continued on page 21
Hoolehan sets out to prove bent can be grown in Hawaii

By H A L  P H I L L I P S

KANEHOE, Oahu, Hawaii — Superintendent Sean Hoolehan looks after Koolau Golf Club, which sports the only bentgrass tees and greens on Oahu. He'd like to take credit, but he knows circumstances forced the move. "The site dictated it completely," said Hoolehan, who was brought in during construction of this 3-year-old Dick Nugent design. "It would have been impossible to maintain Bermudagrass greens on this site. It's not the temperature — it's the mountain range. We have a 3,000 foot vertical range backing right up to the golf course. By 2:30 each afternoon, the whole course is cast in shade."

"We also get such high rainfall, the Bermuda grass gets real spindly and the ground so spongy, we can't mow it," Hoolehan continued. "We get about 100 inches of rain annually. And because of the mountains, it varies radically all over the course. For instance, I get 80 to 90 inches on the third tee and 130 on the 15th tee, because it's closer to the mountains."

Koolau (pronounced Ko-oo-lau) is one of Hawaii's most interesting courses: In addition to the bentgrass greens and tees, it's a daily-fee facility in the land of upscape private and resort courses. Further, it boasts the highest slope rating, 182, in the United States (see read story).

How did Hoolehan end up here? It's a Chicago story...

Born and raised in Oak Park, Ill., Hoolehan discovered his love for agronomy while working for Bob Brame (now a Green Program director) at Timber Trails in nearby La Grange. After completing Rutgers' two-year program in turf management, he returned to the Chicago area and took an assistant's job at Ruth Lake in Hinsdale.

"Sean was Ray Scheid's assistant at Ruth Lake," explained Tim Nugent, Dick's son, who takes up the story. "A while back, my dad said: 'What are you doing here?'"

Turns out Hoolehan's wife, Kathy, was in the Navy and had been transferred to Pearl Harbor. Todd Nicely — then general manager and head pro at Navy Marine Golf Course — offered Hoolehan a job as night waterman and events accelerated.

"Within a year I was head superintendent," Hoolehan explained. My expectation wasn't to be a superintendent out here right away. The culture was different. I had no experience with warm-season grasses. It was just one of those things. I was just looking for a job that would teach me how to grow Bermudagrass."

After their fateful meeting at the Hawaiian Open, Dick Nugent hired Hoolehan as Koolau's first superintendent. However, somewhere between the end of construction and the grow-in, the bottom fell out of the Japanese economy.

What had been conceived and built to be an upscale private course ("You should see the clubhouse," said Tim Nugent. "It's 100.00 square feet.") was opened as a daily-fee golf course — during a recession.

Hoolehan had some adjustments to make.

"The hardest thing has been working through this economic slump," he said. "During construction, we thought we'd maintain it with crew of 35 guys. We use 16 now. But you learn a lot from that — how to make do. You learn a lot more than you would with a blank check."

"Sean is the glue that has held the whole thing together," said Tim Nugent.

"And the course just wouldn't be what it is without him. He was the only superintendent out there who said you could grow bent."

"He said: 'You plant it; I'll grow it.'"

The agronomic transition from Chicago to Oahu wasn't easy for Hoolehan. In Chicago, you learn to be stingy with fertilizer, he said. On Oahu, year-round weed growth demands a heavy hand with fertilizer and a light touch with pesticides.

"The most challenging thing here is weed control because there is no off-season," he said. "All the annual weeds in Chicago are perennials. Weed control is the measure of any good grass."

Dean Knuth, the USGA's senior director of handicapping, didn't believe Hoolehan could be so high, so he decided to slope the course himself. Knuth was right — the course had been misjudged.

Knuth rated it 182 from the back, 158 from the blues.

"Before I played it, I was somewhat dubious," said Knuth, who developed the slope system and personally sloped Pine Valley at 153. "I mean, how could that course possibly have such a high slope rating? Not only was it not too high, I discovered they were being too conservative. Basically there are no bail-out and you have forced carries over jumble, where a ball can neither be found nor played."

Why does the USGA stop at 155? "It's a linear system," Knuth explained. "If the slope is allowed to go too high, it becomes non-linear and skews handicaps."

Consequently, the Koolau scorecard reads: Gold tees — 155; blue tees — 155; white tees — 154.

The asterisk tells the true story, if you have the stomach for it.

"It's a ball-eater, that's for sure," said Hoolehan. "You've got to keep it in play. But it's really not that bad. It's hard, but it's fair."

Koolau altitudinal in more ways than one, USGA finds

By H A L  P H I L L I P S

KANEHOE, Oahu, Hawaii — Move over, Pine Valley; make way for the new slope king. That's right, Koolau Golf Club has unseated the King Kong of Clementon as America's most ornerous golf course. The Dick Nugent design topped out at a near-Satanic 162 on the United States Golf Association slope meter, though the official USGA limit is 155.

"The developer wanted the longest course in Hawaii," said Tim Nugent, Dick's son. "So that's what we gave him. It's 7,300 yards from the back."

"Says of the charts," said superintendent Sean Hoolehan, who has been on hand since construction began. "But I honestly think you could not have built this course, on this site — and still be environmentally conscientious — without making it this hard."

"Dick [Nugent] said: 'I'm not going to move all that dirt just to make it easy.'"

Koolau's original rating was 152, as determined by the Hawaii State Golf Association. But the greens had so many different target points, the course was resloped. The rating jumped to 158.

"Koolau's 1st hole gives golfers an indication of the "highly sloped" challenge ahead. The Ohau island course has the highest slope in the United States — supplanting Pine Valley as king.

"Before I played it, I was somewhat dubious," said Knuth, who developed the slope system and personally sloped Pine Valley at 153. "I mean, how could that course possibly have such a high slope rating? Not only was it not too high, I discovered they were being too conservative. Basically there are no bail-outs and you have forced carries over jumble, where a ball can neither be found nor played."

Why does the USGA stop at 155? "It's a linear system," Knuth explained. "If the slope is allowed to go too high, it becomes non-linear and skews handicaps."

Consequently, the Koolau scorecard reads: Gold tees — 155; blue tees — 155; white tees — 154.

The asterisk tells the true story, if you have the stomach for it.

"It's a ball-eater, that's for sure," said Hoolehan. "You've got to keep it in play. But it's really not that bad. It's hard, but it's fair."

GOLF COURSE NEWS
UNIVERSITY PARK, Pa. — Penn State’s College of Agricultural Sciences has developed a new mulch for landscapers and turfgrass professionals.

Pennmulch (patent pending), developed by agronomy instructor George Hamilton, is made from chopped newsprint, manure and straw, and can be used in place of traditional mulching materials.

In addition to creating a use for large volumes of wastepaper, the product addresses a long-standing need in the industry.

"Mulching is crucial in turfgrass seedbeds for holding moisture, reducing erosion and protecting seeds from temperature extremes," said Hamilton. "But traditional mulches present problems. Many professionals use hydromulch — a mixture of wood fiber or ground paper combined with fertilizer and seed, which is sprayed onto seedbeds. Hydromulching requires an expensive machine and a high-volume water source for filling the hydromulcher."

"The alternative is straw, which often contains weed seeds, tends to blow away, and is difficult to store and handle. In addition, soil microorganisms that break down straw also deplete soil nitrogen."

Pennmulch is shaped into small, green pellets that are easy to ship and store. "It looks exactly like rabbit food," Hamilton said.

"The pellets can be spread by hand or by many types of conventional spreaders owned by turfgrass professionals and landcapers. A starter fertilizer can be combined with the product so that fertilizing and mulching is done in one step."

When wet, the pellets expand to several times their original size so that a small amount covers a large area. Also, because the mulch is made entirely of paper, there’s no danger of seedbeds being contaminated by weed seeds, he said.

While Pennmulch currently is marketed only to commercial operations, Hamilton hopes to make it available to homeowners soon. "The product has a large marketing potential," he said. A Pennsylvania Department of Agriculture survey shows that in 1989 homeowners spent nearly $19 million on grass seed.

"Pennmulch has great possibilities for retail because it can be sold in any size bag; it is shipped and stored much more easily than traditional mulches and the shelf life is unlimited," he said. "Although it was designed for use in grass seedbeds, we’re looking into other uses, such as vegetable gardens and ornamental plantings."

Research on the product began three years ago with a Ben Franklin Partnership Environmental Technology Fund, which included in-kind support from the College of Agricultural Sciences.

Pennmulch is being manufactured by Penn Mulch, Inc., of Pittsburgh. Last fall, 50 tons were produced and about 40 tons were sold to turfgrass and landscape companies.

"We’re researching new sources of paper, development of a low-cost pneumatic spreader to apply the mulch, and variations of the product containing fertilizer and grass seed," Hamilton said.

"We’re also implementing an extensive marketing plan. I’m confident Pennmulch will establish a niche in the industry."

---

**Introducing the Spirit PT**

*Looking for a new utility truck, but can’t get past the price tag? Look again.*

**Koolau’s Hoolahan**

Continued from previous page

superintendent in Hawaii. "The bentgrass usually survives all year long, but we make no effort to keep it. We use no herbicides. We have a strict IPM (integrated pest management) program here."

Depending on the time of year, we want to see the disease before we spray. We have an IPM manager whose sole job is to be on top of disease.

"We just can’t justify the use of fungicides. We get hammered by dollar spot this time of year, and Bermuda merges about this time, too. But we just let it go."

Though Koolau sports bentgrass tee and greens, the fairways are overseeded with Bermuda during the winter season.

It’s ironic that Hoolahan traveled to Hawaii and spent all that time learning to deal with warm-season grasses, only to look after a course with wall-to-wall bent, save the fairways a few months each winter.

"It’s sort of ridiculous," he said with a laugh. "But you know what else I learned out here? It’s hard to kill Bermudagrass."

Introducing the Spirit PT — the new personal transport utility truck priced to easily fit any budget without sacrificing quality, durability or utility.

The Spirit PT has a lot to offer. It features a quiet, Honda 5.5 hp gasoline-powered engine. It handles up to 600 lbs. at up to 10 mph. Its rugged and roomy cargo box has a wide, low ramp-type tailgate for fast and easy loading and unloading. But the best feature of the Spirit PT is its price tag — you’ve go to see it to believe it!

If you’re looking to buy a new utility truck — or a couple of them — look no more. Catch the Smithco Spirit today!
PGA Tour honors Myers for top-conditioned TPC track — Summerlin

By MARK LESLIE
The story of an Indiana farm boy who made good has continued for Gary Myers. The superintendent at TPC of Summerlin until March, Myers was presented the PGA’s most prestigious award — the Superintendent of the Year Award for 1993. The award meant that Myers had exceeded all expectations of quality control on the TPC of Summerlin, and the TPC Network.

"Because Gary has done such an outstanding job at Summerlin, he has been promoted to the TPC of Scottsdale," Roth announced. Myers compared the challenges presented by his jobs at Summerlin and Scottsdale. "It's a challenge in itself to maintain quality turf conditions under that enormous amount of play," he said. "But we also have to be aware that the touring seniors spend a lot of time playing here and it takes extra special care because of that."

TPC of Scottsdale hosts the Phoenix Open in January. But that's nothing new for Myers. During his term as superintendent at Desert Inn Country Club in Las Vegas from 1982-90, he peeled the course for 17 or 38 PGA/LPGA and Senior PGA tournaments. Regular PGA and LPGA Tour events were hosted two weeks apart. Only two other courses host even two major PGA tournaments.

Myers, who studied engineering at Purdue University, graduated in 1978 from the University of Massachusetts' Stockbridge School. He also worked from 1979-82 at Country Club of Green Valley south of Tucson.

Winter kill causes major problems

Continued from page 17

Winter kill is widespread across the region. They all discussed how superintendents should proceed to repair damaged areas.

The meeting was videotaped, and an edited edition is available at cost. Copies are available from Judy Policastro at 201-379-1100.

DEAD AIR FINDINGS IMMINENT

Preliminary results from the Georgia Turfgrass Foundation's flagship project — the dead air syndrome research green—should be forthcoming in mid-summer. Overall project coordination has been the responsibility of Jim Dusch and Ken Mangum, who have donated routine maintenance of the green. However, donations of cash and materials are still needed for this $90,000 project. For further information, contact Douglas Moody at 404-975-4123.
standards, we can seed it.  

Free tools for your imagination.

Call our toll-free number for a free JacklinGolf Imagination Kit loaded with comprehensive turfgrass planning and specification tools. Use them to take your course to a whole new level!

Ashes to ashes at Clark

Continued from page 17

usually lacking in tropical soils. There were no toxic levels, which surprised me. There was a little copper, but nothing significant.

"But any time you have different soils you have an interface problem. It's like a perched water table in a green, which might cause root zone problems. This should affect water movement until they break up the ash and mix it all together."

"The ash is basically a soil amendment."

Architect Robin Nelson — whose firm has design courses directly on top of cooled lava — will add nine holes and give the original 18 a complete makeover. The ash has affected the project, he said, but it's nothing he and Noble can't handle.

"The ash has pretty much been dragged off and stockpiled in the rough," said Nelson. "The only problem comes if the ash solidifies in a single layer. But we plan to mix it right in with the soil.

"It's a great site. A lot of huge monkey paws, which are acacia trees... There's also a ravine that runs through the entire site and is completely filled with ash. It will become a huge sandy waste area when we're done."

The irrigation system will be designed to deal with the "unlikely event" of another eruption at Pinatubo, said Nelson. While no manner of rotor can deal effectively with flowing lava, the Clark course will be equipped with an extremely powerful irrigation system.

"Basically," Nelson said, "we're going to have fire hydrants so you can blow the ash off the course."

improved disease resistance. The result is outstanding quality — often with fewer chemicals and less maintenance.

Call 1-800-760-4321 or your authorized JacklinGolf distributor. We'll help you keep your quality sky high.

"Par for the Course" gets pro-environment word out

BY HAL P H I L L I P S

LAWRENCE, Kan. — There is a new entry among the myriad golf-related, 30-minute TV shows that now dot the cable landscape.

"Par for the Course," produced by the Golf Course Superintendent Association of America (GCSAA), made its debut in late March and can be seen in syndication on the PRIME Network. The half-hour show will concentrate on golf's environmental attributes and other course management issues, in addition to features on driving ranges, instruction, places to play, and trends shaping golf's future.

The series will run 13 weeks on PRIME, which is distributed to 22 regional sports networks nationwide, serving more than 40 million subscribers. Its global division, Prime International, feeds programming to affiliates in Asia, Europe and South America. So far, 19 of PRIME's 22 affiliates have agreed to air "Par for the Course."

"We're pleased with it," said GCSAA Executive Director and Chief Executive Officer Steve Mona. "Obviously, it's a little too early to tell how it's being received. Our audience is the average golfer and we haven't had a lot of contact with him yet."

"But when we met with our members in Dallas, we gave them a sneak preview and they liked it."

Scott Smith, GCSAA public relations manager, is also co-producer of "Par for the Course." Smith's co-producer and the show's host is Duke Frye, a former sports anchor at KPRC-TV, Houston. He also hosts and produces programs for the Kansas City Royals Television Network and provides occasional play-by-play for PRIME.

According to Smith — who also boasts experiences as a writer/producer of video, film and cable programs — the entire series will carry a price tag of "less than $200,000."

"It's a substantial investment," said Mona. "But we feel like it's money we need to spend. We have to get the word out and TV's the medium that allows us to do that with the most people. The average, rank-and-file, 15-handicap golfer only has a vague idea of what our members do."

"We're not trying to promote our organization. We want to give the public a better understanding of what our members do."

The April edition of "Par for the Course," for example, included a feature on the Audubon Wildlife Sanctuary Program; a new product that bills itself as an alternative to metal golf spikes; golf instruction with Larry Nelson; and rules segment hosted by USGA rules official Herb Stevens.

United States Golf Association Green Section Director Jim Snow made a cameo appearance and at least five GCSAA members were quoted as experts on turf care and wildlife protection.

"We feel like we have educated, articulated members," said Mona. "That's part of this whole push. We have people out there who are the stewards of the club's greatest asset, and that should be appreciated."
Homemade botany bottle hastens disease growth and identification

Continued from page 17

determine what turfgrass disease is causing problems.

Sitting on my desk under my lamp, the bottle's temperature and humidity are just right for the rapid growth of the pathogen, making identification much easier and faster. It also gives me a constant reminder during the day of how much I enjoy my day as "teacher."

Here's teacher Mrs. Pickins and her class's procedure for transforming a two-liter soft drink bottle into a botany bottle, or miniature biosphere:

1) Obtain the kind of bottle with its base glued to the bottom, which enables it to stand up.
2) Fill the bottle with hot water and let it stand for 10 minutes. This will soften the glue, allowing the base to be separated from the bottle. If the base will not come loose, refill the bottle with hot water and soak it in a sink filled with hot water. If all else fails, place the empty bottle in a microwave for 20 to 30 seconds. (Careful, just a little too long and the shape of the bottle will be distorted.)
3) With the base removed, you should now have a bottle with the filler neck on one end and a hemisphere dome on the other. Use a sharp knife to remove the filler neck. Different height botany bottles can be created by changing where you make this cut. I have found a good height is to cut about 1/8 inch above the point where the bottle starts to taper in toward the neck. I have found this makes it easier to get the bottle back into the base; since the outside diameter of the bottle (at the point of the cut) is slightly smaller than the inside diameter of the base.
4) Using a hole cutter, remove a plug from the area of the green (or other turf area) where you suspect disease activity. Square off the bottom of the plug, so it will sit flat in the base, and leave the plug about three inches long.
5) Place the plug in the base and carefully push the dome back into the base.
6) Place the completed botany bottle beneath a light or grow lamp. You will notice that within a few hours moisture will begin to accumulate on the inside of the dome. This combination of heat (from the light) and moisture will promote rapid disease development, helping you to more accurately identify the pathogen.

The botany bottle can also be used to check seed germination, force a dormant turf to begin growth, and aid in identifying various types of grass. Turf can be maintained for months beneath the dome with only a rare watering and occasional "mowing" with scissors.

One more point. During my talk with my son Travis' classmates, we were discussing how scientists of the future would probably have to learn to grow more food and take care of plants of all types with a lot less pesticides than we must use today.

One little girl raised her hand and asked why scientists don't just put something in the plants that insects would not like the taste of. Here was a 9-year-old, all on her own, voicing one of the "cutting edges" of today's plant breeding efforts — the use of endophytes to combat insect damage.

Next time a fourth-grader takes the time to listen.

Semler elected head of Wisconsin GCSA

Mike Semler of Bishops Bay Country Club in Madison has been elected president of the Wisconsin Golf Course Superintendents Association. Semler, who succeeded Bruce Worzella of West Bend Country Club, heads a slate of officers that includes Vice President Mark Kientz of Buff's Eye Country Club in Wisconsin Rapids; Secretary Tom Schwab of Monroe Country Club; and Treasurer Patrick Norton of Cedar Creek Golf Course in Oconomowoc.

Joe Kuta of Hartford Country Club was newly elected to the board of directors, joining re-elected Directors Scott Schaller of South Hills Golf and Country Club in Fond du Lac, Bill Knight of Ozaukee County Park Commission in Port Washington and Mike Hendrich of Racine Country Club.
Humor, embarrassment a potent combination, Moore relates

Continued from page 17

try to find a little humor in every situation. Nothing makes a bad day a little more bearable than getting someone to laugh with you—or even at you.

I have found that some of the funniest situations are those that make you cringe a little. The combination of embarrassment and humor is a potent one. One of the best I can remember happened to me occurred early in my Green Section career. I had a couple of months on the staff under my belt and was starting to feel like perhaps I could do this job after all. Brimming with confidence and a TAS visit on a course in Nebraska. Along for the tour were the green committee, the golf professional, and the superintendent—the usual entourage.

We encountered a green with two, dark parallel lines crossing the surface. Having personally diagnosed the injury, I immediately applied charcoal to many a bunker. Super blasting out two shots that stopped even quicker than the pro’s. Well shoot, I might as well try to.

Dropping a ball, I quickly reviewed the Johnny Miller sand tips I read in 1971, opened the face, swung outside-in, and lucked out.

The ball actually hit and backed up. Case closed!

Unfortunately, there is a sequel to this story. A couple of weeks after this demonstration of my playing skill, as it relates to the agronomic condition of the course, I was on a visit to a course in Mexico. The complaint this time was that the greens did not hold an approach shot—even with a wedge. Careful to pick an uphill lie, into the wind, and to a green that looked over watered, I decided once again to prove the complaining player wrong by embarrassing him with the fact that even a grass guy can hold the greens.

After shanking the first three shots and nearly hitting one of our group about 90 degrees off line, I gave up and tried to remind everyone I was there as an agronomist—not a player. Big cringe.

Jim Moore

Pennington

Looking Like A Job For A Pennington Turf Specialist

Don’t you hate it when the sales rep doesn’t know his grass from a hole in the ground? At Pennington, that’s not the case. Pennington turf specialists are well-trained and knowledgeable about which grasses will best suit your turf requirements, water conditions, and climate. Not only that, they’ll make sure that you get what you want when you want it. If it’s Specialty Turfgrass that you need then it’s Pennington Seed you need to call.

PERENNIAL RYEGRASSES - Pennington 240, Shining Star, Stallion Select, Morning Star, Sunrise 246
PERENNIAL RYEGRASS BLENDS & MIXTURES - Sunrise Primo, CBS II, Triple Play, Sunrise plus Poa Trivialis, Professional’s Select, Fairway Classic, Sports Club Mix
TURF TYPE TALL FESCUES - Duster, Tradition, Virtue, Finelawn Petite, Finelawn 88, Enviro Blend, Triad Blend
SEEDED TURF TYPE BERMUDAS - Cheyenne, Yuma

Call 1-800-285-SEED for a Pennington Seed Specialty Turfgrass Distributor near you.

DICKISON NAMED TO HALL

ATLANTIC CITY, N.J. — Upper Montclair Country Club superintendent Bob Dickison has been inducted into the New Jersey Turfgrass Hall of Fame by the New Jersey Turfgrass Association. The award is presented annually to a person who recognizes their continued lifetime commitment of dedication, service, and achievement contributing to the advancement of the turfgrass industry in the state.
MIKE McBRIEDE
Muirfield Village Golf Course
Dublin, Ohio
Memorial Tournament
May 19-22, ABC

"We're either had an unusually wet and cold spring, or we've been spoiled by good weather the last four or five years," said Mike McBride, who has a crew of people on Frost Patrol from early May until after the Memorial to prevent frost from killing the thousands of annuals planted for this event. "Annually are not hardy. We try to keep the air temperature around them warm enough with irrigation," he said.

McBride has worked at Muirfield Village since its construction, at which time he was a political science major at Bowling Green State University. Deciding against politics, he completing Rutgers University's two-year turf management program, then returned to the grounds crew in Dublin, earning a promotion to superintendent in July 1985.

McBride said a lot of time, energy and funds were devoted the last year to a major, July 1985.

"Annuals are not earning a promotion to superintendent in a two-year turf management program," then returned to the grounds crew in Dublin, earning a promotion to superintendent in July 1985.

McBride said a lot of time, energy and funds were devoted the last year to a major, July 1985. They planted more than 200 ornamental trees, including dogwoods, Easter redbuds and Hawthorns that bloom in mid-May to June to "add a splash of color." Another 24,000 to 25,000 annuals were also planted, necessitating the Frost Patrol.

THINGS TO LOOK FOR: "Last fall we restored the greens on 10 through 18," McBride said. "That completes our greens restoration project started three years ago." The Penncrest bent-grass greens were stripped, reseeded with washed sod, and returned to their original contours, with "minor modifications to create some more pining on the greens."

Ever seen a golf course quad-cut? If all goes well, McBride's crews will double-cut the greens in the morning and again at night during the tournament, so they will Stimp over 11.

"We set up a fertilizer program so our growth will be at zero by the time the tournament comes around," he said. "You don't want a flush of growth around tournament time."

MADE-FOR-TV PREPARATIONS: Television won't pick a lot of the work that the grounds crews have done, McBride said. They planted more than 200 ornamental trees, including dogwoods, Easter redbuds and Hawthorns that bloom in mid-May to June to "add a splash of color." Another 24,000 to 25,000 annuals were also planted, necessitating the Frost Patrol.

"Last fall we restored the greens on 10 through 18," McBride said. "That completes our greens restoration project started three years ago." The Penncrest bent-grass greens were stripped, reseeded with washed sod, and returned to their original contours, with "minor modifications to create some more pining on the greens."

