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The fact is, Central Florida Turf is working hard to provide you with superior workmanship in construction of new golf facilities, irrigation with all turf installations or renovation of existing golf courses ... and all at a competitive price!

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USGA specifications and will be restored to their original contours.

**Architect revises booklet on greens construction**

“More than 70 percent of all greens today have been improperly built, or otherwise fail to meet modern scientific standards conducive to promoting growth while reducing physical and physiological stress,” says Dr. Michael Hurdzan, a former superintendent and past president of the American Society of Golf Course Architects.

In his revised version of the 24-page pamphlet, “The Evolution of the Modern Green,” Hurdzan points out that to further complicate matters, each green has its own requirements involving such factors as orientation to the sun, air, drainage, shade and wind, and swings in temperature and relative humidity.

“The net result,” Hurdzan concludes, “is that today’s golf course superinten-
dent has 18 different 'babies,' each one having its own strengths and weaknesses, and all of them being susceptible at any given time to devastation resulting from weather, disease, insects, vandals, weeds, equipment failure or operator error, miscalculation or player abuse.”

The quest for faster greens has resulted in a situation in which more of today’s greens are being stressed beyond their genetic capacity to heal themselves.

However, he believes space-age technology will help win the battle. “Today’s greens are the product of such disciplines as agronomic chemistry, soil physics, genetics and play physiology — disciplines that were far removed from the art of turfgrass management until the last 30 years or so,” Hurdzan says.

Even at world-famous courses, the greens may be perfect only for a very short period, and then only with great expenditures of time, money and manpower, he adds.

“Therefore, greens should not be compared. Good greens are expected... great greens should be appreciated... and perfect greens should be cherished. For they are as fragile and changeable as life itself,” he says.

Hurdzan’s booklet reviews the historical development of the putting green, including the dominant methods of construction and the carefully prescribed procedures for building them, as well as the proper care and maintenance of both new and mature greens. It is available for $5 from the American Society of Golf Course Architects, 221 N. LaSalle St., Chicago, IL 60601.

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THE FLORIDA GREEN / WINTER 1990
Recent studies show Chipco® Ronstar® G works without root pruning.

We say judge for yourself.

Let's face it, the last thing you need from a turf herbicide is root damage. That's why so many golf course superintendents are making CHIPCO® RONSTAR® brand G herbicide their first choice for broad-spectrum weed control. Root pull studies conducted at a leading university show that CHIPCO® RONSTAR® G herbicide works without pruning turf roots. That's important, because healthier roots mean stronger, more durable turf. Turf that stands up better to stress.

Best of all, just one pre-emergence application of CHIPCO® RONSTAR® G provides season-long control of 25 tough broadleaf and grassy weeds—including goosegrass and crabgrass. You'll also appreciate the fact that CHIPCO® RONSTAR® G won't leach out or move laterally through the soil. And it's labeled for use on a wide variety of ornamentals. So you can apply it to ornamental plantings at the same time you do your turf. You'll get up to 120 days of weed-free control. Plus CHIPCO® RONSTAR® is also available as a wettable powder and in granular fertilizer formulations under well known brand names. So judge for yourself. You'll discover why CHIPCO® RONSTAR® is the number one turf herbicide on the course today.

Chipco Ronstar® G
Brand Herbicide

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Algae! Now you And save thousands in maintenance

THE WAR AGAINST ALGAE AND POOR WATER QUALITY.
It's costing U.S. golf courses tens of millions in maintenance dollars and man hours each year. The problems go far beyond algae-filled ponds and unpleasant odors. Algae attacks your entire irrigation system. From pump house to sprinkler heads. Clogging filters, valves and screens. Choking irrigation lines. And fouling sprinklers.

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The clean water aeration system designed specifically for golf courses. It gets your irrigation ponds, lakes and water hazards clean and clear. Fast. And keeps them that way. AIRE-O<sub>2</sub> Golfwater is simple, safe, and virtually maintenance free.

- Eliminates the need to use chemicals.
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- Reduces monthly maintenance costs.
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Aeration Industries. A world leader in clean water technology with over 15 years of proven expertise. From municipal and industrial wastewater treatment, to clean-up of lakes, rivers and harbors, to high yield aquaculture.
"THANKS TO AERATION INDUSTRIES AND AIRE-O₂ GOLFWATER, WE'RE WINNING THE WAR."

Dan Jones, C.G.C.S., Manager
Banyan Golf Club
West Palm Beach, Florida

"We've eliminated our algae problems... without the use of chemicals... and for the first time in the ten years that I've been here, our irrigation system is working the way it was designed to. In fact, we haven't had a clogged Clay valve or a blown irrigation pipe since we installed the AIRE-O₂ system.