Ever seen a golf course quad-cut? If all goes well, McBride's crews will double-cut the greens in the morning and again at night during the tournament, so they will Stimp over 11.

"We set up a fertilizer program so our growth will be at zero by the time the tournament comes around," he said. "You don't want a flush of growth around tournament time."

MADE-FOR-TV PREPARATIONS: Television won't pick a lot of the work that the grounds crews have done, McBride said. They planted more than 200 ornamental trees, including dogwoods, Easter redbuds and Hawthorns that bloom in mid-May to June to "add a splash of color." Another 24,000 to 25,000 annuals were also planted, necessitating the Frost Patrol.

"Last fall we restored the greens on 10 through 18," McBride said. "That completes our greens restoration project started three years ago." The Penncrest bent-grass greens were stripped, reseeded with washed sod, and returned to their original contours, with "minor modifications to create some more pining on the greens."

Ever seen a golf course quad-cut? If all goes well, McBride's crews will double-cut the greens in the morning and again at night during the tournament, so they will Stimp over 11.

"We set up a fertilizer program so our growth will be at zero by the time the tournament comes around," he said. "You don't want a flush of growth around tournament time."

MADE-FOR-TV PREPARATIONS: Television won't pick a lot of the work that the grounds crews have done, McBride said. They planted more than 200 ornamental trees, including dogwoods, Easter redbuds and Hawthorns that bloom in mid-May to June to "add a splash of color." Another 24,000 to 25,000 annuals were also planted, necessitating the Frost Patrol.

"Last fall we restored the greens on 10 through 18," McBride said. "That completes our greens restoration project started three years ago." The Penncrest bent-grass greens were stripped, reseeded with washed sod, and returned to their original contours, with "minor modifications to create some more pining on the greens."

Ever seen a golf course quad-cut? If all goes well, McBride's crews will double-cut the greens in the morning and again at night during the tournament, so they will Stimp over 11.

"We set up a fertilizer program so our growth will be at zero by the time the tournament comes around," he said. "You don't want a flush of growth around tournament time."

MADE-FOR-TV PREPARATIONS: Television won't pick a lot of the work that the grounds crews have done, McBride said. They planted more than 200 ornamental trees, including dogwoods, Easter redbuds and Hawthorns that bloom in mid-May to June to "add a splash of color." Another 24,000 to 25,000 annuals were also planted, necessitating the Frost Patrol.

"Last fall we restored the greens on 10 through 18," McBride said. "That completes our greens restoration project started three years ago." The Penncrest bent-grass greens were stripped, reseeded with washed sod, and returned to their original contours, with "minor modifications to create some more pining on the greens."

Ever seen a golf course quad-cut? If all goes well, McBride's crews will double-cut the greens in the morning and again at night during the tournament, so they will Stimp over 11.

"We set up a fertilizer program so our growth will be at zero by the time the tournament comes around," he said. "You don't want a flush of growth around tournament time."

MADE-FOR-TV PREPARATIONS: Television won't pick a lot of the work that the grounds crews have done, McBride said. They planted more than 200 ornamental trees, including dogwoods, Easter redbuds and Hawthorns that bloom in mid-May to June to "add a splash of color." Another 24,000 to 25,000 annuals were also planted, necessitating the Frost Patrol.

"Last fall we restored the greens on 10 through 18," McBride said. "That completes our greens restoration project started three years ago." The Penncrest bent-grass greens were stripped, reseeded with washed sod, and returned to their original contours, with "minor modifications to create some more pining on the greens."

Ever seen a golf course quad-cut? If all goes well, McBride's crews will double-cut the greens in the morning and again at night during the tournament, so they will Stimp over 11.

"We set up a fertilizer program so our growth will be at zero by the time the tournament comes around," he said. "You don't want a flush of growth around tournament time."

MADE-FOR-TV PREPARATIONS: Television won't pick a lot of the work that the grounds crews have done, McBride said. They planted more than 200 ornamental trees, including dogwoods, Easter redbuds and Hawthorns that bloom in mid-May to June to "add a splash of color." Another 24,000 to 25,000 annuals were also planted, necessitating the Frost Patrol.
Achieving the chore for half the labor

BY TERRY BUCHEN

One day I was thinking to myself: "How can we get the appearance of the single-stripping effect of a walk-behind greensmower while using a triplex greensmower?"

We had a Toro Greensmaster 3000, purchased in the late 1980s. It had individual reel shut-offs on the outer two reels. We ordered a third reel shut-off for the center reel and installed it after talking with the local distributor, who said it was okay to have all three reels with individual on/off capabilities.

The next step was to call the factory and ask if the center reel could be kept in the "Up" position with the use of bungie chords, while not damaging the up/down hydraulic system. The factory said it was okay because, when the center reel is in the "Up" position, the hydraulic system by-passes the hydraulic system. Having the center reel in the "Up" position obviously helped avoid confusing the operator for the next step.

We began mowing greens using only the two outer reels. The striping pattern was identical to using a walk-behind mower, though it takes a good operator to mow the unmowed area between the mowed stripes.

In essence, we doubled our mowing capacity compared to using a walk-behind unit. The only major difference was the triplex obviously has a flotation head versus a fixed-reel unit on the walk-behind mower.

Doing the victory lap using the two outer reels, both clockwise and counterclockwise, will give the walk-behind appearance as well.

But if you've ever used ammonium sulfate in its pure form or in a blend, you know it can be a messy situation.

Fortunately, now there's Country Club® 16-4-8. A homogeneous fertilizer that offers the benefits of ammonium sulfate in a spreadable, easy-to-use form.

By using 16-4-8 on your course, you'll not only reduce incidence of summer patch by as much as 80% — as well as help control other closely related diseases such as spring dead spot, take-all patch and necrotic ring spot.

But if you've ever used ammonium sulfate in its pure form or in a blend, you know it can be a messy situation.

Fortunately, now there's Country Club® 16-4-8. A homogeneous fertilizer that offers the benefits of ammonium sulfate in a spreadable, easy-to-use form.

By using 16-4-8 on your course, you'll only reduce incidence of patch disease, you'll control your budget. Because with 16-4-8, you can manage your use of costly fungicides.

For more information on the number one fertilizer for fighting patch disease and fungicide costs, contact your local Country Club Distributor. Or call Lebanon Turf Products at 1-800-233-0628.

*Contact Lebanon Turf Products for a free copy of the Rutgers University Study on the Influence of Nitrogen and Soil pH on Summer Patch Development in Kentucky Bluegrass.
High school turf program fills the needs of students, courses

BY PETER BLAIS
STUART, Fla. — Giving high school students a taste of what it's like to be a golf course superintendent is the goal behind The Bulldog Sports Turf Complex at South Fork High School.

Completed in late 1990, the 20-acre facility includes three par-3 golf holes, putting green and practice range. Approximately 75 students use the complex for educational purposes. Another 60 spread among the golf team, physical education classes and adult education program practice and play on the three-hole layout.

But turf education is the primary focus.

"A local superintendent who went to Ohio State University told me he saw a lot of kids enter the OSU turf program who had never worked on a golf course," said South Fork turfgrass instructor Keith Krueger.

"They had no idea what they were getting into and were simply overwhelmed. This facility exposes students to the possibility of a golf management career and weeds out those who might never make it."

Krueger credits Vocational School Director Carl Miller with hatching the idea. Miller saw a need to train students to work on the 26 golf courses in surrounding Martin County.

Miller recruited Krueger from Mirimar High School, where he was a horticulture teacher and oversaw construction of the school's football field.

The educators created an advisory committee that included local architect Charles Ankrum and several local superintendents as well as Martin County golf course superintendents Kevin Downing of Willoughby Golf Club and Harry Lincoln of Boca Grove Country Club.

"I didn't know anything about being on a golf course, but they walked me through it," Krueger said.

Ankrum donated his expertise to design the facility. Construction started in late 1989 with many local companies providing labor, equipment and supplies at cost or below.

"I cost the school about $80,000 to build a facility worth about $350,000," Krueger said. "The only area we've come up short is maintenance equipment. Some of the courses have been very good about giving us their used stuff. But it's generally pretty used up and in need of repair. We were hoping to get some of the major suppliers to donate more."

Several students have used the experience gained on the South Fork facility to obtain full-time positions on course maintenance crews.

Many more are working weekends and summers. A few are preparing for superintendent careers.

"We just had a student who went on to the turf program at Abraham Baldwin College in Georgia come back to do an internship at a nearby course," Krueger said.

Students receive a certificate for participating in the high school turf program. The local branch of Indian River Community College also offers college credit for completing the turf course and passing a college-administered competency test.

Students entering related fields, like landscape maintenance or nursery work, also benefit from time spent on the school course.

"And even if they don't eventually go to work in the turf or plant industry, they earn a lifelong respect for the environment," Krueger said.

The Bulldog complex also helped South Fork's Agriculture Department, which includes the turf program, become one of just 15 schools invited into the state Academics for Career Development and Applied Technology Program.

Teachers in the program — including math, science, English and social studies instructors — gear their curriculum to different aspects of agriculture.

"The teachers meet frequently and coordinate their courses around a certain topic," Krueger said. "It might be plants for nine weeks, then water for the next nine. It lets students see the connections between what they learn in those subjects and what they want to do in life."

MAINTENANCE

High school turf program fills the needs of students, courses

'This facility exposes students to the possibility of a golf management career and weeds out those who might never make it.'

— Keith Krueger

Turf instructor
On the Move

Semler takes on head post at new Bishop's Bay CC in Madison

Madison, Wis. — Mike Semler has moved from Cherokee Country Club to the new Bishop's Bay Country Club here. Semler is the current Wisconsin Golf Course Superintendents Association president.

Marysville, Kan. — Phil Thielen has been named head superintendent at Marysville Country Club here.

Marietta, Ga. — Steve Lukowski has been promoted to head superintendent at City Club of Marietta here. Lukowski had been the assistant superintendent.

Shawano, Wis. — Steve Dobish has been named the head superintendent at Shawano Lake Golf Club here. Shawano Lake was formerly known as Shakogocou Country Club.

Dalton, Mass. — Mike Gunn, former assistant superintendent at Stockbridge (Mass.) Golf Club, has taken over the head superintendent post at Wahconah Country Club here. Robert Tyre Jones played his last recorded round at Wahconah.

In other news out of Georgia, Doug Witt is the new head superintendent at Hard Labor Creek Golf Course in Rutledge, while Robert Womac has accepted the top job at Big Canoe Golf Course in Big Canoe. Tim Roskos has been named head superintendent at Lake Dow Golf Course — now under construction in McDonough — and Tim Kinnelly has moved from Maryland to take the head superintendent’s position at The Farm in Dalton.

Wichita, Kan. — Ron Reese, past president of the Kansas Golf Course Superintendents Association, has accepted an appointment as golf course superintendent at Hidden Lakes Golf Course here.

Robert Murrow Jr. is the new superintendent at Augusta Country Club in Kansas.

A Few Plugs For A Zoysiagrass That Doesn’t Even Need Any.

Sunrise Brand seeded Zoysiagrass from Jacklin Seed and International Seeds. It’s everything you want from a Zoysiagrass. Without the plugs.

Less Maintenance.
Sunrise Brand seeded Zoysiagrass needs infrequent mowing and little or no fertilizer to maintain its thick green appearance.

Less Water.
Sunrise Brand seeded Zoysiagrass is exceptionally drought tolerant — requiring little or no watering in many areas.

More Wear and Tear.
In wear tests, Sunrise Brand seeded Zoysiagrass far outlasted other warm-season varieties.

Seeded, Not Sprigged.
Sunrise Brand Zoysiagrass is seeded. So you can have beautiful turf in weeks, instead of years from plugging.
Sod producers talk business

NEWPORT, R.I.—Turfgrass sod will be featured at the American Sod Producers Association's annual Summer Convention and Field Days here July 26-29. This behind-the-scenes showcase highlights equipment, products and services considered important elements of producing sod for home and commercial use. The convention opens Wednesday, July 27, with committee and annual business meetings and an educational program, all at Newport Islander Doubletree Hotel.

Thursday will be devoted to exhibitor product and equipment displays, and demonstrations and viewing of ASPA seed test plots. For more information, contact Thomas Ford, American Sod Producers Association in Rolling Meadows, Ill.

USGA REPORTS

Scientists take EPA's pesticide fate model to task

Continued from page 1

of herbicides through soils used for agricultural crops.

Using small greenhouse lysimeters, the GLEAMS model prediction was compared to actual values for a 22-inch soil profile very similar to United States Golf Association (USGA) putting green specifications.

Lysimeters are small bucket-like devices with a collection tube at the bottom to determine what herbicides leach through the soil profile. The USGA-recommended gravel blanket and intermediate sand layer were included in the profiles.

Two different putting-green, root-zone mixes consisting of 85:15 and 80:20 by-volume ratios of sand and sphagnum peat were placed in small greenhouse lysimeters. Tifdwarf Bermudagrass was established onto the lysimeters and mowed at putting-green height.

The 2,4-D, a broadleaf herbicide, was applied in two applications 15 days apart. Once the herbicide was applied, the lysimeters received a simulated rainfall of one inch on Fridays during the 120-day experiment.

Daily temperature changes were carefully monitored so this information, along with the rest of test parameters, could be entered in the GLEAMS model.

The results demonstrated the GLEAMS model over-predicted the amount of 2,4-D that would leach through each putting green root-zone mix. Only minute quantities of 2,4-D were detected in the water that leached from the lysimeters.

The extraction and analytical methods were developed to detect levels of 2,4-D at 5 micrograms per liter (5 parts per billion or 5 ppb) or higher.

Peak 2,4-D amounts of 2 micrograms per liter (2 ppb) or less were found in the water samples removed from the bottom of the lysimeters.

Only a trace of 2,4-D percolates through the rooting media, and the concentration is several orders of magnitude less than the MCL (maximum contamination level) standard of 70 micrograms per liter established by the Office of Drinking Water, U.S. Environmental Protection Agency, explained Smith.

"Even though the GLEAMS model greatly overestimates the observed herbicide load," he added, "the maximum predicted concentration of 40 micrograms per liter is less than the MCL standard established for 2,4-D." Differences between the measured and predicted percolation of 2,4-D may be due to a lack of understanding of herbicide fate on the dense surface of turfgrass leaves and the role of thatch, Smith said.

The inability of the current GLEAMS model to adequately predict surface evapotranspiration (ET) and water movement through the turfgrass/soil system are additional cause for concern.

"Our data indicate that the dynamics of the sod and rhizosphere, immediately below the soil surface, have not been thoroughly defined," concluded Smith.

"There is an urgent need to take the results from USGA-sponsored pesticide fate research projects as well as other pertinent research, and overhaul the mathematical models for use on golf courses."

Mike Kenna, PhD, is director of Green Section Research for the United States Golf Association. He works from the USGA office in Stillwater, Okla.
FOR THE BIRDS

Birdhouse plans are big savers for the maintenance budget

By TERRY BUCHEN

There are some excellent hidden benefits to joining the Audubon Cooperative Sanctuary Program for Golf Courses, and our club just re-upped its membership. It's the best $100 a year our club has ever spent.

The Audubon Society of New York operates this program nationwide in conjunction with the U.S. Golf Association Green Section, and one of its not-so-obvious benefits is public relations. The society sends press releases to media and others you want to receive them in your community. This has immensely helped superintendents' public relations efforts, especially in environmentally sensitive communities. Even clubs or courses that like to keep a low profile have used the press releases to great benefit. Probably the best use of Audubon press releases has been by golf courses in the Audubon program. Joining helps the environment—and public relations.

Interested superintendents may contact Green Section agronomists nationwide, or the Audubon Society of New York at 131 Rarick Road, Selkirk, N.Y. 12158; telephone 518-767-9051. They will send an invoice and/or brochure.

BLUEBIRD HOUSE HINTS

Paint the outside of the box any dull color. Don't use white. Face the box opening to the southeast. Roughen the inside surface of the front piece so young birds can cling to it for feeding and to exercise their wings before their first flight. A rough surface can be made by sawing slots 1/8 inch deep, punching shallow holes with a screwdriver, tacking a strip of 1/4-inch hardware cloth, or gluing small scraps of wood.

Drop front 1/4 for ventilation

Predator guard

No. 8 x 1 1/2 screw

1/4" grip

PIVOT CLEARANCE

PIVOT SCREW

SIDE VIEW

COON AND STARLING GUARD

BECOKING BARN OWLS

The barn owl is one of the most skilled hunters of all raptors. It has been determined that one pair of barn owls and their young can consume 25,000 mice a year. If you are to encourage them to nest, discontinue use of rodenticides. Study the above diagram, then fasten the sides to the back and bottom are attached afterward. Put the top on after the box is installed.

Since barn owls do not bring nest materials to their nests, cover the bottom with one or two inches of wood shavings or pine straw. Do not paint the inside of the box. Make sure no nails protrude from the wood. Barn owls prefer to nest in build-

ings, so face the box into the barn or build-

ings. Secure the box onto a stud and install it as high as possible to lessen human disturbance and help to protect the owls from snakes, raccoons and cats.

The nest box will also work when wired high in a large tree placed away from prevailing winds. When outside, it can be made inaccessible to owl predators by placing a 30-inch-high metal sleeve around the tree.

WREN HOUSE TIPS

Wrens are attracted to single-unit, enclosed bird houses. To attract house wrens, place the box very close to or actually in the cover of a bush or small tree. Wrens seek the shade and protection of thick bushes, where mated pairs find nesting materials and food for themselves and their young. The box may be placed three to 10 feet from the ground. If cover is available, wrens will nest as high as 15 feet from the ground.

The wren builds the bulk of its nest of stick. You can encourage wrens to use your box by placing nesting material near the boxes.

SUGGESTED LAYOUT 1 x 6

BECKOKING BARN OWLS

D 11/4" VENT HOLE IN EACH CORNER OF BOTTOM

BECKOKING BARN OWLS

D 11/4" VENT HOLE IN EACH CORNER OF BOTTOM

BECKOKING BARN OWLS

D 11/4" VENT HOLE IN EACH CORNER OF BOTTOM

JUST DUCKY FOR WOOD DUCKS

Though wood ducks normally nest in hollow trees, they readily move into manmade structures. Attach them to sturdy poles set four to six feet or more above the high-water level. When placed in a tree, the house should be eight to 30 feet high. The house must be plainly visible and the entrance hole not obstructed. Try to keep it vertical. Any slant must be forward. Three to four inches of sawdust or shavings should be placed in the house. Evict any birds or squirrels who try to occupy the houses.

GOLF COURSE NEWS

May 1994 29

(tree swallow)

The three do prefer different habitats and locations in which to nest and rear their young. Tree swallows feed on the wing and seek open agricultural fields and meadows or treeless and shrubless wild areas as their nesting places. A nest box must be placed in the open on a fence post or special box. This graceful swallow doesn't care much about the height of its nest cavity, provided the above requirements are met. Swallow boxes are best placed five to six feet above ground. Spacing of boxes is necessary to prevent one pair from driving away another.

Since tree swallows feed on the wing, they do not use nesting materials. A box only six to eight inches square is needed. For best use of Audubon press releases has been by golf courses in the Audubon program. Joining helps the environment—and public relations.

The barn owl is one of the most skilled hunters of all raptors. It has been determined that one pair of barn owls and their young can consume 25,000 mice a year. If you are to encourage them to nest, discontinue use of rodenticides. Study the above diagram, then fasten the sides to the front. The back and bottom are attached afterward. Put the top on after the box is installed.

Since barn owls do not bring nest materials to their nests, cover the bottom with one or two inches of wood shavings or pine straw. Do not paint the inside of the box. Make sure no nails protrude from the wood. Barn owls prefer to nest in buildings, so face the box into the barn or building. Secure the box onto a stud and install it as high as possible to lessen human disturbance and help to protect the owls from snakes, raccoons and cats.

The nest box will also work when wired high in a large tree placed away from prevailing winds. When outside, it can be made inaccessible to owl predators by placing a 30-inch-high metal sleeve around the tree.

WREN HOUSE TIPS

Wrens are attracted to single-unit, enclosed bird houses. To attract house wrens, place the box very close to or actually in the cover of a bush or small tree. Wrens seek the shade and protection of thick bushes, where mated pairs find nesting materials and food for themselves and their young. The box may be placed three to 10 feet from the ground. If cover is available, wrens will nest as high as 15 feet from the ground.

The wren builds the bulk of its nest of stick. You can encourage wrens to use your box by placing nesting material near the boxes.

SUGGESTED LAYOUT 1 x 6

JUST DUCKY FOR WOOD DUCKS

Though wood ducks normally nest in hollow trees around marshes, lakes and streams, they readily move into manmade structures. Attach them to sturdy poles set four to six feet or more above the high-water level. When placed in a tree, the house should be eight to 30 feet high. The house must be plainly visible and the entrance hole not obstructed. Try to keep it vertical. Any slant must be forward. Three to four inches of sawdust or shavings should be placed in the house. Evict any birds or squirrels who try to occupy the houses.

GOLF COURSE NEWS

May 1994 29
West

600 EXPECTED AT FIELD DAY

HUBBARD, Ore. — The Turf-Seed, Inc. field day, which drew 200 when it started in 1983, is expected to have 600 or more distributors, growers, university people, landscape sod producers, golf course superintendents and journalists on June 16.

"The event has been such a success that other seed companies plan their field days around ours to attract our guests," said Turf-Seed President Bill Rose.

The field day will feature national turfgrass trials, yield and forage trials plus wildflower and shade performance trials. Dr. Bruce Clarke of Rutgers University will speak on patch disease.

Other speakers will be Dr. William A. Meyer, president of Pure Seed Testing, Inc., discussing breeding advancements and new directions; Crystal Rose Flicker, discussing turf breeding and wildflowers; Dr. Melodee Fraser from Pure Seed Testing East research center in North Carolina discussing warm-season turf breeding and testing. Rose will address turf quality and show growout plots of seed from various sources.

Northeast

BALTUSROL, FLAHERTY HONORED

The New Jersey Turfgrass Association presented its Recognition Award to Baltusrol Golf Club and Joseph Flaherty for outstanding work in hosting the 1993 U.S. Open Golf Championship.

Presented annually, the award recognizes "conscientious efforts toward better turf, thereby contributing to the beautification of facilities, a greener world and a more attractive environment for New Jersey."

North Central

MID-AM BOARD NAMED

Don Groth, of Don Groth Landscaping in Greenfield, Wis., is the new president of the Mid-America Horticultural Trade Show.

DIRECTORS

heading a slate of officers and directors representing the show's three sponsoring associations — the Illinois Landscape Contractors Association, Illinois Nurserymen's Association, and Wisconsin Landscape Federation.

Thomas Hoerr of Green View Companies in Dunlap, Ill. is vice president, while Platt Hill of Platt Hill Nursery in Bloomington, Ill., is secretary, and Frank Mariani of Mariani Landscape in Lake Bluff, Ill., is treasurer.

Cheryl Muskus, of C & J Landscaping in Addison, Ill., was re-appointed to serve as a director. Continue in their current terms are Directors Peter Grathoff of Thornapple Landscape Maintenance in Geneva, Ill.; Richard Schwarz of Schwartz Nursery & Garden Center in Addison, Ill., and Paul Swartz of P. Swartz Nursery & Garden Shop in Burlington, Wis.

FERTILIZER, PESTICIDE STORAGE RULES AMENDED

New Nebraska state regulations governing bulk fertilizer and bulk pesticide storage went into effect Feb. 14. The regulations affect many Nebraska individuals and businesses who handle bulk fertilizer or bulk pesticides (containers larger than 55 gallons), or that apply agricultural chemicals for hire.

The regulations are intended to prevent releases or spills of agricultural chemicals from contaminating ground water or nearby surface water.

For anyone storing bulk fertilizer, the amendments now require the construction of a secondary containment structure, such as diking, for:

- individual containers larger than 2,000 gallons;
- multiple containers with a combined capacity larger than 3,000 gallons; or
- when quantities exceed 25 percent of the container capacity, for containers larger than 500 gallons, anytime between Nov. 1 and March 15.

Diking of a pesticide storage facility remains unchanged; a secondary containment structure is required if more than 500 gallons of bulk pesticide are stored.

Other amendments recently enacted include: allowing a custom applicator, under certain circumstances, to use a temporary loadout location for up to 14 days per year; and allowing the use of synthetic liner for secondary containment.

Word is spreading almost as fast as our bentgrasses.
Southeast CAROLINAS RESEARCH SUPPORTED

Research contributions doubled in a year, and the 32nd Annual North Carolina Turfgrass Conference hosted a special presentation ceremony for representatives to officially present their contributions to the Research and Extension Endowment, the Turfgrass Foundation and other special project funding. Some $139,703 in donations were reported from local and regional associations, as well as commercial industry programs. The association's funds through member support and educational events, while the commercial industry uses product-buyer participation programs.

Contributions for the Research and Extension Endowment were accepted by Dr. Durward Bateman, dean of the College of Agriculture and Life Sciences at North Carolina State University.

On behalf of the:
- Eastern North Carolina Turfgrass Association, Tommy Davis, superintendent of Wedgewood Golf Club in Wilson, contributed $2,000.
- Cape Fear Golf Course Superintendents Association's Mike Claffey, superintendent of Landfall Club in Wilmington, contributed $6,000.
- Piedmont Turfgrass Association's David Shelton, superintendent of Pilot Knob Park in Pilot Mountain, contributed $2,000.
- Western North Carolina Turfgrass Association's Rory Ellington, superintendent of Cedar Rock Country Club in Lenoir, contributed $5,000.
- Carolinas Golf Course Superintendents Association's Mike Fabrizio of Wild Dunes, Isle of Palms, S.C., contributed $17,000.

Turfgrass Council of North Carolina's Charles Tomlinson, assistant state extension engineer of the North Carolina Department of Transportation in Raleigh, contributed $1,000.

Ciba Turf & Ornamental Products sales representative Ken Russell donated $1,012—accounting for 25 cents per gallon of Banner, Pennant & Subbie that distributors sold. Last year's participating distributors were Eastern Turf Equipment Co., Pro Turf & Irrigation and Southern Ag, Insecticides.

Total industry-sponsored research and Extension fund contributions totaled $201,441.

Contributions for the North Carolina Turfgrass Foundation were accepted by TCNC President Tom Bland and Executive Director Gene Maples on behalf of NCSU's Agriculture Foundation. These contributions were received from:
- Mike Claffey, co-chairman of the Turfgrass Council of North Carolina's Golf Day Committee, who contributed the proceeds of 1993 North Carolina Golf Day totaling $1,341.
- Bob Bell, vice president of sales and marketing for Smith Turf and Irrigation, and Miller McClintock of Million Chemical, in a joint fund-raising program, who donated $710, or $5 per case of Blazon purchased in North Carolina.
- Bell, who gave $340 from Turf-Seed, Inc.'s Blue Tag Redemption program, which donates .50 cents for each Oregon Certification blue tag returned to local seed dealer.

This year for the first time, some contributors wanted to officially subsidize particular projects and programs.

Cape Fear GCSA made a special contribution of $2,000 to be used in for research in the Tri-County area of Dr. Bruce Williams, area superintendent of grass area of Brunswick County Cooperative Extension Service.

Bob Trancinski, manager of public relations, Lawn & Grounds Care Division of John Deere Co., in Raleigh; Turner Revels, owner of Revels Tractor Co. in Fuquay-Varina, N.C.; and Myrtle Beach, S.C., and Lon Fleming, owner of Greenville (S.C.) Turf & Tractor, Greenville, represented the John Deere Foundation in awarding North Carolina State University with special funding for its Computer Information Systems project. The donation of $24,000 was accepted by Dr. David Knauff and Dr. Gene Kanzrath.

N.C. FIELD DAY READIED

RALEIGH, N.C. — From snake control to cooling bentgrass, a variety of educational talks will highlight the 1994 Professional Turf and Landscape Field Day in the North Carolina State University Turfgrass Field Laboratory and Horticulture Field Laboratory here, May 18.

A product and equipment field day will follow the 'Turf and Landscape Field Day.'
Troubled Waters?

Before water can enhance a landscape, it has to be healthy. The results of poor water management can be unsightly, smelly and costly. Otterbine quality water management keeps ponds and lakes sparkling, clear and odor-free. Naturally, efficiently, and beautifully.

Otterbine CONCEPT\textsubscript{2} surface aerators give nature a boost by stimulating natural water cleanup processes. They offer interchangeable spray patterns for almost unlimited versatility.

And our TRITON and AIR FLO subsurface aerators are virtually undetectable as they create strong currents to produce oxygen that cleans and purifies.

Rugged and built to last, all Otterbine aerators are simple to install. Efficient. Compact. Self-contained. Safety tested. And approved by the Electrical Testing Laboratory.

Our comprehensive product line ranges from the highest technology in aeration systems to OTTER SHADE, the new environmental lake dye. And we stand behind a 35-year tradition of quality, pride and fast, effective service.

Call or write, today, to find out how Otterbine can help make your water work, beautifully.

Water works with Otterbine.
3840 Main Road East
Emmaus, PA 18049 USA
(215) 965-6018
Aeration gear takes on crucial position among golf course superintendents

By Peter Blais

A

s concerns about water quality continue to grow, aeration equipment is becoming increasingly important as a way to keep golf course ponds and lakes clean. 

"It amazes me developers will spend a half-million dollars on an irrigation system and then run crummy water through it," said Steve Brown, president of Airlake Aeration Inc. "We're seeing more and more algae growth on tees and greens. It's golf course ponds and lakes clean."

Airlake markets a diverse line of pond management equipment. The Lakeville, Minn., firm's most recent innovation is a low-energy-use subsurface system. The 1-horsepower machine moves 4,000 gallons of water a minute. It can be oriented vertically in more than eight feet of water or horizontally in shallow locations. The unit is being tested in Florida, California and Minnesota and should be available later this year.

"It could be especially useful at Northern courses," Brown said. "Most aerators have to be removed in the fall and reinstalled in the spring. This one can remain in the water 12 months a year."

Aquascape, a Toro partner, also markets various water-quality management equipment, including surface aspirating aerators, fountains, submersible aerators, diffused air systems and air stripping systems.

The Minneapolis company has significantly modified the nozzle configuration andjettedon the elbow-shaped overflow pipe in favor of a more linear one on its subsurface aerator. The changes vastly improved the unit's mixing capabilities, according to Aquascape Division Manager Guy Hamilton.

Aquascape, a 2-year-old joint venture between Toro and Aeromatic Systems Inc., has also improved its fountains. All parts are now made of stainless steel rather than aluminum, Hamilton said. Other than the motor, the fountain has just one additional moving part. The unit requires no maintenance and first became available in 1993, Hamilton added.

Toro and former partner Aeration Industries dissolved their three-year partnership last August, according to Aeration Public Relations/Marketing Manager Peg Knapp.

Aeration Industries, among the world's largest manufacturers of aeration equipment, has re-entered the golf market with its AIRE-02 line and is also testing its Triton subsurface aerators and 90 percent of its total water-quality management product line, according to Marketing Manager Carla Barebo.

"They stand up much better to the harsh water conditions you find today, especially effluent and high-salt-content water," Barebo said. Otterbine recently began offering ground-fault interruption as a standard feature. This safety device automatically shuts off the unit when a minimal amount of electricity leaks into the water.

Rain Jet Fountains of Laguna Niguel, Calif., followed up last year's introduction of a 15-hp fountain aerator with the February unveiling of a 1/2-hp model designed for shallow ponds. The FA Series operates in as little as 18 inches of water. While primarily decorative, it also discourages stratification (hot surface temperatures and cool bottom temperatures), according to senior designer Shawn Robertson.

The dye is certainly not permanently cast, as manufacturers add products

Pond and lake management offers superintendents myriad environmental challenges

By Peter Blais

Aeration Inc. "We're seeing more and more algae growth on tees and greens. It's golf course ponds and lakes clean."

"It amazes me developers will spend a half-million dollars on an irrigation system and then run crummy water through it."

— Steve Brown, president Airlake Aeration Inc.
New formulations move care of waterways into advanced stages

Continued from previous page

Early to mid-spring — before the initial growth of organic material has begun — is the best time to apply lake dyes, according to Barry Lancaster, wholesale manager for Precision Laboratories Inc., makers of True Blue. "In a pristine lake in northern Minnesota, with no water entering or leaving, a single application in the early spring would get you through most of the summer," Lancaster said. "As you move south, there is more direct sunlight and organic material in the water. That contributes to the deterioration of the dye. If you put it in now (early spring) before vegetation growth really gets started, you would probably have to supplement it just once in late June or early July."

While dyes help beautify water features, especially come tournament time, superintendents are also discovering they can help speed of play. Lancaster added. "If someone hits a ball into a treated pond, they won't be able to see it unless it's in less than a foot of water," Lancaster explained.

"So rather than wasting time looking for it, most golfers just drop another ball and keep playing. At some courses, that's helped add another foursome or two a day."

Lancaster estimates the average course spends $500 annually on lake dyes. Eighty percent of True Blue's sales are to golf courses, he added. Dyes have also been shown to be environmentally friendly. Becker-Underwood spent $24,000 on an independent study to test the effects of its colorant on plants and animals, Underwood said. "It was shown to be completely non-toxic, even when used at rates up to 167 times the labeled rate," he reported.

"It's very effective in quarter-to-half-acre ponds and has been well received so far," said Marketing Manager Carla Barebo.

Enter The Becker-Underwood Lake Colorant WSP™ Contest!

Lake Colorant WSP is the fast, economical way to turn pale, dirty or off-colored water into a natural-appearing, healthy, translucent blue. Just toss in the recommended number of water soluble packets. Then, step back and watch. That's easy!

Lake Colorant WSP is the perfect way to brighten landscapes that have water accents, to add sparkle and beauty to golf course water hazards and ponds and fountains in office parks.

Now, you could win up to $1,000 in Becker-Underwood's Lake Colorant WSP contest. It's easy to enter, too. Take a color photo or slide of the body of water you plan to color before treatment. Then, toss in the recommended number of packets of Lake Colorant WSP. After treatment, take another color photo or slide showing how Lake Colorant WSP improved the appearance of the water. These before and after photos/slides will be used to determine the prize winners.

Follow these simple rules:

1. Any body of water can qualify for entry (ponds, fountains, golf course water hazards, etc.)
2. Only Lake Colorant WSP can be used to qualify for contest.
3. Lake Colorant WSP product must be purchased between August 1, 1993 and July 1, 1994.
4. All entries must be postmarked by July 31, 1994.
5. To enter the contest, send "before" and "after" color photos or slides, proof-of-purchase of Lake Colorant WSP, and a brief description of how Lake Colorant WSP improved the appearance of the water. These before and after photos/slides will be used to determine the prize winners.
6. Prizes awarded are as follows: 1st Place - $1,000 2nd Place - $500 3rd Place - $250

Calls galore

Border collie solution wins over supers

BY MARK LESLIE

GREENWICH, Conn. — Superintendents interested in buying border collies trained to herd geese off their golf courses can directly telephone the source — and get Richard Marcks off the hook.

His phone "has been ringing constantly" since Golf Course News published an article about his border collie herding geese at Fairview Country Club here, Marcks said.

Marcks, who called the border collie idea "the hottest thing since peanut butter," said please call the trainer — Barbara Ligon — at 804-263-5912.

"Our supply [of trained dogs] is getting low," Ligon said. "Calls have come in from coast to coast."

Since Marcks started spreading the word of his success with his dog Tac at Fairview two years ago, Ligon has supplied 15 dogs to golf courses in Connecticut and New York.

Greenwich's Parks and Recreation Department bought two dogs in April to rid its five parks of the messy geese.

Normally working with sheep, the border collies at Ligon's are trained specifically to herd geese as well. She uses a small fenced-in pond and a flock of mallard ducks.

Ligon charges $350 per month to train a border collie.

An advance-trained dog, neutered and with all its vaccinations, can cost $2,000 to $2,500. She includes a video-taped demonstration of each dog working and also trains the new owners on the commands.

"I'm guaranteeing the dogs it's going to be a wonderful home because they end up being the hero of the golf course," Ligon said.
Robert Trent Jones Jr. exceeds expectations with Golf by Design

By Mark Leslie

It was a long time coming, but Robert Trent Jones' new book was worth the wait. Jones, whose dad dazzled golf course design aficionados a couple of years ago with "Golf's Magnificent Challenge," provides a unique twist both on design and play. Impossible? No way!

In what may be the best-written golf coffee-table book in some time, Jones sheds his designer's sketch pad and doffs his player's thinking cap in this mesmeric reading and viewing treasure, "Golf by Design — How To Lower Your Score by Reading the Features of a Course."

"No two courses or rounds are so alike that you can attack them with exactly the same game plan," writes Jones, who worked on this book for several years. "For me, the constantly changing conditions and the unique twist both on design and play, variety of holes define the essence of the game."

Indeed, Jones relates architect-equals-defender and golfer-equals-attacker in terms of chess, pool, and air & land warfare. "A well-defended golf hole is a giant chessboard where the designer has created a system of defenses" — sometimes obvious like waste bunkers, sometimes camouflaged, to sabotage the golfer's game, he writes. Jonesloods his book with hints for the golfer — from the view of a designer who is himself a pretty darn good golfer. A couple of out-takes:

• "Your first lesson in course mastery is to be aware of the significant natural factors that should influence how you approach a course."  

• "Visualize a hole as a series of plans without grass, trees and water. That's the designer's view when he lays out a hole."  

• "Tackle your shot-making abilities to the course. You mentally take control of the design... Designers try to tempt you into hitting risky shots. Smart players know their limits and avoid trouble."  

• And this comment, which may go to the very depth and core of the architect's id: "On certain holes, a designer may attempt to upset a golfer's balance and mindset. He tempts you to push too hard or take unnecessary chances. I often say, 'Lost ball, lost stroke, lost confidence.' "  

Jones talks of strategic, penal and heroic design. He compares geographic categories of courses — links or seaside, prairie, parkland, desert, mountain and tropical. He talks of psychology and rhythm. He talks of the evolution of different aspects of golf design, such as the tremendous changes in the physical and strategic importance of tees in the last 30 to 40 years; and the technical advances in ball and club construction that have produced higher shot trajectories and moved the game from "a land campaign to an aerial assault."

He even gives insights into how to study a scorecard to analyze the course through its yardages, par, hole handicaps, slope rating and the like. "Golf by Design" is spiced with myriad four-color photographs and drawings to illustrate Jones' points.

"Our ambitious attempt," he recounts, "was to take you into the mind of a golf course architect. Just as you are the player, or 'attacker' if you will, the golf course architect is the 'defender.' He has mustered all his skill and creative energy to present you with a playground which you try to conquer with every stroke of your club. He tries to tantalize you with an inviting landscape, camouflaged and beset with bunkers, swales and grassy slopes."

It was an ambitious attempt realized for Jones, and I hope this tantalizes you into reading it for yourself. Ah-h, sweet success.

"Golf by Design" costs $35 and is published by Little, Brown and Co. of Boston, New York, Toronto and London.
Mike Waldron leaves LPGA post to replace Mona at Georgia SGA

Mike Waldron, who had served as director of tournament services for the Ladies Professional Golf Association (LPGA), has taken over as executive director of the Georgia State Golf Association (GSGA).

Waldron replaces Steve Mona, who was named president and chief executive officer of the Golf Course Superintendents Association of America (GCSAA) late last year.

A native of Atlanta, Waldron has been a member of the GCSAA's Board of Directors since 1978 and a member of the GSGA executive committee from 1988-90.

Prior to joining the LPGA staff, Waldron began his career in the golf industry as manager of regional affairs for the United States Golf Association.

Management book from Cornesksys espouses principles of total quality

Continued from previous page

Profile index tool based on the modified Malcolm Baldridge Award Criteria.

The self-assessment will provide readers with "a method to get a baseline of where your organization is at the present time" and as "a tool for comparing your progress after you have undertaken the quality journey."

The Cornesksys have started a newsletter, "TQM in Golf & Country Clubs," which will answer questions from the golf industry, and will share stories, procedures that colleagues are using to keep quality initiatives alive while assessing their effectiveness.

They can be contacted at 489 Oak Park Blvd., Fort Orange, Fl. 32127; telephone — 904-760-5866.

COMMENTARY

Whose rights are equal rights?

Continued from page 14

construction," said Elizabeth Hart, National Club Association vice president and government liaison.

Hart noted that California not only mandates the 2-to-1 construction ratio but also requires a place for women to lie down. Men's rooms have no couches.

In fact, I feel these states have not gone far enough! Why not? Well, have you ever seen a woman go to the ladies' room alone? Ever? No, it's an unwritten law (though our revered government may mandate it some day) that women go in pairs. Enter that into the equation and what do you get? The ratio should rightfully be 4-1 in Florida, 6-2 in Minnesota.

That would cost still more, but who's counting? Certainly not our government, which seems more and more bent on placing its thumb squarely on the populace in every corner of our lives... Even the restrooms.

***

You've heard of NIMBYs (Not in My Back Yards), but what about NIMPF (Not in My Picture Frame)? World-renowned golf photographer Tony Roberts lamented: "Rakes are the worst thing that ever happened to golf. A hazard is a hazard."

***

Dogged pursuit: Spotting our March story on border collies (see followup on page 34), Certified Golf Course Superintendent Thomas Dale of Radnor Valley Country Club in Villanova, Pa., told us he has used a border collie to keep geese off his course for 10 years. Sansom recently died of cancer. His 8-month-old successor, Divots, is expected to take over the task this year.
Barbaron Building New 18

At Cypress Lake

Lakeland, Fla. — Barbaron, Inc. of Crystal River has been selected by Cypress Lakes Ventures to construct a new 18-hole additional course at the Cypress Lake Golf and Country Club here. The course has been designed by Powell Golf Design of Bradenton and is scheduled to open in the early fall.

Course Designers Exempted

A Mississippi bill that exempts golf course designers from being licensed if they are not from Mississippi passed both chambers and the bill was signed as director of business development in project development. Hellman formerly was director of business development for Dick Nugent Associates.

New Ecology Unit to present golf’s benefits on pro-active, case-by-case basis

The ecology unit is a joint initiative of the Royal and Ancient Golf Club of St. Andrews, PGA European Tour and European Golf Association — an umbrella organization representing the 25 European national golf associations.

Launched in January, the program has been funded for the next three years in recognition of the need for Europe’s lead- ing golf associations to present a coordi- nated approach to environmental issues. "We [golf industry] haven’t handled those problems well in the past," said Executive Director David Stubbs, an experi- enced ecologist who has specialized in golf- ecology issues the past seven years and gained considerable experience matching golf and conservation interests.

"Basically we’ve just put out fires wherever they’ve erupted. We need to take a more pro-active approach and get a dialogue underway with the environmental

Hurdzan pursues yellowed pages & hickory sticks

By Mark Leslie

It is like “Christmas and an Easter egg hunt all rolled up in one.”

It captivates, excites and enlightens.

And it has made Dr. Michael Hurdzan a frequenter of flea markets and dusty old bookstores.

It is the hobby (and treasure hunt) of golf collecting. "I just can’t describe to you the excitement of finding something you’ve been searching for for years," said Hurdzan, a golf course architect whose massive col-

lection includes books, clubs, ceramics, glassware, buttons, games, you name it.

"I can almost tell you the time, date and place I found each one of them, and what I paid for them. It’s like an Easter egg hunt and Christmas all in one. And every single day is like that. Collecting is the most exciting thing, if you really treasure the things — which I do.“

Hurdzan, then young and far from wealthy, caught the collecting bug un- awares on Christmas Day 1967. "Someone gave me Book of the Links by Sutton. I had no idea those kinds of books even existed — let alone on golf course architecture. I was absolutely captivated by the idea. I read it and reread it. It was a wonderful experience. It became so exciting to me that I started to collect more and more things. I went to book stores and flea mar-

kets — and still do.”

Hurdzan pulled out an old cigarette dis-

penser for rolled cigarettes. "I used to put my golf course architecture. It is the hobby (and treasure hunt) of golf collecting. "I just can’t describe to you the excitement of finding something you’ve been searching for for years," said Hurdzan, a golf course architect whose massive col-

lection includes books, clubs, ceramics, glassware, buttons, games, you name it.

"I can almost tell you the time, date and place I found each one of them, and what I paid for them. It’s like an Easter egg hunt and Christmas all in one. And every single day is like that. Collecting is the most exciting thing, if you really treasure the things — which I do.“

Hurdzan, then young and far from wealthy, caught the collecting bug un- awares on Christmas Day 1967. "Someone gave me Book of the Links by Sutton. I had no idea those kinds of books even existed — let alone on golf course architecture. I was absolutely captivated by the idea. I read it and reread it. It was a wonderful experience. It became so exciting to me that I started to collect more and more things. I went to book stores and flea mar-

kets — and still do.”

Hurdzan pulled out an old cigarette dis-

penser for rolled cigarettes. "I used to put my things. I went to book stores and flea mar-

kets — and still do.”

Hurdzan pulled out an old cigarette dis-

penser for rolled cigarettes. "I used to put my
ISSIMMEE, Fla. — One thing in the life of Steve Newgent is for sure: He’ll never get bored. He wouldn’t have it.

Newgent, who builds, maintains, designs and manages golf courses, said: “I can’t wait to get to work. I’ve been that way for 30 years.”

Newgent had a foretaste of his life while still in college. He would begin his day getting a construction crew started building Indian Harbor Pines golf course, and end it shaping the Satellite Beach course’s greens and bunkers. He built nine holes at Ironwoods Country Club in Gainesville and 18 at West End Country Club in Gainesville while a married student in 1968-69.

Today, Newgent basically lives on the road, out of his Chevy Suburban, traveling between the several courses his company is building, the one or two he is designing, the six on which he handles the maintenance contracts and the one his firm manages.

At 6:30 a.m., he is shaping a green. At 6:30 p.m., he is checking an agronomic problem at one of his “maintenance” facilities.

“I never ever wanna be bored. I don’t like sitting in the same place,” Newgent said.

He ensures that he’s not sitting long by operating his Golf Masters construction business — formerly Fore Golf — along with its subsidiaries Golf Art Maintenance and Golf Art Club Corp.

The word “art” reoccurs in his businesses because Newgent sees his work as that.

“I’m an artist. I love creating,” he said.


“Most people hire me because I do it. That’s my trademark. I’ve finished every green my company’s ever built.”

“Steve is the best shaper and golf course builder in the country in my opinion,” said Joe Lee, who has hired Newgent to build more than 50 of his courses.

“Steve is a hands-on guy. There are so many who get away from their business once they get successful. Steve’s got good people working for him. But at the crucial times he is on the dozer shaping a green or box-blading it out.”

Is Newgent the only person in the industry who designs, builds, maintains and manages?

“Others design and manage, or build. But I don’t know of anyone else who also maintains,” Lee said.

Newgent said he has designed a baker’s dozen golf courses, including Pine Oak, a facility in Haines City, which he will also maintain and operate once it is finished.

“He is especially proud of Country Club of Ocala, which he designed and built. It opened in mid-February.

Among his current construction projects are: The Highlands in Chester, Va., which he designed, and River Downs in Baltimore, designed by Art Hills.

Among the courses he maintains by contract are Ironhorse Golf and Country Club in West Palm Beach and Winston Trails in Boynton Beach.

Bruce Futch is president and Newgent’s partner at 2-year-old Golf Masters, while Steve Parker is general manager of Golf Art Maintenance and Golf Art Club Corp.

Perhaps their most famous client has been Disney World in Orlando, Fla. Newgent, who was superintendent of Disney’s Lee courses from 1970-73, has had a hand in grading and finish shaping for all six golf courses there, including7

“Steve is the best shaper and golf course builder in the country in my opinion,” said Joe Lee, who has hired Newgent to build more than 50 of his courses.

“What I really want to do is more architecture and maintenance,” he said.

“Steve is the best shaper and golf course builder in the country in my opinion,” said Joe Lee, who has hired Newgent to build more than 50 of his courses.

“Steve is the best shaper and golf course builder in the country in my opinion,” said Joe Lee, who has hired Newgent to build more than 50 of his courses.

“Steve is the best shaper and golf course builder in the country in my opinion,” said Joe Lee, who has hired Newgent to build more than 50 of his courses.
Charles Howard forms design firm; brings Garley, Davis, Eaves, Thomas on board

AUSTIN, Tex. — Creation of the Charles Howard Design Associates brings together an exceptionally talented team marked by special skills.

Howard has more than 25 years' experience in golf course engineering, golf course construction and development planning. He has acquired an extensive working knowledge of design under a variety of environmental and financial conditions.

Howard's engineering expertise and land planning skills have been expanded through extensive involvement in agronomy, botany, soil sciences, geology, computer technology and permit processing.

His experience as a land planner has gained importance with increased emphasis on golf courses as only a part of a complete development, residential or otherwise.