Now my ponds are clean and clear. And my maintenance crews are free to work on the golf course instead of fighting algae problems... I'm also winning lots of compliments from our members."

To find out how AIRE-O₂ Golfwater can help you win the war, contact your local irrigation distributor, or call Aeration Industries at 1-800-543-4475.

AIRE-O₂ Golfwater.
The environmentally safe way to clean and clear water. Beautifully. And within your maintenance budget.
Eventually, everything and everyone in golf comes to Florida.
And if they don’t stay, at least they leave their money.

Golf is such a big part of Florida’s economic picture that its Department of Commerce commissioned a study by the National Golf Foundation.

The finding: Golf is a $5 billion industry in Florida, fully 20 percent of the gross national golf product.

Of that $5 billion, less than $400,000 is spent on equipment. The rest is on real estate, green fees, golf course construction and golf-related travel.

Nobody knows for sure exactly how many golf courses Florida has because we’re building them as fast as they can pass cut the permits, sometimes faster.

As of Jan. 1, 1989, the NGF had counted 932 courses open for play in Florida. The 1990 data, scheduled for release in mid-to-late February, should show about 50 more. Another 89 were under construction or on the drawing boards as of Dec. 15, 1989 (See page 74).

More than 200 touring professionals call Florida home and, now that the LPGA has decided to give new meaning to Daytona Beach’s old slogan “Where the girls are,” that number is likely to climb significantly.

If Daytona Beach is where the girls are, Palm Beach is where the golf is. This one county of about 2,000 square miles and fewer than 700,000 inhabitants at the northern end of the Gold Coast supports more than 125 golf courses, all but half a dozen of them in the county’s 500 square miles that are within 15 miles of the Atlantic Ocean.

If Palm Beach County were a state, it would have ranked 35th in the number of golf courses at the end of 1988, between Maine (116) and Maryland (143). By the time the 1989 data are published, it’s entirely possible for Palm Beach County to have passed Maryland and a few other states.

Palm Beach County is home to the PGA of America (which has located two and a half of its 43 sections, or chapters, in Florida), the National Golf Foundation, the Golf Course Builders Association and a handful of the world’s greatest golf course architects, including one of the most prolific (page 65).

It is also home to Florida’s oldest famous golf course, Donald Ross’s Seminole.

It’s not easy to build a great golf course in Florida, but the state has one of the largest and most varied collections of outstanding golf courses in the world (page 28).

The land is flat and generally uninteresting, the sandy soil won’t hold water, which is in short supply (page 22), and the delicate ecosystem already is supporting more people than nature intended. In other words, the environmental laws are tough.

The one thing Florida golf developers have in their favor is OPM — Other People’s Money or Older People’s Money, take your pick. Florida has lots and lots of that.

The state ranks seventh in total number of golfers and 22nd in participation — only 9.9 percent of the residents play golf — but first in senior golfers. And nobody else is in the Top Ten.

By themselves, Florida golfers raise the national average age of golfers by two years.

And when some very talented architects go digging after all that OPM buried in Florida’s sand, it is amazing what spectacular golf courses are created by the spoils.

In most parts of the world, exclusive country club real estate is advertised by word of mouth and sold in mahogany-paneled offices.

(Continues on page 24)
Sawgrass
Ponte Vedra, FL
32082
904-285-3700
Headquarters
Staff of 350 directs all PGA Tour operation — including PGA Tour Productions — from the Sawgrass development, which is the site of the original Tournament Players Club, considered the Tour’s home course.

FLORIDA ACTIVITIES
REGULAR TOUR
1. Doral Ryder Open, Doral CC, Miami
2. Honda Classic, TPC at Eagle Trace, Coral Springs
3. Nestle Invitational, Bay Hill Club, Orlando
4. The Players Championship, TPC at Sawgrass, Ponte Vedra
5. Walt Disney World/Oldsmobile Classic, Orlando
6. JCPenney Classic, Bardmoor CC, Largo
7. Chrysler Team Championship, Palm Beach Polo Club, West Palm Beach

SENIOR TOUR
1. Royal Caribbean Classic, Key Biscayne GC, Key Biscayne
2. GTE Suncoast Classic, Tampa Palms CC, Tampa
3. Aetna Challenge, Club at Pelican Bay, Naples
4. Chrysler Cup, TPC at Prestancia, Sarasota
5. Fairfield Barnett Spacecoast Classic, Suntree CC, Melbourne

BEN HOGAN TOUR
1. Panama City Beach Classic, Hombre CC, Panama City Beach
2. Lake City Classic, Lake City CC
3. Pensacola Open, Pensacola CC
4. Gateway Open, Gateway CC, Fort Myers

Palm Beach Gardens
P.O. Box 109601
Palm Beach Gardens, FL 33410
407-624-8400
Headquarters
Staff of more than 100 directs all operations of the PGA of America from a headquarters building, now undergoing expansion, on the grounds of PGA National Golf Club, considered the PGA of America’s home club.