Jim Ganley, Tripp Davis, Lonnie Eaves and Kevin Thomas also are key staff players.

Ganley's role as construction manager and agronomist continues from close connection with golf course construction and maintenance. Educated in Turf Science at the University of Massachusetts, Ganley entered the golf development industry by building and maintaining seven golf courses throughout the Northeast in the late 1960's.

Burns adds course projects to agenda

Burns Golf Design has changed its address. The firm can now be reached at 5449 Marsh View Lane, Fernandina Beach, Fla. 32034; 904-277-4474. Steve Burns spent seven years with Tom Fazio, prior to forming Burns Golf Design in 1988. The firm's other principal designer, Ed Carton, spent five years with Fazio. They currently have The Club at Ravenswood Lake, in Medina, Ohio, under construction, and are working on the design for Laura S. Walker State Park G.C. in Waycross, Ga.

At present, Burns is overseeing the construction of the 1993 NCAA Men's Golf Championships at the Augusta National Golf Club. He also is responsible for measuring material takeoff, earth quantities, construction drawings, contract specifications and observation.

Tripp attended the University of Oklahoma on an athletic scholarship. He was named Academic All Big Eight in 1988, and in 1989 was both All Big Eight and NCCAA All-American while helping the Sooners to the national golf championship. He then played the professional tour for two years.

At present, Tripp is overseeing the CHDA Research Station at U. of Oklahoma, and is studying the ecology of a site.

Lonnie Eaves, with Howard Design more than 10 years, now specializes in engineering irrigation systems, grading plans, structures and waterways. He also is responsible for measuring material takeoff, earth quantities, construction drawings, contract specifications and observation.

Kevin Thomas is the computer whiz and systems manager. A valued aspect of his work is innovating new technologies with Howard's computer systems and integrating advances from the computer industry. Thomas' computer skills produce accurate base maps, digital terrain models, construction drawings and quantity calculations.

Howard Engineers is experienced in the engineering of structures, water ways and especially irrigation systems. The staff is responsible for more than 300 irrigation systems across the country.

No one else can make a controlled-release fertilizer like Poly-S. And now we have a patent to prove it.

More importantly, no other controlled-release fertilizer can perform like Poly-S. Which is why, in a little more than a year since the introduction of Scotts Poly-S technology, Poly-S fertilizers are being applied successfully by over 5,000 turfgrass managers in the U.S., Canada and worldwide — the fastest selling fertilizer in history.

And the reason Poly-S is so popular is performance, with consistent nutrient release over a longer period of time. Because of the improved nitrogen efficiency, you get more value from the fertilizer you apply, with an overall improvement in turf quality.

And because Poly-S offers the capability to choose specific release rates appropriate to different applications, it has proven its effectiveness under a variety of agronomic conditions in every region of the country.

Of course, Poly-S fertilizers also come with a Scott Tech Rep, agronomically trained to help you develop a total turfgrass program.

Scott Tech Reps aren't "patented," but like Poly-S fertilizers, they are a Scotts exclusive.

For more information on Poly-S fertilizers, contact your Scott Tech Rep. Call 1-800-543-0006 or fax 513-644-7679.

BAY GOLF RENOVATES BUNKERS

ABSECON, N.J. — A four-month bunker restoration project completed, Marriott's Seaview Resort's par-71 Bay Golf Course again is open and ready for another 80 years of championship play.

Designed by Donald Ross, the course resembles a seaside links, with undulating greens and 86 well-protected bunkers. These bunkers received the bulk of the $500,000 expended for restoration.

GOLF COURSE NEWS
Graham/Panks jazz up Scottsdale

RIO VERDE, Ariz. — Touring pro David Graham and design partner Gary Panks have opened Tonto Verde Golf Club here.

The softly contoured 6,737-yard par-72 course is the centerpiece of the 600-acre Tonto Verde subdivision, being developed by Rio Verde Development, Inc. Views of the Mazatal, Superstition, and McDowell mountain ranges surround the course, providing the players with spectacular panoramas unique to the area.

They have also broken ground of the Talon Course at the Grayhawk Golf Club, in north Scottsdale.

Grayhawk developers Gregg Tryhus and Del Cochran are in the initial stages of construction of the 7,000-yard, par-72 layout.

"Scottsdale is fortunate to have several of this country’s finest courses, and we have set our sights high. From the day it opens, we intend to have our first course considered as one of the best in the state," said Cochran.

Construction plans call for grasping the 176-acre layout to begin by early summer, with the course opening scheduled by year’s end.

The fairways and tees are to be planted with Tifway 419, and the grassy hollows and collars around bunkers will be Tifgreen 328. The greens will have Penncross bentgrass, with a three-foot ryegrass border.

'That sinking feeling' is more than an expression at Shoal Canyon

Continued from page 1

building the course.

"It's a unique project, that's for sure," said Siemens. "The site itself is sinking as we speak. Most of the greens are being built without any features because you're going to get features over time, whether you want them or not.

"There's no way to predict it. Some areas are sinking faster than others."

Ground was broken last November, with seeding scheduled for July. Twelve holes are being built on a former landfill that has been capped. The remaining six holes are perched atop a granite knoll, providing commanding views of the Los Angeles basin and even the Channel Islands on those rare, clear days.

The city of Glendale pursued a golf course development deal because the land has no other practical use, explained American Golf's Director of Construction Tom Devlin.

"We're developing the course in partnership with the city," said Devlin. "It's a long-term lease: They provide land, we provide construction and management. We'll pay rent depending on the revenues.

"It's a wonderful site. On a clear day, there's nothing like it in LA."

"There will be some unique problems and noticeable changes in topography. It will be a continuing maintenance problem for AGC," said Siemens.

However, if any management company is prepared to deal with a landfill course, it's American Golf.

"We probably operate more golf courses on landfills — eight — than any other management company," said Devlin. "We have a lot of experience with settlement and unique maintenance requirements.

"To say it's sinking six feet each year simply isn't accurate. That's just hearsay. It may have sunk six feet in one place while another doesn't move at all. We've also had a lot of rain, which makes the landfill settle even more.

According to Devlin, landfill courses require some special design and maintenance measures.

Irrigation, for example, cannot be overdone because water "unsuitable" the underground trash. Siemens noted that landfill courses must be "meticulously drained" to avoid excess water leaching through the cap to the landfill.

Irrigation lines break more often, so facilities should employ an in-house technician to act quickly, Devlin said. Further, polyethylene pipes should be used for main irrigation lines in order to withstand the bending and stretching.

Concrete cart paths are a no-no, due to the shifting topography. And whenever possible, drainage should be handled on the surface, via swales and barancas, as opposed to underground piping.

"Does the sinking and settling ever stop? I'm not an expert on landfills," said Devlin. "But I've built enough to say it never really stops. There is a curve that shows settlement abates over time. But frankly, with Shoal Canyon, I don't know where we are on that curve."

To VFD or not to VFD

(or constant speed, centrifugal or vertical turbine, or simply upgrade the pump station you have?)

There isn't a single pump station solution. Depending on your choice, you can save time, money, energy and even your reputation.

To help, SyncroFlo has written PUMP STATION SELECTION REPORT, a practical guide that reviews pumping system basics. It also has a check list of issues to address before deciding.

We don't just make pump stations, we provide irrigation solutions. The SyncroFlo line of EAGLE® pump stations is among the most extensive in the world. You'll find our stations have more STANDARD features than other manufacturers offer as options. All are backed by the best guarantees and support in the industry, not the least of which are total system, third party performance and safety certifications.

Yours for calling

1-800-886-4443:

SyncroFlo, Inc.

6700 Best Friend Road • Norcross, GA 30071
(404) 447-4443 • FAX (404) 447-0230

Graves-designed muni growing in

McCALL, Idaho — Substantial construction was completed in 1993 on a nine-hole addition to the 18-hole McCall Municipal Golf Course.

The par-35 layout was designed by Robert Muir Graves of Walnut Creek, Calif.

The addition, developed by O'Neil Enterprises, is to be given to the city, along with 100 acres of land. Developer Peter O'Neil also will provide a mile-long section through Spring Mountain Ranch for construction of an eastern bypass road for the city of McCall.

Golf course developments and other improvements will be financed by a city local improvement district bond issue, amortized by the sale of home sites at Spring Mountain.

Neal Meagher, Graves design associate, said, "In order to match the new nine to the existing 18, we've used sand bunkers sparingly, which leaves alternative open routes into the greens."

Choices, choices.

Two family facilities planned for Dallas

DALLAS — Emerald Family Entertainment, Inc. will develop, construct and operate two new facilities in the Dallas area this year.

Galleria Golf Center will be a 52-station, lighted driving range in north Dallas’ Galleria shopping/commercial district. Tour Play Golf Center, located in the suburb of Mesquite, will be a 48-station, lighted driving range, and upscale nine-hole par-3 course.

Morrises hang out design shingle together

FLOWER MOUND, Texas — Jay Morrish & Associates, Ltd. has opened offices in this Dallas suburb. Jay Morrish is president and son Carter is vice president of the course design firm.

"This central location offers us the opportunity to work on a variety of projects covering a large geographic area. I love the Dallas area and wish we had moved here 10 years ago," said Jay Morrish.

Carter is also designing golf courses with Roy Bechtol of Austin and PGA touring pro Howard Twitty.

Graves-designed muni growing in

McCALL, Idaho — Substantial construction was completed in 1993 on a nine-hole addition to the 18-hole McCall Municipal Golf Course.

The par-35 layout was designed by Robert Muir Graves of Walnut Creek, Calif.

The addition, developed by O'Neil Enterprises, is to be given to the city, along with 100 acres of land. Developer Peter O'Neil also will provide a mile-long section through Spring Mountain Ranch for construction of an eastern bypass road for the city of McCall.

Golf course developments and other improvements will be financed by a city local improvement district bond issue, amortized by the sale of home sites at Spring Mountain.

Neal Meagher, Graves design associate, said, "In order to match the new nine to the existing 18, we've used sand bunkers sparingly, which leaves alternative open routes into the greens."
Puerto Rican development proved challenging

By FRANK J. DINENNA

FAJARDO, Puerto Rico — Central Florida Turf, Inc. of Avon Park, Fla., has completed construction of a new 18-hole golf course at the El Conquistador Hotel and Golf Resort here.

The hotel and golf course sit on the northeast corner of the island, about 40 miles east of San Juan. The hotel is perched atop the cliffs of Las Croabas, where the Atlantic Ocean and Caribbean Sea meet.

El Conquistador in Puerto Rico, built by Central Florida Turf, Inc. of Avon Park, Fla.

As project supervisor, I found this to be a very challenging and rewarding assignment. Even though Puerto Rico is a commonwealth of the United States, in reality, it is a Spanish-speaking country, whose people are very friendly, helpful and hard-working. With their cooperation, I was able to locate all the raw materials needed to build the USGA greens.

One individual whose help saved me a lot of time was superintendant Domingo Lagares. Greg Sherwood, the golf course and tennis director, made arrangements with CFT to hire Domingo until the grow-in started. He proved to be a valuable asset. He had an easy-going personality and a total knowledge of what and where I could find the materials — and men I needed to keep the project moving.

Domingo put together our island crew, people that understand the operations of a golf course.

As the crew from Florida was clearing and shaping the course, Domingo and his crew were installing an irrigation system and hand-plating 419 sprigs on the seven-acre sod farm CFT had built just off site.

Sod importation was not permitted in Puerto Rico, due to a ban on soil, mostly because of nematodes. So all sprigs were imported from our farm in Avon Park, Fla. (419 for fairways and tees, Tifdwarf for greens).

This was the main reason we built the sod farm. The sod was used to ring tees, and line sand traps. In order to ship sprigs, drive down the fairways, cut sprigs, bag them by hand and place them in a refrigerator container, which was shipped by large container truck to San Juan, and delivered to the site.

Once the shaping was completed in an area, the irrigation crew would move in. The system's main line ran across the fairways, cutting them in half. By designing the irrigation system in this manner, you could isolate any half of a fairway you needed to work on without shutting down the whole fairways.

The fairways were completed, Domingo's crew would take over and hand-rake fairways to give us a clean planting surface.

When the fairways were ready for planting, we would load pick-ups full of bagged sprigs, drive down the fairways and drop the bags off for the men to hand shake the sprigs onto the surface in front of the disc planter. By the end of the day we had a finished product and a tired-but-happy crew.

In the end we put together a team of Americans and Puerto Ricans that built an outstanding golf course. And thanks to the design coordination of Arthur Hills and Mike Dasher, and the team work of Greg Sherwood, the men from Central Florida turf, Domingo Lagares and his crew, we built the El Conquistador.

Now Poly-S Performance Comes In Two Unbeatable Sizes.

The traditional formulation of Scotts exclusive Poly-S Technology has proved its effectiveness over 5,000 golf courses in the U.S., Canada and worldwide. And now, for more demanding, fine turf applications, Poly-S Technology is also available in smaller particles for use on all turfgrass, including low-cut fairways and tees.

The smaller particle Poly-S fertilizers provide the same extended nutrient release and improved nitrogen efficiency that has made Poly-S the fastest selling fertilizer in history. And they are available in a variety of formulations to meet different application needs.

High K TurfFertilizer provides a high level of available potassium to enhance the hardness of the turf — in addition to initial green-up and extended residual.

Nitrogen/Potassium Turf Fertilizer offers a balance of nitrogen and potassium to strengthen the turf while providing quick initial green-up (without surge growth), sustained growth, and extended residual for more predictable long-term feeding.

Turf Fertilizer provides more initial green-up while supplying maintenance levels of readily available phosphorus and potassium.

Turf Nitrogen offers extended nutrient release for up to 10 weeks, while supplying sufficient sulfur to help correct deficiencies and maintain adequate soil levels.

Turf Fertilizer Plus Iron includes sufficient iron in plant-available form to correct and prevent deficiencies.

Super Turf Fertilizer offers the longest residual currently available from any Poly-S fertilizer — up to 12 weeks.

Of course, Poly-S fertilizers also come with a Scott Tech Rep, an agronomically trained professional who is ready to help you develop a total turfgrass program.

For more information on Poly-S fertilizers, contact your Scott Tech Rep. Call 1-800-543-0006 or fax 513-644-7679.

Poly-S Fertilizers

May 1994 41
Postmark East Malaysia: Fream breaks ground in Sabah

BY HAL PHILLIPS

SABAH, East Malaysia — Architect Ron Fream, principal of Santa Rosa, Calif.-based Golfplan, keeps Golf Course News abreast of his overseas activities via the postcard. Every month or so, Fream drops the staff a line, telling of his work and adventures.

Fream and Robert Trent Jones II have been working in Asia-Pacifc longer than any other American architects. His latest update arrived stateside from Sarawak on the former island of Borneo:

"Hello — The prime minister of Malay-
sia will inaugurate ground-breaking for our Karambunai resort course along the sea-
side, north of Kotakinabalu Easter Sunday. The site is sand dunes, mangrove swamp and four miles of empty, white sandy beach! The environment here is unique — grand blue skies and great green forests. The sea is turquoise blue. And I get paid to be here? Best Wishes, R. Fream"

HOME COURSE ADVANTAGE?
LAGUNA QUAYS, Queensland, Australia — The new Turtle Point Golf Club here recently played host to the inaugural Aus-
tralian Skins Game. This Graham/Panks design, which opened in 1993 will also be the site of the Skins Game in 1995 and 1996.

Architect and former U.S. Open champion Dave Graham, a last-minute replace-
ment for Nick Price, ended up winning the event — and $70,000 — over Greg Norman, Ian Baker-Finch and Craig Parry. Appar-
ently, design partner Gary Panks finished out the money...

FOSTER IN THAILAND
CHIANG MAI, Thailand — Keith Foster and Associates of Phoenix, Ariz., has been retained by Prestige Properties Co., Ltd. of Bangkok to begin the design process for an 18-hole golf course here.

The resort layout, located near the King of Thailand's summer palace, will have a hotel and residential/business properties in its proximity.

GOLF STRATEGIES DEBUTS IN KUNTAN
KUNTAN, Malaysia — With Golf Strateg-
es' first Asian course nearing completion in Malaysia, the design firm — under di-
rection of principal and senior golf course architect Neil Crafter — has been retained to design 45 holes of golf at two separate locations on the Chinese mainland.

The Astana Golf Resort here in Kuntan is currently under construction, with an open-
ing date scheduled for early 1995. This 27-
hole member and resort course is located on the east coast of Malaysia in Pahang state, site of a former rubber and palm oil plantation.

Meanwhile, construction of the 27-hole Guangzhou South China Golf Club will soon commence near Zhenlong in Guangdong Province. Golf course approval has been granted, so ground should be broken by mid-summer, according to Crafter. The development is slated to in-
clude a clubhouse and members hotel, to-
gether with commercial shopping facilities to serve the planned 500 villas in the resi-
dential precinct.

BATES, PIERMAN TEAM IN JAPAN
KAMEYAMA, Japan — Construction has begun on a high-end private golf course here in this resort area of Chiba Prefec-

UNDER THE COVER OF DARKNESS
Floodlights illuminate the East Course at Koala Lampur Golf & Country Club, a new Nelson, Wright, Heworth product. Lighted courses are becoming commonplace in Asia-Pacific.

CUPP TAKES ASIAN PLUNGE
Cupp Design Inc. has entered the Asian marketplace with the creation of Cupp De-
sign International. Cupp offices in Atlanta and Oregon will support the firm's Asian business. Former U.S. Amateur Champion and PGA Rookie of the Year John Fought manages the Portland office. Michael Biley, who has extensive experience in Japan and Guam, is Cupp's East Coast design associate. Legends Golf Ventures-Asia of Singapore will represent Cupp in Asia.

For more information, contact H.H. Lim, Managing Director, Legends Golf Ventures-
Asia, 4 Long Kee Road, #02-05, Singapore 0331; telephone (65) 4722888. In the United States, contact Norman A. Carl, Legends Golf Ventures Ltd. 615-383-1464.

GRAVES ON THE SUBCONTINENT
BOMBAY, India — Veteran architect Robert Muir Graves has been retained to design a golf course here, as part of a residential complex supervised by Nikhil Valharia, managing director of Fantasy Land. The project is being conducted with Byram Jeejeebhoy, director of the Jeejeebhoy Group of Companies and Madhu Valharia, director of the Valharia Group of Companies.

In East Malaysia, Robert Muir Graves Ltd. has signed on to design three more projects. Two contracts — Mt. Kinabalu Golf Course and Sabah Country Club — will be executed in Sabah, while Pinosuk Plateau Golf Course is located in Sarawak.
With Stenson, Faldo steps up design activity

By Hal Phillips

WUHAN, Peoples Republic of China — With marketing guidance from International Management Group and architectural help from veteran designer Brit Stenson, Nick Faldo has leaped into the Asia-Pacific golf development fray.

With seven Asia-Pacific projects in the works — including Wuhun International Golf Club here — Faldo is executing his decidedly traditional design style and enhancing project cachet as only a world No. 1 can.

"Nick's objective is to remain at the top of his sport while, at the same time, steadily increasing his design activities," explained IMG's Mike Fielly, who handles Faldo from the firm's Singapore office. "What Nick Faldo means to a golf development is immediate credibility, especially in Asia where the process is always membership-driven.

"Asia is probably the world's most active market, and that's why Nick is focusing his efforts here. But there's a desire for Nick to be in every market.

Faldo has eschewed the idea of reeling off various "signature" courses with a series of different lead architects. Instead, he has wedded himself to IMG and Stenson, who cut his design teeth with the U.S. PGA Tour during the 1980s.

"You have to judge every deal by how much work it will be; where it's located, and how much you can do for the client," said Dye. "That never changes."

Baird chosen to design course at Riverbend Ranch

SANTA ANA, Calif. — Coombs, Inc., a Fresno developer, has appointed Gary Roger Baird Design International, Ltd. as the designer for its 18-hole golf course on the Riverbend Ranch site, just north of Fresno in southern Madera County.

The daily-fee track, situated on the banks of the San Joaquin River, will gently wind through some of the last remaining stands of great valley oaks and be adjacent to the river's riparian corridor.

Construction is scheduled to begin in June.

Private equity financing and contributed work in the amount of $6.5 million will be used for the golf course. Bond financing of $10.5 million may be used for the residential infrastructure scheduled to start in summer of 1995.

The engineering firm of Foresgren Associates of Salt Lake City and Gary Meyer of GRM Properties will be partners in the project with Coombs. Foresgren Associates/PA will also be acting as construction manager for the course.

Perry Dye redirects; eyes American market

Continued from page 37

The Family Dye, located on 30 acres in the 9-hole collection of famous par 3s from Cypress (Golf Club in Cypress, Calif.) in 1992.

The new focus for Dye Designs is not theoretical. It has already taken hold. A fall opening is expected for a city of Sacramento course, now well under construction. Dye reported his firm has just signed a deal to design and build a 27-hole golf complex, complete with driving range and teaching facility, in Jefferson County, Colo. Another municipal project — nine holes and range for the city of Englewood, Colo. — is nearly signed, sealed and delivered.

"The Jefferson County project is only 30 minutes from my office," said Dye. "It's our first project in state in about six years, which is sort of exciting — driving to a site. And these are less complicated jobs. Instead of moving three or four million cubic yards of dirt, we'll move 300,000.

Dye Designs was one of the first U.S. firms to take its product overseas in a big way, opening the door for flocks of architects to ply their wares in the lucrative, albeit speculative Asia-Pacific market. Yet Japanese money fueled much of the fire and, when the bottom fell out last year, Dye found himself overextended.

"We're still reacting to the Japanese bubble-burst," he said. "Right now, we have three projects under construction in Japan, whereas there have been times when we had 14." I'm gratified the value of Japanese memberships at my courses has held up 10 to 20 percent better than those at other courses. Not only my courses: A few designers have seen memberships at their courses really hold their value, which speaks to the quality of our work.

Will the Japanese funding return any-time soon?

"I don't think so," he answered. "It's got to be second-stage. And by that I mean they've got to start spending money in Japan before they'll fund anything overseas. Singapore, Thailand and China will be the funding mechanisms in Southeast Asia for the time being.

Indeed, according to Dye, business is continuing as usual in Southeast Asia. He said the firm has just signed another deal in southern Thailand, while Thai Muang Beach Resort opens for play near Phuket this spring. Laguna National — the 36-hole, upscale Singapore project designed by Andy Dye — is about to christen its second 18.

"And I'm still getting calls to do par 3s — because of Chicago," said Dye, referring to the 9-hole collection of famous par 3s from the Family Dye, located on 30 acres in downtown Chicago. "It was sodded before the snow came. We'll just have to see what lived and what didn't."

There's no getting around it: Dye Designs has been forced to downsize. Ten positions were eliminated in January, said Dye. The firm's focus has changed dramatically since the early 1990s, but some basic premises have not.

"You have to judge every deal by how much work it will be; where it's located, and how much you can do for the client," said Dye. "That never changes."

It should tell you something when the competition compares themselves to us.

After all, we all know how to cut through a good sales pitch. It's not our style to drill holes in the competition. We simply out-perform them and then let you decide. We've offered a selection of deep-time aeration worldwide for over a decade. The results and the durability of the Verti-Drain® are a matter of record. So before you leap to a look-alike, do yourself a favor and take another look at the original.

VERTI-DRAIN®
Works like a pitchfork, only better.

Emrex, Inc., Box 1349, Kingston, PA 18704 (717) 288-9360

GOLF COURSE NEWS

CIRCLE #135

May 1994 43
Ecology Unit

Continued from page 37

The Ecology Unit’s major aims:
• improve the image of golf through a program of positive ecological initiatives;
• encourage a higher standard of environmental performance from the golf development industry and course managers;
• provide a serious contribution to the European golf debate; and
• ensure that the development and management of courses are not impeded by excessive, inappropriate environmental restrictions.

"In countries like Germany, Belgium and Austria, a lot of pressure has been brought to bear against golf development," Stubbs said. "Germany has severe restrictions involving chemical use.

"The media has published alarmist stories about golf being a toxic activity. There was never a rational, credible way for golf to respond. We needed something a bit more substantial. So we've created this program and a coordinated policy that will help us deal with environmental issues."

Stubbs said the unit will serve as a clearing house for information relating to golf and ecology. It will also play a key role in coordinating research, disseminating information and forging links with leading environmental organizations and official agencies.

"The U.S. Golf Association, [USGA Director] Jim Snow and the Green Section agronomists have been very helpful," Stubbs said. "They participated in a meeting in Spain last summer that helped get this off the ground."

Whereas pesticides and water quality are the major concerns of anti-golf environmentalists throughout the United States, environmental issues are more numerous and more regionalized across Europe, Stubbs said.

In Britain, pesticides are not a problem since it is generally accepted that golf courses use far fewer chemicals than agriculture. Stubbs explained. Greater concern is focused on the visual impact of golf courses on the landscape and wildlife habitat.

Throughout continental Europe, golf is often perceived as an elitist sport, making it a political issue that is often clouded by environmental arguments, Stubbs said.

In Germany, converting farmland into golf courses is strongly discouraged, even though large food surpluses exist that require large, government-paid farm subsidies, Stubbs added. But despite golf's attractiveness as a way to reduce surplus farmland, a strong agricultural lobby opposes any reduction in food-production acreage.

Overcoming the fears of environmentalists and local planning boards regarding golf development is the unit's long-term goal. It won't happen overnight, Stubbs said.

"This is a small step in that direction," he said. "But you have to walk before you can run."

Harvard design seminars June 13-14

CAMBRIDGE, Mass. — Harvard Graduate School of Design again is offering summer courses and workshops related to the planning and design of golf courses and resorts.

Instructors include golf course designers Geoffrey S. Cornish and Robert M. Graves; architects Kenneth DeMay and Richard Diedrich; consultants James McLoughlin and Dr. Michael Rubin; attorney Thomas J. Boczar; Jerry L. Pierman, immediate past president of the Golf Course Builders Association of America; and William H. Sawyer, president of Golf Finance Inc.

Topics and dates include Golf Course Design, June 13-14; Golf/Residential Site Planning, June 16; Golf Course Development, June 15; and Golf Clubhouse Design and Site Planning, June 17-18.

For a catalog, contact the Office of Development and External Relations, GSD, Harvard University, 48 Quincy St., Cambridge, Mass. 02138; telephone 617-495-1680.

You didn’t read it in the sports section. But Fore fungicide recently wowed course superintendents in 17 states. Put to the test, Fore showed it was one of the hardest-hitting broad-spectrum fungicides in commercial turf care today. And probably the most economical.

Beats more diseases for the money.

On tees, greens, and fairways, Fore proved it was more than a match for 14 major diseases. Including such well known names as Brown patch, Dollar spot, and Helminthosporium melting-out.

And as superintendents in 17 states discovered, a treatment of Fore costs far less than the leading competitive fungicides.

No resistance after 25 years.

A multi-site enzyme inhibitor, Fore has been defeating turf diseases for over 25 years. And in all that time, not one of those diseases has mustered even the least resistance.

Holler Fore! Even for Pythium.

Spray a reduced rate mixture of Fore and Subdue (or Banol) and you can also gain improved control of Pythium blight. So if you’re looking for a proven broad-spectrum fungicide to strengthen your program this year — holler Fore! And duck some of the high cost of turf care at the same time.

For information on trials and warranty, write: Rohm and Haas, c/o Bob Gordon, Independence Mall West, Philadelphia, PA 19105

Limited warranty: Fore fungicide is guaranteed to control labeled turf diseases or your purchase price will be refunded.
New greens, fairways take shape at Hills’ Bonita Bay

BONITA BAY, Fla. — A bird’s-eye view of Bonita Bay shows nine new fairways and greens taking shape as the community adds a third 18-hole championship golf course by splitting one of its existing courses and adding nine new holes to each half.

The front nine of the Marsh course, opened in 1985 and ranked ninth in the state and 85th in the nation by Golf Digest, has been closed since mid-May. The greens are being rebuilt to United States golf Association specifications.

By mid-November, the new Marsh will open, along with nine holes of Bay Island, Bonita Bay’s newest course. Bay Island’s remaining nine holes are scheduled for completion in late 1994.

“With initial site work completed, we already can see that the views are even more incredible than we had imagined,” said Ed Rodgers, vice president of club operations for Bonita Bay Properties, Inc.

All three courses were designed by Ohio-based course architect Arthur Hills. Many fairways border wetlands sloughs and other natural areas which comprise one-quarter of the Bonita Bay site.

Wadsworth Golf Construction Co. built the Marsh and Creekside, the second Bonita Bay course which opened in November 1990, and will build Bay Island as well.

Carefully monitored trials* in these 17 states showed Fore controlled 14 major turf diseases.

Jones Sr. signs casino course deal

LEDYARD, Conn. — A deal has been struck, and a contract signed committing The Robert Trent Jones Companies to building an 18-hole golf course within the boundaries of the Mashantucket Pequot Nation.

The course is one of two to be built as part of an effort to upgrade the Pequot’s Foxwoods casino complex into a destination resort.

The project will be a father-son collaboration of sorts, as the Pequots have hired Jones’ son, Rees, to build the second course on the site. Design and construction work has begun on both layouts, but it remains to be seen what environmental obstacles may come in the way of construction. Developers hope clearing will begin before the weather makes work impossible next winter.

Robbins/Koch to design The Club at Mill Creek, N.C.

MEBANE, N.C. — Robbins/Koch Golf Designs, Inc. has been selected to design an 18-hole golf course here to be called The Club at Mill Creek.

The design team of PGA Tour player and ESPN golf analyst Gary Koch and architect Rick Robbins has planned a par-72 layout over 190 acres that feature mature trees, winding streams and rolling terrain with an elevation change of more than 95 feet. The semi-private, daily-fee facility will fit within the single-family residential community.

Robbins said the course will reflect a traditional style of design that will complement existing land features. The championship tees will stretch to nearly 7,000 yards, while the front tees will set the course at just under 5,000 yards. Koch, a six-time winner on the PGA Tour, added: “Our primary objective was to create a course that will make golf fun. Mill Creek will be challenging, fair, and most important of all, playable for the average player.”

The golf course and residential community is being developed by First Oakland Properties, Inc., headquartered in Raleigh, N.C.

$20-million facelift for Grand Geneva

LAKE GENEVA, Wis. — Grand Geneva Resort & Spa is undergoing a $20 million renovation, including improvements to its 18-hole Brute and Briar Patch golf courses.

A Scottish-style links course designed by Pete Dye and Jack Nicklaus, Briar Patch will undergo extensive work. A variety of holes on Brute will also be redesigned and renovated.

Last July,Marcus Hotels and Resorts of Milwaukee bought the property, which was known for 10 years as American Lake Geneva Resort. The facility was closed last fall and is reopening in May.

©1992 Rohm and Haas Company.
European golf development
Continued from page 15

courses, which now tend to be run by management companies. These courses also show a tendency to open up the courses for non-club members.

Great hope regarding future golf course development in Europe often focus on Eastern Europe, after the fall of the Iron Curtain. Only 17 new courses over the last four years show the reality, though. There may be lots of attractive sites for golf courses; there may be big plans for new developments; there may even be financial power of investors in the European East. Investors have been discovering, however, there is very little demand for golf, as there is no sufficient buying power among the population in Eastern Europe.

This has been proven true on the fields of East Germany, where more than 120 applications for new golf course projects have been filed — only 8 of which actually have come into existence. Most of them are concentrated around Germany's new capital Berlin and until now and most of them, with memberships of around 200 each, are not posting wild success. East Germans, suffering from higher unemployment and lower wages than their fellow countrymen in the western part, prefer spending on new cars, new household goods or traveling rather than putting down some 20,000 Deutschmarks for a share in a new golf course.

Estimates of the European golf federations show there are some 360 new courses under construction — or in an advanced stage of planning — in Western Europe. At the same time, only nine new courses under construction are reported from the countries of Eastern Europe.

Most of the new golf course developments are actually promoted by professional golf management companies watching out for the profitability of their projects. One major problem that does affect these economic targets is the very strong influence of planning and construction costs stemming from environmental constraints. The need to provide much larger golf course sites (65 to 100 hectares for 18 holes), so as to establish ecological compensation areas on the courses, has resulted in much higher costs. Further, bank deposits are required by authorities in order to secure the implementation of such ecological motivated measures.

The European golf industry in 1992, as shown in a European golf market survey provided for Messe Muenchen (Munich trade fair) last October, amounted to around one billion U.S. dollars in retail for golf equipment, plus some 210 million U.S. dollars for golf course equipment. Despite past impressions, there is little doubt Europe has to be taken seriously as a rapid growth market.

Broadcaster Ben Wright to design first U.S. course

TRAVELERS REST, S.C. — Journalist and historian Ben Wright of Flat Rock, N.C., will design his first golf course in the United States for The Cliffs Golf & Country Club, according to Jim Anthony, president and chief executive officer of The Cliffs Development Co.

Wright, who designed several courses in France and England before joining CBS-TV in 1972, will create The Valley Course for The Cliffs Golf & Country Club.

The Valley Course will be the centerpiece of Cliffs Valley, a 600-acre private planned community in the foothills of the Blue Ridge Mountains in the northwest corner of South Carolina. Wright will incorporate a classic golf course architecture philosophy at Cliffs Valley.

The course will flow with the land around a 12-acre lake and past the two streams on the property. Several small waterfalls are expected to be integrated into the creeks to enhance the visual and audio aesthetics of the golf round. Bunkering is expected to be used sparingly, and more as a directional than penal element. As a means of giving a common signature to both The Valley and Cliffs courses, Wright will use native granite boulders to frame lakes, streams and fairways.

New nine this fall at Weston Hills

FT. LAUDERDALE, Fl. — Greensmix recently completed blending the root zone soil mixture for the new nine holes here at Weston Hills Country Club, a Robert Trent Jones II design that annually plays host to the PGA Tour's Honda Classic. Greensmix also performed the blending for the club's original 18 holes in the spring of 1990. The new nine, built by Jones' in-house construction firm, Greenscape, is expected to open this fall.
Playing hickory in the Old World

When Dr. Michael Hurdzan goes to Scotland or Ireland he feels of what links golf was all about. A lot of times I play with wooden-shafted clubs, Hurdzan said, is "a different brand of golf. You don't hit the ball as far. You have to learn to keep the ball down." It's my way of gently testing that you don't have to have [expensive] graphite-shafted clubs. You can enjoy the game with whatever equipment you have.

Secondly, it gives me that feel of what links golf was all about. A lot of times I play with a reproduction gutty ball. When I played St. Andrews I played one hole with a real 1910s gutty. It allows me to relate to what golf was like at that period of time. Wooden shafts were popular until the '30s.

Playing with wooden-shafted clubs, Hurdzan said, is "a different brand of golf. You don't hit the ball as far. You have to be a lot more accurate. You have to learn to keep the ball down."

Hurdzan Collection

Continued from page 37

"As it ended up, they probably both came out of Mac's own library. Golf in America has his signature and personal stamp in it. And the value of Scotland's Gift today? "A thousand dollars."

Then there's a little paper-back written by Robert Trent Jones Sr. The booklet was to be auctioned and Hurdzan wanted it so badly he bid $95. "The auction results came out and I didn't get it. I was stunned." A friend who bid $225 himself told Hurdzan it had sold for $975. A short time later, Hurdzan received a packet in the mail from architect Roger Rulewich, who had ripped a page of one of Hurdzan's books while photocopying. The packet contained the Jones book — signed by Jones and by Rulewich, who wrote: "For someone who collects rare treasures from the history of golf from someone who only manages to destroy them."

In the realm of clubs, Hurdzan has many sets, but perhaps none as special as the wooden-shafted set made by George Nichols Co. in Scotland. While in Scotland, he visited the Nichols company and asked an old clubmaker about his clubs. The man couldn't believe a set still existed intact, but when Hurdzan showed them to him, the clubmaker "broke down and cried," Hurdzan said. "He remembered those particular clubs."

There is a world of clay pipes — you know, the kind you see the old Irishmen smoke in 'The Quiet Man.' Hurdzan found one, with crossed golf clubs, in a flea market in Columbus, priced at $15. He bought it and later discovered it's worth about $2,100 because the end isn't broken.

Then there's the rare Braille Book for Golf, printed 1935. The greatest treasure of all is a Rembrandt print, The Cloven Player, sometimes called The Golf Player. Circa 1660, it is a second-state printing of a man golfing.

Club-fitting and teaching devices, scores of wood-shafted clubs ("I would buy any wood-shafted club for $10. I've got thousands of clubs I've bought for $5.75, club buttons dating to the 1700s, an array of unique clubs — Hurdzan has them all."

"Among new items, I usually look for something that's not going to be on the market long — that I know is weird, or so ridiculous it won't be around long," he said. "Like the putter with a level on it, which you can hide with a shutter. How many of those will sell? Not many. But my son 50 years from now will have an oddity."

On the one hand, Hurdzan said, "I've overdone it here. I collect everything. There isn't anything on the market that I wouldn't try to get some of." But on the other hand, "I get dupes to trade, but I never sell anything."

Hurdzan laments that golf collecting has become a business, and, today it is "buyer beware."

"A lot of people now are in it for the money, unfortunately," he said. "When I started, it was just collectors. And it was inexpensive. You could amass these things. A book like this that I bought for $50 is now $600 or $700. And, not only is it a business, but there are forgeries. You have to be very careful."

His advice for collectors beginning today? "You have to decide: Are you collecting as an investment, or for something that you love. If it's something you love, pick what you like — if it's books, stick with books. Then isolate yourself to instruction books, architecture books, travel books, whatever."

Other advice:

- Least expensively, a person can collect bag tags, pencils, tees, scorecards, balls, glassware.
- Try to get the patterns to the golf clubs.
- "When I started out, if I could buy two second editions versus one first edition, I would buy the second editions. In retrospect, I should have bought the first editions."

Join the Golf Collectors Society, which has regional and national meetings. "There are tables and tables of things for sale or trade. They have regional meetings as well."
Hazardous Material Storage, Meet the Pros.

Professional management practices demand it: hazardous materials, such as pesticides and flammables, must be isolated from the environment.

Today, addressing this issue is as easy as calling on the pros at EPI. Our E.P.C. Container Systems answer with the most advanced, most reliable facility for hazardous materials disposal available. Our complete line of building sizes and designs can be custom-fitted with a wide range of options to perfectly meet your requirements.

At EPI, we've put the best available technology to work for you in cost-effective hazardous material storage. Call today for more information about our professional solution — The E.P.C. Container System.

For more information contact:
Kasco® F3400 (¾ H.P.) "Geyser" Display Aerator
Kasco Aeration improves water quality naturally and affordably

2925 Quintain Avenue South
Lakeland, Minnesota 55043
Phone (612) 436-7611
Fax (612) 436-6734

Kasco® Aerators offer turf managers and superintendents a cost-effective alternative to excessive chemical use. Aeration of golf course water hazards, park ponds and waterways help to meet public demand for more attractive recreational facilities. Aerators increase circulation and circulation of thermal stratified water to stimulate the natural biodegradation of organic material, such as grass clippings and to control algae growth so that your water looks and smells clean.

For detailed display variations, and even major variations, see Michael Coffman's book, The Dawn of Biocentrism, or New Age, they insist on the spiritual and religious views are traditional Judeo-Christian, or have you adopted other beliefs? Did the counterculture movement of the '60s have any influence on you, or did you just hide under a rock and ignore it all?

Few of us described as "Baby Boomers," who are now the core of the American workforce, could honestly answer that our value systems have not evolved over our lifetimes. With a majority of us changing individually, society as a whole has been transformed, bringing with it both welcome and unwelcome consequences.

Few would disagree that concern for preserving and protecting the environment has been a good change. The American people place great importance on this. What most of us don't realize is that this concern has been seized upon by people who have radically different beliefs from mainstream America, and they have inserted themselves into positions of leadership within many of the environmental organizations.

This is the reason for the lies, distortions, and lack of common sense and logic. By telling only part of the story, the majority of us who care about the environment are being manipulated into supporting actions we wouldn't if all the facts were known. According to surveys, 25 percent to 30 percent of us are concerned citizens who deeply care about what is happening to the environment, another 20 percent of us are very active environmentalists; and probably less than 5 percent of us are the radical minority of the environmental movement.

Among the radicals and activists are the ones with hidden agendas and ulterior motives. They have disrupted the leadership of many environmental organizations, often taking over and shifting focus of some organizations to support radical green organizations. Their belief systems are their religion and, as in any religious war, the end justifies the means.

Listing and describing these organizations and their belief systems is too lengthy for the purpose of this article (buy Dr. Michael Coffman's book, Environmentalism: The Dawn of Aquarius or the Twilight of a New Dark Age for detailed information). There are many similar beliefs, such as ecological, species, variations, and even major differences in the philosophies of these radical environmental organizations. Their argumentations can be made that would be accurate and all-encompassing.

Most of them, however, reject the truth, reason, and rational strategies and "wise use" philosophies. They believe there is no such thing as being a good steward of the land. Human beings can no longer dominate over the earth, according to their view, but share it with other species having equal value. Nature is good and mankind evil; or man is god, nature is god. Golf courses don't even exist in their new world order. Fact is, it is a very simplistic and don't cover the full range of environmental radicalism, but are representative of key points. Whether they believe in asmus, biocentrism, eco feminism, gnosticism, eastern mysticism, neopaganism, occultism, neopaganism, separatist movement, maintenance of biodiversity, the Gaia theory, The Plan, or New Age, they share the common belief that a radical transformation of society must take place, and that using a sympathetic environmental agenda to attain their goals is their best opportunity for success. As far as I know, few of them offer any details for the construction and operation of this brave new world, just sketchy outlines of how wonderful everything is going to be.

Simple minds like mine always try to simplify things so I can figure out how it works. Clearly in this case, it is a conflict boils down to: Do your needs as a human always, usually, sometimes, rarely or never come ahead of other species' needs? My guess is that a bell-shaped curve, closer to how an easy schoolteacher would have graded a class with more "A's"
Jarrell commentary

Continued from previous page

than "F's. The problem is that this kind of a poll has not been taken; that people will lie and distort the truth to achieve their goals; and that active minorities will achieve political success over silent or misinformed majorities.

As one who cares about the environment, I greatly disturb me that a noble cause is being subverted by groups with hidden agendas, individuals seeking personal gain, hypocrites who ask others to make sacrifices they won't make themselves, and religious fanatics trying to impose their values on others.

America is a democracy, and people cannot be denied their choice of beliefs, but they must be given factual information upon which to vote their choices. I happen to believe that wise-uses strategies based on good science are the mechanisms to satisfy the desires of a majority of our population, but I may be outnumbered. Most Americans who believe in protecting the environment are middle to upper class who are far removed from the natural resources they depend on for their high standard of living. Those who know the least about managing natural resources are those most critical of natural resource industries, and support environmental legislation no matter what the issue or the cost. They believe "environmentalists" over scientists by about 5 to 1.

It is estimated that we now spend about $1.7 trillion annually for all environmental regulation, with costs continuing to escalate.

As one who does much of his work in Michigan, so transport is by horseback, horse-drawn carriages, bicycle and by foot. Yet, brand new to the historic resort area is a Jerry Matthews-designed nine-hole public course that opens this month.

Developed by Grand Hotel owner Dan Musser Jr., the Woods Golf Course is perched high on a limestone bluff, overlooking St. Ignace, the Straits of Mackinac and Mackinac Bridge. The hotel's first nine-hole course, The Jewel, was built in 1910 on land that once was the town's public cow pasture. A two-year renovation was completed on that track in 1987.

The first tee of the new Woods course is a 17-minute carriage ride from the 9th green of The Jewel. Golf carts are available at both courses. The carts arrive by ferry each spring. Each is harnessed to a horse to be pulled to the courses. (The carts actually motor under their own power. It just appears the horses are pulling them.)

The new nine on Mackinac Island was designed by Jerry Matthews, the outgoing president of the American Society of Golf Course Architects, who does much of his work in Michigan.

Matthews' new nine on Mackinac blends with island's old-world feel

BY KATHRYN A. CLARK

Something old. Something new. Golfers traveling to Michigan's Mackinac Island had better leave their automobiles behind. Motorized vehicles have been banned on the 2,200-acre island since the turn of the century, so transportation is by horseback, horse-drawn carriages, bicycle and by foot.

Yet, brand new to the historic resort area is a Jerry Matthews-designed nine-hole public course that opens this month.

Developed by Grand Hotel owner Dan Musser Jr., the Woods Golf Course is perched high on a limestone bluff, overlooking St. Ignace, the Straits of Mackinac and Mackinac Bridge. The hotel's first nine-hole course, The Jewel, was built in 1910 on land that once was the town's public cow pasture. A two-year renovation was completed on that track in 1987.

The first tee of the new Woods course is a 17-minute carriage ride from the 9th green of The Jewel. Golf carts are available at both courses. The carts arrive by ferry each spring. Each is harnessed to a horse to be pulled to the courses. (The carts actually motor under their own power. It just appears the horses are pulling them.)

The new nine, adjacent to the airport, is nestled among white pine, cedar, hemlock, white birch and maple trees.

Players will use three sets of tees, the longest yardage slightly more than 3,000 yards.

Matthews' layout required only minimal blasting, and that was to remove a seven-foot limestone ridge on the 4th hole. The course was carved out of rolling forested terrain, punctuated by numerous rocks and outcroppings that provide spectacular elevated rock tee areas and fairways across a hill beside the cart path on the 5th hole. The course was completed in 1987.

All construction equipment had to be transported to the island by ferry. According to Matthews, the difficult item was 900 yards of sand for the 30 bunkers.

Aire-O plant: 1-800-328-8287
Q&A: von Hagge

Continued from page 37

and developments and everything else. But you can rely on light as a dependable part-

ner in your efforts.

GCN: How, in particular, have you elimi-
nated the boredom you refer to?

RvH: About the last 12 years we've come
up with 11 basic vertical shapes. Their
positioning, size and how they interact with
the light allows you to create a kaleido-
scope of visual experience all day long.

Simultaneously, it allows you to explain the
shot presentation. The problem for the golfer
to solve is much more easily portrayed with
the way we use light. We're not just relying on
humps, bumps and trees to do that.

I get a kick out of people talking about
great golf holes, like the 18th at Pebble
Beach. Put that in the middle of Oklahoma
and I defy you to say it's a great golf hole.

It's setting. It's the horizon vistas. It's
the mood, that special feeling when you stand
on the tee. And the sport of golf — you have
a foursome, one guy's hitting the golf ball
and three are standing around taking it all
in. It's got to be total theater, 360 degrees.

You can't build it like a stage prop looking
forward. Nobody plays golf that way, and
certainly the other three folks aren't look-
ing straight ahead.

GCN: When did you start looking into
lighting?

RvH: About 1980. Until then, we used
the traditional approach — only with our
own kind of expression. More and more, I
began to see the overpowering importance
of visual presentation. You can have a tac-
tically wonderful golf course, but you don't
usually present it with pizzazz and excite-
ment and change it up so nothing repeats
itself. It's a dud.

Conversely, there are a lot of strategi-
cally poor golf courses that are magnifi-
cent to look at and all of a sudden are in
a golf magazine's top 100. And they wouldn't
pass a good tactical test as far as design is
concerned. There are a number of great,
great clubs that aren't in any rating and
that nobody will ever see. They are so
private they don't want you around.

GCN: Most golf courses are most dra-
matic looking at sunrise or sunset. That's
when you see the movement of the light
the most.

RvH: Those are the most dramatic hours.

After about 11 o'clock, most golf courses
are dead meat until 3:30 or 4 o'clock. We
take great pride in keeping that kaleido-
scope of visual experience through shadow
and texture and light changing right
through those dead hours. I don't think
anybody else is doing it. If so, I think it
happens by accident. I think a lot of our
architects today are like natural piano play-
ers or dancers: They can do it, but they
don't know how or why. Or else they're
guarding their secrets... That doesn't
take away from their talent. We have enormously
talented people out there now.

It's also the kinds of grasses you use as
texture that either diffuses, absorbs or
mutes light.

GCN: The old-time designers didn't have
the equipment we have today...

RvH: But they didn't need them. They
were physically picking green sites and
maybe massaging 500 to 1,000 cubic yards
of material. Now you're moving 7,000 or
8,000 for the same green site.

My father worked for Donald Ross and
build four or five clubs in Florida for him
and some around Chicago. If they would
move 70,000 cubic yards of material
with mules and slips and what-have-you, that
was enormous. And he's got some classic
golf courses. They moved 81,000 cubic yards
of material on Pinehurst No. 2, and what would
you change about it? I mean, it's there.

In today's world it's different. You can't
do anything decent in Florida that doesn't
require moving at least 300,000 cubic yards
of material — forgetting the fact that you
might have to work with negative drain-
age. You're creating everything. First, if
that golf course is any part of Florida and
not in the boondocks, you have to create
what we call the primary horizons — that's
first mask of green that blends into the
long horizon that also simultaneously elimi-
nates all that garbage would visually inter-
fer with that interaction if you didn't put it
there. We've done a lot in the desert
courses of California where the sun picks
up glass of the desert that reflects through
the day. But if you do that green mounding
and sloping and blending it into the long moun-
tain background, you're in a visually con-
tained environment.

On every project like that you have to
create a sense of arrival that envelopes you
when you go through the gate.

My wife could have done something at
Augusta or Pebble Beach that would have
been acceptable and she doesn't even play
the game. But more and more, to justify the
club as a business investment, the market
location takes precedent over everything else.

And oftentimes that's a deserted garbage
dump, or some piece of terrible wetland
that everybody has ignored but it's where
people can get to it.

I get a little ornery when people speak of
the great work Mackenzie and Ross did.
They had the pick of a candy story? They
were sent out on a mission by wealthy groups
to go find the best site for the new clubs, I'm
not saying they didn't do a good job. But the
present-day architect seldom gets a shot at
something like that anymore. It's all worked
in dramatic settings, but you can't get to them
unless you parachute in.

GCN: And they didn't have to do that
30, 40 years ago.

RvH: Not at all. Yet they were truly
"country" clubs — considerably out of the
area.

GCN: What have modern equipment and
technology offered to the evolution or
improvement of course design?

RvH: It's become more sophisticated and
versatile. You can do a lot of wonderfully
sophisticated machine-controlled courses
that were impossible 20 years ago. That's not
only the equipment. It's also the growing talent on
the guys on the machines. We have some
shapers in America who are truly artists.
That's been an enormous improvement.

That works directly with my feelings on
the CAD/CADD system. You cannot do those
tools of a computer. We started it and we still use computerized con-
struction specifications and some heavy
earth-moving drawings. But all the fine
shapeing and tailoring is done in the com-
munication between the architect and
shape on site — because here again you're
working with light and at various times
of the day. Sometimes, if you need to create
a bit of mystique or sophistication, it's work-
ing with three and four inches of dirt
that rises and falls and still positively drains water
across it. Plus, just three or four inches of dirt
can either void out or bring into focus some-
ingthing magnificent on the horizon. That can't
be put on a CADD system.

The long views are so important. The
first thing we do on a site is inventory the
horizons to make sure our primary back-
grounds are always on dramatic shots.
Eliminate the background at Pebble Beach
and how much mystery do you have of it?
Or, we play away from smokestacks and
other ugly things on the horizon, or elimi-
nate it by moving dirt.

GCN: How large is your company's staff?

RvH: Sixteen people. Lead designers
are myself and three architects who are
partners in the company. All have been
with me since they got out of school: Kelly
Blake Moran, whose been with me for 11
years; Rick Bartl, 13 years; and Mike
Smekle, 13 years.

Myself and one of the three architects
are common to every project. We make 60
to 75 visits per project. You have to spend
time out there. The more you look, the
more there is to see. It's usually the
developer's lifetime shot and if you don't

THE GREENS SENTINAL
A System Used By The TORO Company

Used by TORO on their upcoming, new Greensmaster series mower. You can now update any of your
Greensmaster mowers or just order your new Greensmaster 3000 with The Greens Sentinel already installed.

Order from your TORO Distributor

NEW MODELS:
Just bolt or clamp onto mower
Protect your greens
from Hydraulic oil damage

FITS TORO GREENSMASTER &
TORO 223- D

B.H. SALES
P.O. BOX 3467
SANTA ROSA,CA 95402
(707) 823-2107

Don't let this happen to your green!!

CLAIMS:
1. Alarm sounds with a loss of only three to five ounces of oil.
2. Uses a uniquely patented floating chamber system.
3. Indicates when oil pump has air leak (aeration of pump) on suction side of pump. Air in oil causes float to drop on contact points.
4. Easily bolted or clamped into your hydraulic system.
5. Allows for pitch and roll of greens.
6. Comes fully equipped to mount onto your mower.

THE 9th hole at Pelican Marsh/Day Colony Golf Club in Naples, Fla., a dramatic par-3, 154-yarder framed by Robert von Hagge's trademark bunkering. The project, designed for the Westinginghouse Communities, won von Hagge Design Associates the 1994 Merit Award from the Ameri-
can Society of Landscape Architects.
Q&A: von Hagge

Long after finishing touches applied, von Hagge stays in touch with clients

By MARK LESLIE

SPRING, Texas — Von Hagge Design Associates has developed a marketing program for its clients that extends six years after course opening and which Robert von Hagge calls "an award-winner." Instead of selling a roll of blueprints and showing up now and then, the company stays in touch with clients that we can do this internship with them," von Hagge said.

Involvement also extends to the landscaping. "We look at the embellishment of the course because we don't believe you should landscape a course before it opens — rather just prior to or at opening," von Hagge added. "You can't design and construct a house and hang the drapes or pictures with any sense before that happens. It has to be up before you can really feel the mood of what is needed in what area. It's stupid to try." He added: "We've been polishing this strategy because we feel we have to in order to stay in the strata we're in."

The better, more natural looking lake and pond dye

Why settle for artificial looking dye when TRUE BLUE® will give your lake or pond a natural, living color appearance. The secret's in our tried and true Blue formula that makes the other brands look unnatural by comparison.

Try it and see for yourself why TRUE BLUE® is fast becoming the preferred lake and pond dye. The one that's a natural. For more information and a technical bulletin, call or write today.

TRUE BLUE is a trademark of Precision Laboratories, Inc.

For the best value, use either spray indicator, Dy'On or Dy'On "W". You make the choice.

TRUE BLUE®

No Blue

TRUE BLUE®

DY'ON OR DY'ON "W" You Make The Choice

Dy'On is the original spray indicator...the first to let you see where you sprayed...a temporary dye that will slowly fade away in sunlight. Dy'On is also recommended as a pond and lake dye. Other diluted, imitator products are worth far less.

Dy'On "W" (washable) is not a dye but a temporary colorant. It is equally easy to use as Dy'On yet will rinse off hands, driveways and walkways quickly and easily.

Regal Chemical Company
P.O. Box 900 / ALPHARETTA, GA 30229
PHONE 404-475-4837 / 800-621-5208

It gives Gary Koch some cushion. He's announcing and trying to develop future sources of revenue. And it's good for Rick, who doesn't have a big identification yet.

GCN: How do you view the evolution of course design?

RvH: For so many years, most golf courses had the tee, the green, the fairway and a row of trees going down either side, with a couple of bunkers now and then.

That was architecture until, I think, when Dick Wilson and Robert Trent Jones began to turn it around in the early '50s. By the early '60s it was in full cry, and then it passed them... Us young pups took it up from there and developed it into a sophisticated presentation. I think very honestly I'm the only one who's done anything since then at another level of artistry and movement so that way and how you can control it.
CHARLESTON, S.C. — To accommodate recent growth, the National Golf Course Owners Association has moved its national office across the bridge to Mt. Pleasant. The new NGCOA address is 1401 Center St. Ext., Suite B1, Mt. Pleasant, SC 29464. The new phone number is 803-881-9956; fax 803-881-9968. The toll-free number remains 800-993-4262.

CASPER TO BIG APPLE

NEW YORK CITY — New York Health & Racquet Club's HRC Indoor Golf & Country Club has hired Billy Casper Golf Management Inc. to provide management services. BCGM will provide daily club operations, marketing, public relations, programming and membership development services. The club has five golf simulators, 800-square-foot raised putting green, computerized swing analyzers and practice driving nets. New York Health & Racquet Club owns 10 Manhattan health centers with 30,000 members.

CLUB FOUNDATION NAMES BERNHARDT

ALEXANDRIA, Va. — Lawrence Bernhardt is currently being elected to the Club Managers Association of America's Club Foundation. Bernhardt is chairman of Boca West Country Club in Boca Raton, Fla. and was instrumental in the Boca West community's recently announced $22 million expansion and renovation program. The Foundation sponsors programs for continuing education and professional development, establishes college courses geared to the club industry, provides research grants for studies dealing with the club industry and awards scholarships to practitioners and students.

PALMER TAKES OVER LA COURSES

ORLANDO, Fla. — Arnold Palmer Golf Management Company has been selected by the Los Angeles County Department of Parks and Recreation, among the largest municipal owner of golf courses in the United States, to operate the Whittier Narrows and Victoria golf courses. The acquisition of the long-term leases is a part of the club's acquisition of the Los Angeles area. The club has no interest in management-only arrangements because of the smaller return on investment than is available with ownership/lease situations, according to company President Stuart Frantz. "Courses we'll look at must have the potential financial strength to return a reasonable profit. And they must fall within the Washington, D.C.-to-Atlanta area." Frantz said. But the company is interested in limiting itself to the Southeast. "Going outside that area would simply stretch us too thin," he explained. "As one of our principals likes to say, 'One of the best fertilizers is the owner's footprints.'"

The ideal situation is to develop

Continued on page 55

NORTHFIELD, Ill. — LinksCorp has purchased Castlewoods Country Club in Jackson, Miss., the company's third acquisition in less than a month and seventh overall. "We are very excited about buying a quality facility like Castlewoods, especially with the new nine holes and course renovations recently completed by Golden Bear designs," said Ben Blake, the company's president and chief executive officer. "The new nine brings Castlewoods to 27 holes. The existing 18 will remain open this summer while the new holes are completed. The new nine will open later this summer. Clubhouse renovations are also planned. Other LinksCorp facilities include Tamarack Golf Club in suburban Chicago, Temple Hills GC in Nashville, Tenn., Rockwood GC near Kansas City, Mo., Glenlake GC near Gulf Shores, Ala., and Hickory Hill GC in Biloxi, Miss. LinksCorp is owned by management and three venture capital firms — Batterson, Johnson & Wang; William Blair Venture Partners; and Northwest Venture Capital. The company recently purchased The Homestead in Hot Springs, Va., 10 years ago it acquired Pinehurst Resort & Country Club, one of the nation's oldest and best-known golf resorts.

Club Resorts Inc. celebrates its 10th anniversary

Club Resorts Inc., among the nation's largest conference resort owner/operators, is celebrating its 10th anniversary. "These past 10 years have been incredibly good ones for us compared to the volatile situation in the industry as a whole," said James Hinckley, president of Club Resorts Inc. The company recently purchased The Homestead in Hot Springs, Va., 10 years ago it acquired Pinehurst Resort & Country Club, one of the nation's oldest and best-known golf resorts.
Fast first aid for your tees.

Controlling divots on par 3 tees has always been tough business—especially when players have to walk from the tee to the bucket and back again. That's why our new Seed & Soil Caddie takes the best ideas in divot repair and places them all at your players' fingertips, right next to the tee markers. To keep the rain out, we curved the spout. To make it easier to fill, we turned the entire bottom into a screw-off cap. To keep it close to potential divots, we made it as easy to move and position as the tee markers it's designed to sit next to. And to remind players to use it, we even included a friendly reminder decal. Like all Standard Golf products, our new Seed & Soil Caddie is designed to last for years of trouble-free use. The integral steel spike is precision-welded for extra strength, and the large capacity reservoir holds plenty of seed and soil. Our new Seed & Soil Caddie makes it easier for players to keep tee areas healthy! Contact your nearby Standard Golf distributor and ask about our Seed & Soil Caddie. It's good medicine for your tees!
Carefree looks to add upscale resorts

By PETER BLAIR

CARMEL, Calif. — The 14th green is 95 yards wide and just 17 yards deep. Over those 95 yards a ball can pass through seven tiers, making approach shots difficult and long putts impossible.

"Pete Dye says he had nothing to do with it," chuckled Carmel Valley Ranch head pro Andy Cude, referring to the architect credited with the course’s design.

"We were working on PGA West at the same time he was designing Carmel Valley. He didn’t get up here a lot, so the construction crew took some things on themselves. Pete says the 14th green is one of several items he never quite intended."

At the urging of the new owners, Carefree Resorts, Dye has returned to Carmel Valley to modify the 14th green as part of the $1.2 million remodeling about to get underway at the Northern California resort. That’s the type of money the recently launched firm is prepared to spend to get its operations up to snuff.

Carefree is upgrading the three-facilities in its high-profile resort portfolio —The Boulders in Phoenix, The Peaks at Telluride (Colo.) and Carmel Valley — and actively pursuing additional resorts.

“We’re particularly interested in Mexico, Hawaii and the Caribbean,” said Vice President of Marketing, Michael Surguine. “If we add one property per year, we’ll be satisfied. We don’t want to be the largest resort operator, just the best."

To be considered for purchase, Surguine explained, a resort must meet three criteria. First, it must have a “magical” setting in a unique environment. Second, every amenity must blend in with the surrounding environment. And third, amenities and services must give guests the chance to interact with the environment.

“If you play golf at Carmel Valley or The Peaks, you’re likely to see deer and foxes in the fairway. At The Boulders you’ll come across rabbits and coyotes,” Surguine said.

Carefree is a spinoff of Westcor — a major owner, developer and manager of retail, office, industrial and hotel properties in Phoenix. Westcor developed The Boulders, which opened in 1985. The Boulders has become one of the best-known resorts in the country. Two Jay Morrish-designed courses are major draws for the 1,300-acre facility in the Sonoran Desert foothills of Carefree.

The Boulders’ success prompted Westcor founder Rusty Lyon to create Carefree Resorts. Lyon considered launching Carefree as early as 1989. But he waited, knowing the easily available credit fueling the acquisition boom of the late 1980s would eventually dry up. When banks stopped lending in the early 1990s, a financially healthy Westcor/Carefree was well-positioned to purchase property at more reasonable prices, Surguine said.

As for Carmel Valley, course modifications are part of an overall $53 million renovation plan that includes upgrades to the clubhouse, tennis and hotel operations. The main objectives are to eliminate blind shots off tees and improve visibility on approach shots, Cude said.

The major earthmoving work will be done on the mountainous 11th through 14th holes. Work was scheduled to begin in the fall, but may be moved up to summer, Cude said.

Bunkers will be repositioned and green elevations lowered on several holes making them more receptive to run-up shots. Water features will be added on the 2nd and 3rd holes. A new underground boiler system will circulate warm water under the 2nd green and 3rd tee complex, where constant shade makes growing grass difficult.

Removing and transplanting trees along four holes will improve views of Carmel River.

"Just changing mowing patterns will make a difference," Surguine added. "Right now fairways run up to a very penal rough that continues all the way to the green. We’ll cut back roughs so it’s easier to stay within the fairway up to the greens."
CGG plans on steady growth in coming years

Continued from page 53

clusters of three to five courses, allowing CGG to maximize revenue generation, management expertise and the use of expensive capital equipment, Frantz said. Lochmere, Devils Ridge and The Neuse give CGG such a cluster in the Raleigh/Durham/Chapel Hill triangle. Oak Valley gives the company a foothold in the Winston-Salem market and Nags Head in the Norfolk, Va./Outer Banks area. CGG is confident it can meet its acquisition goal because of its management team. As a group, team members have 150 years combined business experience, most in the golf business. Frantz and Chairman Roger Watson founded the company in 1963.

Frantz worked many years in commercial banking. He was senior vice president at Wheat First Securities in Raleigh when he first met Watson, who then owned nearby Wildwood Green Golf Club.

Also on the management team are:

• Vice President/Secretary Donnell 'Buck' Adams, a successful PGA Tour player and head professional at the Country Club of North Carolina since 1963.
• Vice President/Treasurer Richard Urquhart, a certified public accountant and president at the Country Club of North Carolina since 1963.
• Vice President of Golf Operations J. William Hamilton, a long-time head professional, golf director and general manager.
• Vice President of Development and Grounds David Brooks, a golf professional and executive who has been actively involved in construction, development and maintenance of several golf clubs.

Superintendents answer to Brooks and head pros to Hamilton. The two positions are considered equal at CGG facilities, Frantz said.

"We'd like to develop sort of a farm system with our assistant superintendents and assistant pros advancing to head positions as facilities become available," the company president said.

CGG is developing retirement and ongoing training programs for its 110 employees.

Surveys and customer interviews are used to determine what products and services customers want and how the course can be improved.

Keeping employees motivated and promoting positive change are the goals of charts and grades evaluating various aspects of course operations. Updated materials are placed in visible locations weekly, providing immediate feedback.

"We rate the quality of greens, tees, fairways, bunks, food and beverage service, pro shop and other areas," Frantz explained. "At Devil's Ridge, for instance, most of the Bermudagrass died in the fairways a while ago. Our customers rated us down in that area. Within a week, we had put in 40 truckloads of new sod."
When it Comes to Performance...

Since 1994 when AquaGro was introduced to the nation’s golf courses, hardly a year has passed that some company didn’t come along with a new wetting agent. Most products have vanished like the morning dew they claimed to control. A few brands have managed to demonstrate their residual effectiveness, but year after year AquaGro remains the hands down favorite among golf course superintendents...because on the golf course performance counts.

The Top Performer

Don't just take our word for it. According to a survey of golf course superintendents conducted last winter by the Center For Golf Course Management's Market Research Division, AquaGro remains the most popular brand by a large margin. CGCM found that 14.4% of the AquaGro users and 3.7% of the Hydro-Wet® users the Naiad users, 7.6% of the Lesco-Wet users, 6.1% of performance. Among the leading competitors 8.1% of the AquaGro was introduced to the nation’s golf courses, hardly a year has passed that some company didn’t come along with a new wetting agent. Most products have vanished like the morning dew they claimed to control. A few brands have managed to demonstrate their residual effectiveness, but year after year AquaGro remains the hands down favorite among golf course superintendents...because on the golf course performance counts.

The Top Performer

Don't just take our word for it. According to a survey of golf course superintendents conducted last winter by the Center For Golf Course Management's Market Research Division, AquaGro remains the most popular brand by a large margin. CGCM found that 14.4% of the AquaGro users and 3.7% of the Hydro-Wet® users the Naiad users, 7.6% of the Lesco-Wet users, 6.1% of performance. Among the leading competitors 8.1% of the AquaGro was introduced to the nation’s golf courses, hardly a year has passed that some company didn’t come along with a new wetting agent. Most products have vanished like the morning dew they claimed to control. A few brands have managed to demonstrate their residual effectiveness, but year after year AquaGro remains the hands down favorite among golf course superintendents...because on the golf course performance counts.

We sincerely thank the nearly 1000 superintendents who participated in this survey, and the thousands of loyal AquaGro users who vote each year with their budgets.

Satisfaction Guaranteed

In addition to being the most popular soil wetting agent on the market, AquaGro is the only one carrying a money-back performance guarantee.

AquaGro is available in Liquid, Spreadable and Pellet formulations. AquaGro also offers the Little Squirt® hose-end proportioner and the Dose-It™ portable injector.

If you're not already using AquaGro, it's time you discovered why the first wetting agent is still the best. AquaGro is available from your local Aquatrols turf products distributor.

Our Competitors are Behind Us 100%.

Since 1994 when AquaGro was introduced to the nation’s golf courses, hardly a year has passed that some company didn’t come along with a new wetting agent. Most products have vanished like the morning dew they claimed to control. A few brands have managed to demonstrate their residual effectiveness, but year after year AquaGro remains the hands down favorite among golf course superintendents...because on the golf course performance counts.

We sincerely thank the nearly 1000 superintendents who participated in this survey, and the thousands of loyal AquaGro users who vote each year with their budgets.

Satisfaction Guaranteed

In addition to being the most popular soil wetting agent on the market, AquaGro is the only one carrying a money-back performance guarantee.

AquaGro is available in Liquid, Spreadable and Pellet formulations. AquaGro also offers the Little Squirt® hose-end proportioner and the Dose-It™ portable injector.

If you're not already using AquaGro, it's time you discovered why the first wetting agent is still the best. AquaGro is available from your local Aquatrols turf products distributor.

Our Competitors are Behind Us 100%.
That difficult," he lamented. I felt like smacking him on the head, but laughed instead. "Do you realize how stupid you sound?" I asked. Intentionally or unintentionally, his course had positioned itself to successfully capture an obviously large niche of golfers. Its reputation enticed many more than it scared. Yet he was complaining.

Many golf courses never manage to become so well ingrained in golfers' minds. This course became synonymous with upscaoe (i.e., as close as "local Joe and Joanne") would get to a tour-level course at an affordable price.

They needed to advertise only as a reminder; tournaments flocked to it; and the good tee times were always booked.

Just like a normal person would rather everyone liked him/her, they wanted every golfer on their course.

But as we marketers have seen time and again, it is almost impossible to succeed at pleasing everyone. This course had become successful by focusing on "challenge" and "championship" status. That eliminated a lot of golfers.

The best thing they could do would be to forget those golfers who wouldn't come because they thought the course was too tough.

They are simply not this course's market. One of two things will happen with these golfers: Either they will golf the course and realize it isn't so bad, or they will never come out at all. In either case, it may not be worth pursuing.

Much time, effort, and money were expended to develop an image. That image is ingrained in the market's collective psyche, and a huge niche of golfers flock to the course because they perceive it will satisfy their needs.

The cost and damage that could be done undoing this image could be disastrous. What if Cadillac decided to tell everyone, "A Cadillac is for everyone; you really haven't arrived just because you drive a Caddy."

As we were leaving, my friend asked me what seriously thought.

"Double the message intensity. Make every golfer think they've sur-

ved an assault of Everest and have accomplished something. They'll feel like heroes and keep coming back. Forget the rest, it doesn't matter what you tell them now, they're going to feel awrong as a three-squared sweater. As long as the round count keeps going up, ride with it.

"Take your pro's advice: Keep your eye on the ball." Really, we should all have these problems.

Compare the Rest.
You're Looking at the Best.

Wherever golf is played, Superin-
tendents and golfers alike recognize the quality, pride and craftsmanship that goes into every Par Aide ball washer.

So it's no surprise that more than a few imitators have come and gone over the years.

But, despite all of their "me too" claims, absolutely no one has yet equaled the unique advantages and rugged durability of Par Aide's cast aluminum original.

It was true in 1955. It's still true today. When it comes to ball washers, and the name of the company that stands behind them, Par Aide has no peers.

Ask your Dealer today about the best long-term investment value in golf course accessories — ask to see all of Par Aide's "Classic" ball washers.
Announcing
the premier national
trade show and
conference just for
superintendents,
owners, and managers
of public-access golf
course facilities

It's called Golf Course Expo, the premier national expo and
conference for daily fee, municipal, semi-private and resort
courses—and it's sponsored by Golf Course News.

The Expo features:
• More than 200 companies with products and services on the trade show floor
• A one-stop marketplace for all you need to profitably build, manage, maintain and market the public access course
• Practical solutions for superintendents, owners, managers and developers of public access courses
• A two-day educational program with three-tracks featuring industry leaders speaking on agronomy, management, and development

Plan now to be there

Mark your calendar NOW and send for more information—what could be easier?

YES!
☐ Send me information about Golf Course Expo—including free VIP admission to the show floor
☐ I'm also interested in information on the three-track conference
☐ My company would like to purchase exhibit space—please send me more details

Name
Title
Organization
Address
City
State, Zip
Phone
Fax

Return to: Golf Course Expo
PO Box 997
Yarmouth ME 04096
or fax to 207-846-0657
**GCSAA continues new tack, joins RISE as associate member**

**By Hal Phillips**

LAWRENCE, Kan. — After three years of keeping its distance, the Golf Course Superintendents Association of America (GCSAA) has joined the specialty chemical trade organization RISE (Responsible Industry for a Sound Environment) as an associate member.

Under the regime of former Executive Director John Schilling, GCSAA had made a point of refusing membership in several allied organizations, including RISE, which was formed in 1991 by manufacturers, formulators and distributors of specialty chemical products. But GCSAA's about-face reaffirms its continued commitment to mend industry fences under the leadership of new Executive Director and Chief Executive Officer, Steve Mona.

"We get the same support from everyone else. Why shouldn't we reciprocate?" said Mona, who joined GCSAA in late 1993. "One of our mandates here was to restore the relationships with our allied organizations: RISE, the USGA, PGA, etc. This really goes to the heart of what we're trying to accomplish and become as an organization."

"When you look at RISE, you're looking at some of our larger advertisers and exhibitors. We're involved with environmental issues and so are they. This is the logical thing to do, and our board thought it was the right thing to do."

Mona explained that he will meet with RISE Executive Director Allen James sometime in July to "see things from their point of view."

Continued on page 64

---

**ISK Biotech now the American division of ISK Biosciences Inc.**

OSAKA, JAPAN — Ishihara Sangyo Kaisha (ISK) plans to strengthen its position in the world agricultural chemical industry by unifying the ISK agrochemical business under the global identity of ISK Biosciences, effective immediately.

In November 1990, Ishihara acquired ISK Biotech Corp. of the U.S.A. as a strategic step to increase its existing presence in the U.S. and Canada for the manufacturer's line of irrigation hardware and control systems. Shoup recently accepted the position as associate member of the organization, the ISK Biosciences Executive Committee has been formed at the ISK corporate office here to develop objectives, set policy, and provide strategic direction. The three divisions have the primary responsibility to manage the business strategically.

Continued on page 63
Kevin Pryseski of Cattail Creek Country Club in Glenwood, Md., has been awarded the Seed Research of Oregon 1993 "Golf Course Superintendent of the Year" award, presented annually to the superintendent who best displays a stewardship for the environment by incorporating imaginative management techniques with innovative problem solving.

Pryseski has been with Cattail Creek from the start of construction, working closely with architect Willard Byrd and Sam Kessel of Lea's Green Meadows.

The 6,624 yard Cattail Creek has Providence greens, Dominant creeping bentgrass blend fairways, Champion perennial ryegrass blend roughs, and Crusader turfgrass mixture far roughs.

The Seed Research of Oregon Advisory Committee met again this year during the 1994 GCSAA Show. Seed Research took the opportunity to introduce its newest members: Dennis Pellrene of the Capilano Golf Club in West Vancouver, British Columbia; Joe Voli of Chagrin Valley Country Club in Chagrin Falls, Ohio; and John Anderson of the Oregon Golf Club in West Linn, Ore.

Seed Research of Oregon is proud to announce their "Best 18 Green in North America" contest. The contest seeks to identify and honor the golf course superintendent with the best Providence, Dominant or SR1020 creeping bentgrass greens.

Seed Research will appoint a team of university and industry professional to judge the greens on the basis of color, density, texture, greens speed and overall health. Consideration will also be given to the age of the greens, the amount of play, maintenance budget and the region's climatic extremes. The winning golf course superintendent and distributor's sales representative will win an all expenses paid trip to the 1997 International Turfgrass Conference in Sydney, Australia.

Seed Research has also named Wyncote Country Club of Oxford, Pa., its "Golf Course of the Year" for 1993. For their hard work and dedication, architect Brian Ault — principle member of Ault, Clark and Associates — and golf course superintendent, Ken Pepple worked closely with the Sweeney Seed Company, of King of Prussia, Pa.

Wyncote — whose playing surfaces are entirely planted with Seed Research varieties — is a small slice of Scotland, set among the rolling hills of Pennsylvania's Amish Country. Wyncote was awarded third place in Golf Digest's Best New Courses of 1993.
Scots names new nat'l accounts manager

MARYSVILLE, Ohio — David J. Oberle of San Diego, Calif., has been promoted to the postion of national accounts manager, Golf Course Management Companies of The Scotts Company Professional Business Group (PBG). Oberle joined The Scotts Company in 1987 as a technical representative. His success in providing technical sales and service to clients throughout the Southern California area earned him a promotion first to senior technical representative, then to executive technical representative.

Oberle also has extensive golf course experience, having worked with the Somerset CC in Mendota Heights, Minn.; the Pine Hills CC in Sheboygan, Wis., and the Congressional CC in Bethesda, Md. A commercial liaison for the San Diego Superintendents Association.

Sandoz surveys pesticide applicators

Continued from page 1

Fifty-three percent of the superintendents surveyed said they didn't receive any complaints from the public, while 15 percent cited problems pertaining to odor.

course superintendents have at least an equal concern to those of the agricultural and lawn care communities," said Jeff Cook, Sandoz's business manager for Barricade. "Maybe more than anything, I would have expected the golf course industry to respond in a more cavalier way — and the reason I say that is, we know the superintendents are under a lot of pressure to do a better job with less money. But there is clearly a high level of professional concern."

Question: What is the most common complaint you hear from the public, your neighbors or customers relating to the use of pesticide products?

Fifty-three percent of the superintendents surveyed said they didn't receive any complaints, while 15 percent cited problems pertaining to odor. Nine percent of the golf course managers reported fielding complaints about worker safety, and 5 percent heard complaints regarding environmental safety.

More than 50 percent of all surveyed groups indicated they are dealing with more public concern over pest control and the environment, compared to five years ago. Farmers were the highest, at 80 percent.

Yet about half of the respondents in all groups said their personal level of concern associated with pest control has also increased over the past five years. According to Cook, these are disturbing trends the chemical industry cannot afford to ignore.

"Honestly, I think some people in the industry — competitors included — get nervous about surveys like these," said Cook. "Why? I'm not sure. In the agricultural community, it's more exposed. Every time an issue is raised, it's discussed publicly.

"In the golf course business, it seems to hit closer to home. Manufacturers don't want to be quite as open about the issues at hand. We thought long and hard about doing the study [and including superintendents], but we thought it was the right thing to do.

"These issues are not going to go away."

According to Max Larsen, executive vice president for Gallup in Lincoln, Neb.: "Respondents said that manufacturers and the government have primary responsibility to educate the public and fix safety and environmental problems.

"But they see themselves as partners in the process."

Question: Do people in your industry always, sometimes, not usually or never follow labels closely?

A full 93 percent of superintendents polled answered "always," the highest figure for any of the seven groups. Farmers were lowest at 68 percent.

Cook said it cost Sandoz approximately $100,000 to conduct the poll. A minimum of 100 superintendents were among the 2,050 pesticide applicators contacted via the telephone — by the Gallup Organization. For more information on the survey and information about obtaining a copy, call Sandoz at 708-699-1616.

PRESSES TO YOUR MAINTENANCE COSTS.

You already know that Primo can reduce your fairway mowings by up to one-third. But what you may not have considered, is how fewer mowings can mean more free time for your crew to work on other projects.

And it goes without saying that if you can get more done in less time, you save money. It's all possible with Primo for turf growth management.

Because Primo makes grass grow half as fast. And the cost of applying it is more than recouped by your lighter mowing schedule.

Contact your authorized Primo distributor or Ciba sales representative to learn more about how Primo can help you save time.

Because, as they say, time is money.

*CIRCLE #151*
LAHRCO ACQUIRES RIGHTS
IRRITURF, IRRISCAPE
CHARLESTON, S.C.—Lahrco
has acquired the exclusive U.S.
marketing rights to Irriturf and
Irriscape water quality systems
and has established its east coast
offices here. Irriturf — designed
for large scale irrigation purposes,
more specifically golf course irri-
gation — is a catalytic water con-
tioner composed of selected
metals and cast together in a spe-
cially configured core. The pro-
cess reduces the content of chlo-
ride, bicarbonate, boron, sodium,
and total dissolved solids.

Weinstein & Hategan join Florida Underground Tank

FT. LAUDERDALE, Fla. — Scott Weinstein
has been named director of business develop-
ment in charge of all marketing functions and
Marius Hategan has been appointed general su-
perintendent of Florida Underground Petroleum
Tank Contractors, Inc.

Weinstein, who brings to Florida Underground
an extensive and varied background in sales and
account development, is responsible for main-
taining and developing new and existing busi-
ness relationships for the company. Prior to join-
ing Florida underground, HE was a commercial
account manager for Enterprise Leasing in Mi-
ami, where he was responsible for the marketing
and development of businesses with sales in
excess of $1 million.

Hategan, a civil engineer, is responsible for
the implementation and supervision of environ-
mental system installation and groundwater ex-
traction/hydrocarbon contaminated soil treat-
ment systems. He also is involved with the planning,
execution and supervision of environmental
remediation projects. Hategan comes to Florida
Underground with an extensive background in
environmental engineering, with a concentration in
environmental remedial actions systems.

EVERY MORNING, THERE ARE
TWO THINGS YOU CAN COUNT ON:
THE SUN WILL COME UP. YOUR CARRYALL
WILL GO TO WORK. THAT'S RELIABILITY.
[ACCORDING TO A RECENT SURVEY OF GOLF COURSE
SUPERINTENDENTS, THE CARRYALL BY CLUB CAR IS THE
MOST RELIABLE LIGHTWEIGHT TURF UTILITY VEHICLE ON
THE MARKET.]1 AND NOW THAT OUR CARRYALL
II PLUS HAS A NEW, MORE POWERFUL
11-HP, 4-CYCLE ENGINE, IT CAN ONLY GET
BETTER. FOR PERFORMANCE, SERVICE,
AND SUPPORT, RELY ON CARRYALL. CALL
1-800-643-1010 AND DRIVE IT TO WORK.

Lake to handle Northeast for Medalist America

ALBANY, Ore. — Medalist
America has named Bob Lake the
new turf specialist for the New
England market. He will be
responsible for providing advice and
recommendations to turf profes-
sionals in the golf course market,
as well as expandable software packs.

Lake has been active in the New
England turf market since 1980,
having served as superintendent
at three area golf courses. He has
also been a Class A PGA golf pro-
fessional for 23 years.

In other Medalist news, Scott
Debolt has been named turf spe-
cialist serving distributors in the
five-state area of Alabama, Mis-
sissippi, Arkansas, Tennessee and
the Florida Panhandle.

Debolt's experience includes a
four-year stint with TIECO of
Nashville, Tenn., where he
handled outside sales of golf
course equipment, seed fertilizers,
chemicals and irrigation systems.

Reinecker returns to hydroseding

Neil Reinecker, formerly vice
president of Reinco, Inc., has re-
signed after 15 years at the manu-
facturing company to resume his
pursuits with Erosion Control
Technologies, Inc. The new com-
pany was founded by Reinecker
in 1991 with the introduction of
The Hydro Seed Cost Estimator,
an IBM-compatible software pack-
age designed for the hydro-seed-
ing professional who prefers to
keep hydroseeding job cost esti-
mates on a PC.

Erosion Control Tech will con-
tinue to market and support the
software and will expand its focus
to include sales of new and used
hydroseding and straw-blowing
machinery, fiber mulch, and the
company's new Tackifier.

The company is headquartered
in Branchburg, N.J. yet is able to
service the entire country with a
small-but-effective network of as-
sociates who, like Erosion Con-
trol Tech, specialize in
hydroseding and mulching
equipment, and supplies.

For further information please
call Neil Reinecker at 1-800-245-
0551.

ALLSUP JOINS ENVIRONMENTAL
WATERWAY MANAGEMENT
ORLANDO, Fla.—Martin
Allsup, who has more than 13
years of experience with aquatic
plant control and wetland mitig-
ation projects, has been named
the Orlando branch manager of
Environmental Waterway Man-
agement, Inc., a subsidiary of
AquaTerra, Inc. Allsup came to
Environmental Waterway from
Environmental Services, Inc. in
Jacksonville, where he had been a
project scientist supervising
lake management operations.
Questions aplenty regarding Golf Asia '95

Continued from page 59

Connex, who held separate shows last year.

The results – according to a show-side, "industry" – exhibitors were mixed. The general consensus decried the lack of traffic, though those in attendance seemed qualified and ready to buy.

"We were happy with the people who stopped at the booth," said Carla Holmquist, who represents the Toro Co. in Asia-Pacific. "There were a lot of good customers looking at actual packages. As far as the number of people, it wasn't a steady stream. Traffic was pretty light."

According to Corbin Reilly of G.M. Scott, which exhibited at both shows in 1993, "The traffic was a little bit less than in prior years, but better than last year. The first morning was slow and the last day was slow. But the other two days were quite busy."

"This is our fourth year at Golf Asia. It continues to be an integral part of our Asia-Pacific strategy."

Added Holmquist: "It was an excellent show for us. There was a lot of interest from China, Indonesia and Vietnam. We even got some interest from India, which surprised me... So overall, we were pleased with the show."

Will you be back next year?

"Yes," she said.

Will GCSSA? That's not clear.

The past six months have seen the superintendents' association pare its overseas commitments considerably: Closing its Singapore office, discontinuing its Spanish- and Japanese-language publications, and reducing the size of its education program here at Golf Asia M.

"We had a one-year agreement that went through this year's Golf Asia show," said Mona. "If we do go forward, we'll need a new agreement."

We have planned a meeting of the board for late May to discuss our role in Asia. GCSAA President Joe Baidy, Mona, and others will meet with many superintendents' organizations and U.S. expatriates during our stay in Singapore.

We have to make some decisions on information sharing in the future... Will GCSAA? That's not clear."

According to Holmquist, the trade show's less-than robust attendance should be considered when future schedules are drawn up.

"As trade people," she said, "we would rather they didn't hold sessions during the trade show. It's okay during the U.S. show because attendance is so massive, but you can't get away with it in Asia. The floor was dead during the sessions."

ISK Biosciences

Continued from page 59

ISK Biosciences will also continue to be the headquarters of the Asia-Pacific division. ISK has also established an ISK European headquarters in Brussels to manage the business activities of all ISK group agricultural chemicals and industrial chemicals products in Europe and Africa. With support from the Americas division, the office in Orpington, Kent, U.K., will continue to be the headquarters for the agricultural chemical business of Europe and Africa.

FROM TURF-SEED, INC.

BrightStar

When you check the National Trials and all the turf data, you'll find why we claim it's...

The Best Ryegrass Yet!

Why you'll want to specify BrightStar perennial ryegrass for your turf:

- High tiller density
- At the top of the National perennial ryegrass trials!

Extremely dark green BrightStar outlines all other perennial ryegrasses in this winter overseeding turfgrass trial.

BrightStar is used in blends and mixtures exclusively from Turf-Seed, Inc., such as Sonoran brand blend.

Marketed by:

TURFSEED

PO Box 250
Hubbard, OR 97032
1-800-247-6910
503-651-2130
FAX 503-651-2351

BrightStar is used in blends and mixtures exclusively from Turf-Seed, Inc., such as Sonoran brand blend.
Club Car names new CFO: reports first-quarter earnings

AUGUSTA, Ga. — Eric L. Tyra has been named vice president of finance and chief financial officer for Club Car, Inc.

Tyra comes to Club Car with more than 22 years of diverse accounting and financial experience, most recently at First Financial Management Corp., in Atlanta, where he served as vice president. He was previously a partner at Deloitte & Touche, an international accounting and consulting firm.

Tyra has succeeded Charles Goodwin, who retired recently after 15 years with Club Car.

Club Car has reported net sales of $54.5 million and $77.2 million for the three- and six-month periods ending March 27 — up 11.1 percent and 14.8 percent over prior year revenue periods for the same periods, according to Tyra.

Operating income for the second quarter was $8.6 million, up $800,000, or 10.9 percent over operating income of $7.8 million for the second quarter of 1993, Tyra reported. Operating income for the six months was $10.5 million, up $1.4 million, or 15.1 percent over operating income of $9.2 million for the same period of fiscal 1993.

Net income for the three months ended March 27, was $4.5 million, or $.48 per share, compared to net income of $2.7 million, or $.45 per share for the prior year, Tyra reported. For the six-month period ended in March, income before an extraordinary charge due to the early retirement of debt was $4.4 million, or $.49 per share, compared to net income of $1.4 million, or $.24 per share — an increase of 208.3 percent — for the first six months of fiscal 1993.

Including the extraordinary charge related to the early debt redemption, Club Car posted a reported net loss for the six-month period ended March 27 of $.5 million, or $.06 per share.

Tempest appoints new sales manager

FRESNO Calif. — Tempest has appointed William L. Vaughn national sales and marketing manager, according to President and Chief Executive Officer Dexter Coffman.

In addition, Coffman announced that Vice President Charles Willard will take on the responsibility of regional sales manager for the Eastern United States. Vaughn comes to Tempest with an extensive background in sales, having been Northwest district sales manager for Casis Inc. and Far West district sales manager for Sharp Electronics Corp. He was most recently vice president for PVA Inc.

He will work out of corporate headquarters here. Willard's area will encompass East of the Mississippi River.

Milliken names Blazon drawing winners

Milliken Chemical congratulates the winners of the drawing for a year's supply of Blazon, and wishes to thank everyone who visited the Blazon booth in Dallas. The winners of the Blazon drawing are:

Cherry Hill, N. J. — Ronald R. Dodson has joined Aquatrols as marketing manager, according to Aquatrols President Tracy Moore, who announced the move.

Dodson will work alongside Andy Moore, vice president of sales and marketing.

Dodson will also work with Aquatrols reps in the field to coordinate the company's marketing function with the needs of the golf course industry.

Aquatrols names new marketing head

CHERRY HILL, N. J. — Ronald R. Dodson has joined Aquatrols as marketing manager, according to Aquatrols President Tracy Moore, who announced the move.

Dodson will work alongside Andy Moore, vice president of sales and marketing.

Dodson will also work with Aquatrols reps in the field to coordinate the company's marketing function with the needs of the golf course industry.

Aquatrols names new marketing head

CHERRY HILL, N. J. — Ronald R. Dodson has joined Aquatrols as marketing manager, according to Aquatrols President Tracy Moore, who announced the move.

Dodson will work alongside Andy Moore, vice president of sales and marketing.

Dodson will also work with Aquatrols reps in the field to

TRUE-SURFACE™ VIBRATORY GREENS ROLLING SYSTEM

- Patented Vibrating Action
- Twice as fast as "sidewinders"
- Lightweight 55 lbs.
- Used PGA 1992 - Senior Skins 1994
- "Quick Attach" System Installs in Minutes
- Fits Toro, Jacobsen, Lesco & Bunton

TURFLINE, INC.
(800) 443-8506
Fax: (314) 441-8180
(Selected Distributionships Available)
**Miles introduces Merit insecticide**

The U.S. Environmental Protection Agency has approved registration of Merit insecticide on turf and ornamentals. The chemical compound, containing the new active ingredient imidacloprid, is manufactured and marketed by Miles Inc. Specialty Products. Merit is designed to control insects by ingestion and contact. Its novel mode of action involves post-synaptic blockage of the nicotinic acetylcholine receptor sites of the insect nerve. The insect’s nervous system is disrupted, resulting in death. Because of its low toxicity to mammals, birds and fish, Merit poses low risk to applicators and the environment. In turf, Merit controls white grub larvae, billbugs and annual bluegrass weevils.

**Merit 75 WSP's use rate of 0.3 pound active ingredient per acre is substantially lower than the two to eight pounds active ingredient per acre for currently registered soil insecticides used on turf.**

For more information, contact your local Miles field representative or call Miles toll-free at 1-800-842-8020.

---

**Introducing the First Complete Line of Potassium Nitrate-Based Turf Products.**

**Supported by Research**

You’ve read the studies. A desirable ratio of potassium and nitrogen makes stronger turf requiring less maintenance. You know this is a higher ratio of potassium to nitrogen than you’re applying now.

**Controlled-Release: the Key**

But what choice have you had? Controlled-release materials are the basis of advanced turfgrass fertility programs. And until recently, controlled-release potassium nitrate has not been available.

Now K-Power’s MultiCore® controlled-release coating allows you to apply the benefits of potassium nitrate-based fertilization across your entire program: Greens Grade, Fairways, even Combination products.

**K-Power® Builds Stronger Turf**

K-Power’s potassium helps turf plants better regulate water levels in their tissue and increase cell wall thickness. The plant is better able to resist temperature and drought stress as well as fungus and insect attacks. Without costly chemical treatments, Stiffer leaves support the golf ball for better shot-making. Even if you mow a little higher, Chippings are reduced because K-Power’s desirable ratio of potassium to nitrogen reduces the rate of leaf growth.

And the low salt index of chlorine-free K-Power potassium nitrate makes it one of the safest turf fertilizers available.

**Unique Formulas**

The Greens Grade line includes the only ammoniated homogenous products that combine the benefits of methylene urea and potassium nitrate. The Fairway Blends provide a unique 50:50 ratio of controlled-release nitrogen to controlled-release potassium. For the growth and green-up you need. When you need it.

**Trial Programs**

Contact your distributor for more information on K-Power and the world’s most perfect trial program. Or call us at 1-800-227-2798.

---

**Slimax**


---

**Latshaw hosts new training videos**

A new hands-on golf course superintendent’s video-based training series, designed to enhance staff training and management skills, is now available from Epic of Wisconsin. The tapes are presented by Paul Latshaw, recognized as an innovative superintendent for more than 30 years and successful host to three major U.S. tournaments. EPIC is a successful video production company with an expertise in landscape, equipment and turf-related videos.

The first two tapes, "Creating the Knowledgeable Operator," and "Greens Care Orientation and Tips," available immediately, will address basic equipment and mowing routines that every maintenance staff member should know. Training tapes will include written support materials and basic testing or performance assessment guidelines.

Superintendents interested in a free preview tape, can write or call EPIC at 2334 Stonebridge Circle, West Bend, WI 53095; or call 1-800-509-4230.
Golf Course Marketplace
To reserve space in this section, call Mary Anderson, 813-898-7077

ADVERTISING INFO.

1994 RATES

2X  6X  12X
Per col. inch:  $75.00  $65.00  $50.00
Add-on per 1/4":  $18.75  $16.25  $12.50
Logo incl. in ad:  $40.00  $40.00  $40.00

• Rates are per insertion.
• Minimum 2-time insertion.
• Prepayment is required.

Send prepayment & ad copy to:
GOLF COURSE NEWS
227 Second Ave. N.
St. Petersburg, FL 33701
(813) 898-7077
Fax (813) 825-0923

EM PLOYMENT OPPORTUNITIES

GOLF COURSE CONSTRUCTION
Project Managers, Shapers, Lay-out Special-ists needed at once. Must be willing to travel. Fax resume and date available to:

(616) 547-7009.

SALES POSITION OPEN

FLOWTRONEX PSI, Ltd., the world’s larg-est pump station manufacturer, seeks ag-gressive, highly motivated sales people to fill immediate openings for an inside sales position in our Dallas, Texas facility and one outside position for Northeast regional sales. Fax resume to Jana Coon at 214-357-1320 ext. 3018.

R E A L E S T A T E

GOLF COURSES WANTED
Southwest Golf is interested in purchasing or leasing golf courses.
Call Dick Campbell at (505) 989-0960

FOR SALE: DOUGLAS ROLLERS
21/2 inch grooved front and rear; totally rebuildable; 2 seasons old. Rebuilt once. Fits LF100 or Lesco 500 reels. $55.00 each includes shipping. Call-Terry Buchen at: (614) 548-6644.

TEXAS HILL COUNTRY

TEXAS GOLF PROPERTIES
512/442-7105
Fax: 512/442-1812

FOR SALE BUSINESS SERVICES

ATTENTION: GOLF COURSE OWNERS, OPERATORS, DEVELOPERS AND ARCHITECTS

Now you have the best available people at affordable prices. We will supply you the personnel for all aspects of golf course construction, turf grow-in, and on-site maintenance training with certified golf course superintendents anywhere in the world. We specialize in long and short term placement with full insurance coverage worldwide. Call or fax your project needs to:

Office: (714) 528-1185 ext. 27 or 45
Fax: (714) 524-7255
(714) 996-7005
(714) 996-9387

LASER MEASURING

LASER MEASURING and SPRINKLER YARDAGE MARKERS
We do it all. Laser measure & installation (same day) of custom metal yardage markers for all types of sprinkler heads. Warranty included. Also tee to green measurements, granite fairway markers. Sprinkler yardage markers may be purchased separately. Contact Nick for samples & references. Fairway Yardage Designs, 800-36-TAGIT. (368-2448)

CLASSIFIED ORDER FORM

HOW TO ORDER A CLASSIFIED AD

RATES: $75.00 per column inch (25-35 words, including a bold head-line). Each additional 1/4 inch is $18.75. If ordering a logo, please indicate and include an extra $40.00; for a blind box, please indicate and include an extra $15.00. All line ads must be prepaid. All rates are per insertion. For more information, call Mary Anderson at (813) 898-7077.

To place your classified ad, mail this form with enclosed payment to:

Golf Course News
227 Second Ave. N.
St. Petersburg, FL 33701
or fax to: (813) 825-0923

Your Name
Company Name
Address
City
State
Zip
Daytime Phone

Please attach separate sheet of paper if extra space is needed.

Payment enclosed, or
Charge to my credit card
• Visa
• Exp. date
• MC
• Exp. date
• Am Ex
• Exp. date

LOGO
Blind Box

GOLF COURSE NEWS

INSIDE INFO

Get the jump on your competition by sub-scribing to the Golf Course News Development Letter which tracks golf course projects under consideration across the nation. This twice-monthly newsletter is packed with news items detailing where and when projects will be undertaken, and by whom. Just $195 for a year’s subscrip-tion. For more information, contact Editor Peter Blais at 207-846-2295, ext.239.

CLASSIFIED ORDER FORM

FOR SALE: DOUGLAS ROLLERS
21/2 inch grooved front and rear; totally rebuildable; 2 seasons old. Rebuilt once. Fits LF100 or Lesco 500 reels. $55.00 each includes shipping. Call-Terry Buchen at: (614) 548-6644.
CALENDAR

May
25 — Kansas Golf Association Green Conference in Manhattan. Contact 913-842-4833.

June
4 — Modern Arboriculture Workshop on A Systems Approach to Practical Tree Care in Nebraska City, Neb. Contact the National Arbor Day Foundation at 402-474-5665.
8 — Lofthouse Field Day in Wilmington, Ohio. Contact David Goodwin at 800-328-1127.
10 — Lofthouse Field Day in Beltsville, Md. Contact John Patton at 800-732-3322.

July

August
16 — Wisconsin Turfgrass Field Day in Madison. Contact Dr. Frank Ross at 608-262-1490.

October
29-Nov. 2 — Georgia GCSA Annual Meeting in Savannah. Contact Karen White at 706-769-4076.

November
8-11 — Turf & Grounds Exposition in Rochester, N.Y. Contact 800-873-TURF.
10-12 — Golf Course Expo in Orlando, Fla. Contact the Golf Course News Conference Group at 207-846-0600.
13-15 — 28th Annual Carolinas GCSA Conference and Show in Myrtle Beach, S.C. Contact 800-476-GCSA.

* For more information contact the GCSAA Education Office at 800-472-7878 or 913-841-2240.

Golf Course Marketplace

To reserve space in this section, call Mary Anderson, 813-898-7077

Laminated Wood Pedestrian & Vehicular BRIDGES & SHELTERS
Order Direct From The Leading Manufacturer in U.S.
• Custom Fabricated Packages
• Ready for Fast Erection
• Direct Distribution Throughout the U.S.

CALL 1-800-777-UNIT
Morrisville, NC 27560
Tel. 919/467-6151
FAX 919/469-2536

CIRCLE #170
CIRCLE #172
CIRCLE #173
CIRCLE #174
CIRCLE #175
CIRCLE #176

Your Water As Nature Intended it.
EP AERATION

THE LEADER IN SUB SURFACE ACTIVATED OXYGEN AERATION SYSTEMS

Low Cost: Proven Technology:
• Installation • Reduces dependence on chemicals
• Operation • Inhibits algae growth

Call: 805-541-6140
Fax: 805-541-6149
2615 MEADOW • SAN LUIS OBISPO, CA 93401

CIRCLE #171
CIRCLE #177
CIRCLE #178
CIRCLE #179
CIRCLE #180

Keep Your Divot Seed Mixture Where It Is Used ...

... in Divot Seed & Sod tee buckets next to the tee markers.
Available in Cedar or Redwood slats with companion
Trash 'n' Debris buckets.

Ask Your Golf Course Distributor for
INNOVATIVE MAINTENANCE PRODUCTS

From Master of the Links

P.O. Box 283, Lockport, IL 60441-0283
(815) 723-4444 • Fax (815) 723-4485

CIRCLE #175
CIRCLE #176

May 1994 67
Asia-Pacific market short of managers

By PETER BLAIS

SINGAPORE—Club managers are looking forward to the second two-week hospitality management program conducted jointly by the National University of Singapore and America's Cornell University School of Hotel Administration. This year's program will run from June 5-17 at the Kent Ridge Campus in Singapore. Plans are to eventually expand the program to two, 14-day sessions that would run back-to-back over a one-month period.

Last year's 14-day session drew 45 students from throughout Asia. While not geared specifically to golf clubs, the program attracted many students who worked at country clubs or resorts with golf operations, according to Cornell Professor Leo Renaghan, one of the program organizers.

The Executive Program in Hospitality Management could help club managers better manage costs and develop ways to attract new customers, Renaghan said. All faculty have taught senior level executives.

"As the leading hospitality school in the world, we want to be where the action is," Renaghan said. "We believe that will be in Asia over the next 10 to 15 years."

Three thoughts:
- More than the U.S. market, this region really needs a good exhibition and conference to help manage the staggering growth.
- For American manufacturers who can establish distribution networks quickly, a killing can still be made here.
- So many courses went up so quickly — and shoddily — from 1988 to 1992, the renovation market will boom before long.

Asia-Pacific market

Continued from page 14

the business being done in the Asia-Pacific region. Japan's sagging economy has not affected development in the region, as backing aplenty has emerged from Taiwan, Singapore, Thailand and Hong Kong. Everyone seems determined to build a real-estate-based golf complex in the People's Republic of China, while Malaysia and Indonesia remain the hottest overall development markets.

Last year, Vietnam was the new frontier. But after 12 months of feverish development activity, it's almost passe. India is the new hot market, with dozens of projects in planning around the southern coastal cities of Bombay, Goa, Bangalore and Madras.

Three thoughts:
- More than the U.S. market, this region really needs a good exhibition and conference to help manage the staggering growth.
- For American manufacturers who can establish distribution networks quickly, a killing can still be made here.
- So many courses went up so quickly — and shoddily — from 1988 to 1992, the renovation market will boom before long.
Form most Construction Co.
Serving the nation for over 30 years.

IRREGATION SPECIALISTS
"Doing One Thing Well"

P.O. BOX 900
TEMECULA, CALIFORNIA 92593

(909) 698-7270
FAX (909) 698-6170

STATE LIC. #267960

CIRCLE #185

850 ACRES CERTIFIED SOD AND SPRINGS (Zoysia, TIF Bermudas, Centipede)

Big Roll Sod, Row Planting, Sprigging, Sodding, Renovations
Complete Turnkey Operations

18 YEARS EXPERIENCE IN GOLF COURSE WORK

Many References • 24 Hour Sod Delivery

1-800-458-4756
DOUBLE SPRINGS GRASS FARM
SEARCY, ARKANSAS

CIRCLE #187

TRIMS gives you more for your money!
TRIMS gives you more benefits and offers you more features than all other grounds management software packages combined! Don’t settle for an imitation.

You’ve always wanted TRIMS! Why Wait?
Call for your free Demo Disk:
TRIMS Software International
6220 East Thomas Road, Suite 303
Scottsdale, AZ 85251
(800) 608-7467

Indicate 5IV or 3IV diskette

CIRCLE #189

POND & LAKE LINERS
- Buy Direct from fabricator 20, 30, 40 mil
- PVC, Hypalon, HDPE, & VLDPE.
- Custom fabricated panels of up to 25,000 S.F. available.
- Material Only, Material & Supervision, or Complete Installation service.

1-800-524-8672
Colorado Lining Company, 1062 Singing Hills Road, Parker, CO 80134. 303-841-2022 Fax 303-841-5780

CIRCLE #190

ENGRAVED YARDAGE LABELS
- Bright colors • Fasteners included
- Orders quickly shipped UPS

NEW ITEM... “THE SOLUTION”
For Areas Without Sprinklers.
Put Your Message Plus Yardage Anywhere.

THE YARD EDGE GOLF CO.
P.O. Box 13159
Wichita, KS 67213

1-800-284-YARD (9273)

CIRCLE #191

SAFE GUARD YOUR INVESTMENTS

• Reduce still buildup on greens
• Reduce clogged irrigation heads & valves
• Reduce damage to pump equipment
• Reduce the need for dredging
• Eliminate clogged pump intakes

RISE ABOVE THE PROBLEM WITH

Float-N-Screen®
Fascinator®

Manufactured By:
Greenscape Pump Services, Inc., 556 Coppell Road, Coppell Texas 75019
Ph: (214) 393-0346 Fax: (214) 393-2337

CIRCLE #188

TRIMS Software International
6220 East Thomas Road, Suite 303
Scottsdale, AZ 85251
(800) 608-7467

Indicate 5IV or 3IV diskette

CIRCLE #189

Golf Course Bridges!
1-800-328-2047

CIRCLE #190

CIRCLE #188

ENGRAVED YARDAGE LABELS
- Bright colors • Fasteners included
- Orders quickly shipped UPS

NEW ITEM... “THE SOLUTION”
For Areas Without Sprinklers.
Put Your Message Plus Yardage Anywhere.

THE YARD EDGE GOLF CO.
P.O. Box 13159
Wichita, KS 67213

1-800-284-YARD (9273)

CIRCLE #191

ADVERTISERS' INDEX

158 A.S.I. ........................................... Page 70
159 Aerification Industries International ... 49
160 Airfield Aerification ........................ 42
161 Amatec ........................................... 15
162 The Andersens ................................... 70
163 Applied Biochemists .......................... 24
164 Aquamaster ....................................... 33
165 Aquatrols ......................................... 56
166 B.h. Sales .......................................... 50
167 BASF ................................................. 9
168 Becker Underwood ............................. 34
169 C-LOC Rentention Systems, Inc. ....... 3
170 Cedar Chemical __________________________ 65
171 Ciba-Geigy ....................................... 4-5
172 Ciba-Geigy ....................................... 28
173 Ciba-Geigy ....................................... 66-67
174 Club Car ........................................... 62
175 Colorado Lining Co. ............................ 69
176 Contech Construction Products ......... 68
177 Continental Bridge ................................ 69
178 Cushman-Jansome America Corp-47 .... 137
179 Double Springs Grass Farm ............... 69
180 E.P. Aeriation ..................................... 67
181 Enviro-Rep ........................................ 68
182 Environmental Compliance Systems .... 68
183 Environmental Products ..................... 48
184 Environmental Protection, Inc. .......... 3
185 Epic of Wisconsin .............................. 68
186 Flowtronex/FSI ................................... 36
187 Fox Par ................................. 44-49
188 Formost Construction Co. ............... 69
189 Golf Course Expo ............................... 58
190 Greenscape Pump Services ............... 69
191 Jacklin Seed Co. ................................. 26-21
192 Jacklin Seed Co. ................................. 27
193 Jacobsen ........................................... 72
194 Jesco Products/Plainview .................... 68
195 John Deere ....................................... 10-11
196 JPJ Distributors ................................... 68
197 Kilo ............................................... 71
198 Kenco Marine, Inc. ............................. 48
199 Kirby Markers ................................... 64
200 Lebanon Turf Products .................... 25
201 Master of the Links ............................. 67
202 Miles Inc. ....................................... 54-55
203 Milliganite ....................................... 22
204 Otebrue/Barebo ................................. 32
205 Par Aide ........................................... 57
206 Parpac ............................................. 24
207 Pastaoc Bros. Construction ............... 67
208 Pfi/Gordon Corporation ....................... 2
209 Pennington Seed Company .................. 25
210 Precision Labs .................................... 51
211 Precision Small Engine ....................... 68
212 Precision Tool Prod. Co. ..................... 67
213 Precision Tool Prod. Co. ..................... 67
214 Quail Valley Turf Farm ....................... 67
215 Regal Chemical .................................. 18
216 Regal Chemical .................................. 35
217 Regal Chemical .................................. 19
218 Regal Chemical .................................. 51
219 Rhoos/Poudenc ................................ 12-13
220 Rohn & Haus ...................................... 44-45
221 The Scott Co. .................................... 39
222 The Scott Co. .................................... 41
223 The Scott Co. .................................... 16
224 Seed Research of Oregon .................. 30-31
225 Smithco .......................................... 19
226 Southern Corp. Promo ......................... 42
227 Standard Golf ..................................... 53
228 Syncoflo .......................................... 40
229 Tec-2-Green ...................................... 8
230 Tens-Corr/Prod. Div. ......................... 6-7
231 Tens-Corr/Prod. Div. ......................... 6-7
232 Trims International Software ............. 69
233 Turf Seed ......................................... 63
234 Turfline, Inc. ..................................... 64
235 Unit Structures .................................... 67
236 Verti-Drain/Enrex .............................. 43
237 Watersaver ....................................... 38
238 Yard Edge ......................................... 69
239 York Bridge Concepts ......................... 68

CIRCLE #185

CIRCLE #186

CIRCLE #190

CIRCLE #191

CIRCLE #192

GOLF COURSE NEWS
May 1994 69
The 1993 Public Achievement Awards

As awarded by the National Golf Foundation

Arizona

يلة لعبة للكمبيوتر

The Andersons' Tee Time with NUTRALENE formulations incorporate the industry's ideal nutrient source together with advanced, small particle fertilizer. In these or other fertilizer formulas you may select, NUTRALENE works two ways. You get an initial release of nitrogen followed up with a slow, controlled-release that can feed up to 16 weeks. You get it green and it stays green longer.

Tee Time Fertilizers with NUTRALENE: Uniformly the best in the business.

1-800-225-ANDY

The Andersons' Tee Time with NUTRALENE formulations incorporate the industry's ideal nutrient source together with advanced, small particle fertilizer. In these or other fertilizer formulas you may select, NUTRALENE works two ways. You get an initial release of nitrogen followed up with a slow, controlled-release that can feed up to 16 weeks. You get it green and it stays green longer.

Tee Time Fertilizers with NUTRALENE: Uniformly the best in the business.

1-800-225-ANDY

The Andersons' Tee Time with NUTRALENE formulations incorporate the industry's ideal nutrient source together with advanced, small particle fertilizer. In these or other fertilizer formulas you may select, NUTRALENE works two ways. You get an initial release of nitrogen followed up with a slow, controlled-release that can feed up to 16 weeks. You get it green and it stays green longer.

Tee Time Fertilizers with NUTRALENE: Uniformly the best in the business.

1-800-225-ANDY

The Andersons' Tee Time with NUTRALENE formulations incorporate the industry's ideal nutrient source together with advanced, small particle fertilizer. In these or other fertilizer formulas you may select, NUTRALENE works two ways. You get an initial release of nitrogen followed up with a slow, controlled-release that can feed up to 16 weeks. You get it green and it stays green longer.

Tee Time Fertilizers with NUTRALENE: Uniformly the best in the business.

1-800-225-ANDY

The Andersons' Tee Time with NUTRALENE formulations incorporate the industry's ideal nutrient source together with advanced, small particle fertilizer. In these or other fertilizer formulas you may select, NUTRALENE works two ways. You get an initial release of nitrogen followed up with a slow, controlled-release that can feed up to 16 weeks. You get it green and it stays green longer.

Tee Time Fertilizers with NUTRALENE: Uniformly the best in the business.

1-800-225-ANDY

The Andersons' Tee Time with NUTRALENE formulations incorporate the industry's ideal nutrient source together with advanced, small particle fertilizer. In these or other fertilizer formulas you may select, NUTRALENE works two ways. You get an initial release of nitrogen followed up with a slow, controlled-release that can feed up to 16 weeks. You get it green and it stays green longer.

Tee Time Fertilizers with NUTRALENE: Uniformly the best in the business.

1-800-225-ANDY

The Andersons' Tee Time with NUTRALENE formulations incorporate the industry's ideal nutrient source together with advanced, small particle fertilizer. In these or other fertilizer formulas you may select, NUTRALENE works two ways. You get an initial release of nitrogen followed up with a slow, controlled-release that can feed up to 16 weeks. You get it green and it stays green longer.

Tee Time Fertilizers with NUTRALENE: Uniformly the best in the business.

1-800-225-ANDY

The Andersons' Tee Time with NUTRALENE formulations incorporate the industry's ideal nutrient source together with advanced, small particle fertilizer. In these or other fertilizer formulas you may select, NUTRALENE works two ways. You get an initial release of nitrogen followed up with a slow, controlled-release that can feed up to 16 weeks. You get it green and it stays green longer.

Tee Time Fertilizers with NUTRALENE: Uniformly the best in the business.

1-800-225-ANDY

The Andersons' Tee Time with NUTRALENE formulations incorporate the industry's ideal nutrient source together with advanced, small particle fertilizer. In these or other fertilizer formulas you may select, NUTRALENE works two ways. You get an initial release of nitrogen followed up with a slow, controlled-release that can feed up to 16 weeks. You get it green and it stays green longer.

Tee Time Fertilizers with NUTRALENE: Uniformly the best in the business.

1-800-225-ANDY

The Andersons' Tee Time with NUTRALENE formulations incorporate the industry's ideal nutrient source together with advanced, small particle fertilizer. In these or other fertilizer formulas you may select, NUTRALENE works two ways. You get an initial release of nitrogen followed up with a slow, controlled-release that can feed up to 16 weeks. You get it green and it stays green longer.

Tee Time Fertilizers with NUTRALENE: Uniformly the best in the business.

1-800-225-ANDY

The Andersons' Tee Time with NUTRALENE formulations incorporate the industry's ideal nutrient source together with advanced, small particle fertilizer. In these or other fertilizer formulas you may select, NUTRALENE works two ways. You get an initial release of nitrogen followed up with a slow, controlled-release that can feed up to 16 weeks. You get it green and it stays green longer.

Tee Time Fertilizers with NUTRALENE: Uniformly the best in the business.

1-800-225-ANDY

The Andersons' Tee Time with NUTRALENE formulations incorporate the industry's ideal nutrient source together with advanced, small particle fertilizer. In these or other fertilizer formulas you may select, NUTRALENE works two ways. You get an initial release of nitrogen followed up with a slow, controlled-release that can feed up to 16 weeks. You get it green and it stays green longer.

Tee Time Fertilizers with NUTRALENE: Uniformly the best in the business.

1-800-225-ANDY

The Andersons' Tee Time with NUTRALENE formulations incorporate the industry's ideal nutrient source together with advanced, small particle fertilizer. In these or other fertilizer formulas you may select, NUTRALENE works two ways. You get an initial release of nitrogen followed up with a slow, controlled-release that can feed up to 16 weeks. You get it green and it stays green longer.

Tee Time Fertilizers with NUTRALENE: Uniformly the best in the business.

1-800-225-ANDY

The Andersons' Tee Time with NUTRALENE formulations incorporate the industry's ideal nutrient source together with advanced, small particle fertilizer. In these or other fertilizer formulas you may select, NUTRALENE works two ways. You get an initial release of nitrogen followed up with a slow, controlled-release that can feed up to 16 weeks. You get it green and it stays green longer.

Tee Time Fertilizers with NUTRALENE: Uniformly the best in the business.

1-800-225-ANDY

The Andersons' Tee Time with NUTRALENE formulations incorporate the industry's ideal nutrient source together with advanced, small particle fertilizer. In these or other fertilizer formulas you may select, NUTRALENE works two ways. You get an initial release of nitrogen followed up with a slow, controlled-release that can feed up to 16 weeks. You get it green and it stays green longer.

Tee Time Fertilizers with NUTRALENE: Uniformly the best in the business.

1-800-225-ANDY

The Andersons' Tee Time with NUTRALENE formulations incorporate the industry's ideal nutrient source together with advanced, small particle fertilizer. In these or other fertilizer formulas you may select, NUTRALENE works two ways. You get an initial release of nitrogen followed up with a slow, controlled-release that can feed up to 16 weeks. You get it green and it stays green longer.

Tee Time Fertilizers with NUTRALENE: Uniformly the best in the business.

1-800-225-ANDY

The Andersons' Tee Time with NUTRALENE formulations incorporate the industry's ideal nutrient source together with advanced, small particle fertilizer. In these or other fertilizer formulas you may select, NUTRALENE works two ways. You get an initial release of nitrogen followed up with a slow, controlled-release that can feed up to 16 weeks. You get it green and it stays green longer.

Tee Time Fertilizers with NUTRALENE: Uniformly the best in the business.

1-800-225-ANDY

The Andersons' Tee Time with NUTRALENE formulations incorporate the industry's ideal nutrient source together with advanced, small particle fertilizer. In these or other fertilizer formulas you may select, NUTRALENE works two ways. You get an initial release of nitrogen followed up with a slow, controlled-release that can feed up to 16 weeks. You get it green and it stays green longer.

Tee Time Fertilizers with NUTRALENE: Uniformly the best in the business.

1-800-225-ANDY

The Andersons' Tee Time with NUTRALENE formulations incorporate the industry's ideal nutrient source together with advanced, small particle fertilizer. In these or other fertilizer formulas you may select, NUTRALENE works two ways. You get an initial release of nitrogen followed up with a slow, controlled-release that can feed up to 16 weeks. You get it green and it stays green longer.

Tee Time Fertilizers with NUTRALENE: Uniformly the best in the business.

1-800-225-ANDY

The Andersons' Tee Time with NUTRALENE formulations incorporate the industry's ideal nutrient source together with advanced, small particle fertilizer. In these or other fertilizer formulas you may select, NUTRALENE works two ways. You get an initial release of nitrogen followed up with a slow, controlled-release that can feed up to 16 weeks. You get it green and it stays green longer.

Tee Time Fertilizers with NUTRALENE: Uniformly the best in the business.
Advanced Applicator is a Cost-Effective Solution for Spot Treatment.

The Pro-Ap is the only hose-end, liquid siphoning applicator specifically designed for golf course use. The refillable Pro-Ap container holds one quart of Hydro-Wet RTA, the "Ready-To-Apply" wetting agent formulations. Hydro-Wet RTA alters water’s behavior while interacting with water repellent surfaces found in the soil. The superior ingredients in Hydro-Wet RTA are attracted to organic soil coatings known to produce hydrophobic conditions. The result is increased water infiltration, absorption, and reduced severity of localized dry spot. The Pro-Ap makes accuracy easy. Its adjustable metering dial lets the applicator choose nine additive settings or syringe only. And there’s no need to water-in because the Pro-Ap’s needle valve meters just the right amount of Hydro-Wet into the water flow.

For more information on the Pro-Ap application system, circle the number below, or call Kalo, Inc, toll-free: 1-800-255-5196.

CIRCLE #160

Simple Test Identifies Hydrophobic Soils.

It is nearly impossible to visually identify hydrophobic soils, but there are several simple tests for determining their presence. The following was included in a 1989 article by Keith Karnok and Kevin Tucker of the University of Georgia.

“...simply involves the placement of small drops of water along the length of intact soil cores at 1/2 inch intervals. The length of time (seconds required for the droplet to penetrate into the core) is recorded. Penetration times greater than 10 to 15 seconds usually indicate a hydrophobic condition.” (The average water droplet penetration times from healthy areas is usually less than 3 seconds.)

Golf Course Management, August 1989.

CIRCLE #161

Getting the Drop on Localized Dry Spot.

In mid-summer, golf courses turn into battle grounds as superintendents fight to maintain those lush fairways and greens. The battle heats up even more when you have to deal with increased traffic, changing attitudes toward the use of chemicals and restrictions on water use.

One of the scars of this battle is localized dry spot (LDS). What is most perplexing is that LDS symptoms may occur even after normal irrigation.1

LDS is most prevalent on greens built mainly of sand and established to bentgrass. It’s caused by fungi which leave a non-organic coating on sand particles. Once soil moisture levels begin to decrease, water runs off the turf, leaving the soil dry and powdery. This hydrophobic condition makes rewetting difficult. If left untreated, LDS can result in turfgrass death.2

Short and long term management practices to minimize the severity of localized dry spots include: syringing, coring and the use of wetting agents.2 Wetting agents can reduce LDS by improving the ability of water to bond with these sand and soil particles. They can also increase the wettability of thatch.3 Preventive applications give the best results, but curative applications can also be effective.


CIRCLE #162

Call Kalo now at 1-800-255-5196 to find out how you can qualify for a free Pro-Ap applicator with the purchase of Hydro-Wet RTA.

Hydro-Wet®
Keeps Water In Its Place.

KALO Kalo, Inc. 4550 W. 109th Street Overland Park, KS 66211

*$89.95 commercial value. Subject to distributor participation.
Jacobsen exclusives help deliver a smooth as silk cut. In head-to-head comparisons, the LF-100 delivered superior fairway mowing, in all kinds of grasses.

Our exclusive heavy-section, 22" reels, combined with our unique, dual-spring down pressure system, follow ground contours closely for a smooth mani-cured cut. Even at production mowing speeds of more than 5 mph.

**Lightest footprint.**
The LF-100 has the lightest footprint in the industry for minimal compaction even on the softest fairways.

Yet it's heavy on quality features. Including a durable, high efficiency diesel engine. Rugged, field-proven chassis with heavy-duty lift arms. High capacity catchers. Plus, "on demand" 4WD, exclusive Turf Groomer® fairway conditioners and vertical mowers are available.

**All-new GreenSentry™ helps you maintain a spotless reputation.**
Our new oil leak detector option —GreenSentry— helps prevent nasty little oil leaks from staining your reputation in a big way. There simply is no better way to ensure one flawless swing after another on fairways. Contact a Jacobsen distributor today and prove it to yourself with a demonstration.

THE PROFESSIONAL'S CHOICE ON TURF.

Jacobsen Division of Textron Inc.