FLORIDA ACTIVITIES
REGULAR TOUR
1. PGA Seniors Championship, PGA National GC, Palm Beach Gardens
2. Winter Tournament Program, PGA National GC, Palm Beach Gardens
3. Oldsmobile National Scramble Championship, Walt Disney World
4. PGA Merchandise Show, Orange County Convention Center, Orlando

Daytona Beach
2570 Volusia Ave., Suite B
Daytona Beach, FL 32114
904-254-800
Headquarters
Staff of about 20 administers both the touring and teaching divisions from temporary headquarters at Indigo Lakes CC while a new headquarters building and home golf course is being built “across the road” (I-4).

FLORIDA ACTIVITIES
1. Oldsmobile Classic, Wyckoff G&CC, Lake Worth
2. Phar-Mor Inverrary Classic, Inverrary CC, Lauderhill
3. Centel Classic, Course TBD, Tallahassee
4. JCPenney Classic, Bardmoor CC, Largo

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3. Centel Classic, Course TBD, Tallahassee
4. JCPenney Classic, Bardmoor CC, Largo

Palm Beach Gardens
4361 Northlake Blvd
Palm Beach Gardens, FL 33410
407-694-2977
The builders retain the executive services of Don Rossi, retired executive director of the National Golf Foundation.

NGF
National Golf Foundation
1150 South U.S. One
Jupiter, FL 33477
407-744-6006
A staff of about 35 coordinates the NGF’s research, consulting and promotional activities from just north of Palm Beach Gardens.
From scrubby beginnings, golf in Florida has blossomed into a multi-billion dollar business.

And isn’t it interesting that the place where it all began now is recognized as the best-supplied market in the nation for public golf facilities.

Remarkable!

The man who started it all, a feisty Scot land developer named John Hamilton Gillespie, loved the game and had the vision to play it anywhere. Which explains why, in May 1886, in Sarasota, Florida — a little fishing village, then part of Manatee County, on the Gulf of Mexico south of Tampa — Gillespie hacked out the first two golf holes in Florida.

Pristine meadowland, surrounded by native palmetto scrub and pine trees, provided an idyllic setting for the introduction of the hallowed game to the new Sunshine State.

“Twa holes f’r practice an’ they can be extended later,” was the way Gillespie described them to friends.

Although well documented as Florida’s first golf holes, there always remained the question, “Were they the first in the nation?”

In the annals of the U.S. game, five holes at Yonkers, NY, constructed in February 1888 by John Reid, another Scot, have been officially ranked first because the club has continued in operation since inception.

Reid, a creative player, named his club St. Andrews, which sealed the deal for golf historians. The Yonkers location was a centerpiece of the American Centennial of the game observed during 1988.


Gillespie, himself, wrote very informative articles about the state of the game for publication in the U.S. and Great Britain. His pieces reminisced about the early days of golf in Edinburgh and St. Andrews in his native Scotland. He went into great detail to explain how the great players of the day employed their special shots for repeated victories, the changes in equipment and social structure which provided women more liberal use of golf courses.

His papers and diaries touched on legendary reports of golf in the 1780s at Harleston Green in Charleston, S.C. There was no hard evidence, however, to prove the golf club was anything but a place for social gatherings. No golf holes ever were documented and certainly women weren’t making inroads into the game.

Gillespie’s action in Sarasota 103 years ago gave Florida a head start in a game which has developed into the state’s major non-polluting industry. According to a recent National Golf Foundation study commissioned by the state’s Department of Commerce, golf is very big business, expected to contribute an estimated $5.2 billion to the state’s economy in 1989.

The crowning jewel in the Gillespie legacy, however, as we enter the second century of golf in Florida, is that Sarasota, where the game began, leads the nation in providing public golf courses for residents and visitors. Sarasota County is Number One in the country on a list of the 10 best-supplied metro areas for public golf (See sidebar elsewhere), according to another NGF study. Sarasota is far in the lead offering an 18-hole golf course for every 715 players.

Gillespie the Scot and his golf, like the amber flow of another smooth export of his native land, gain favor with the passage of time.

Bless you, John Hamilton.

Bill Carey was executive director of the Florida State Golf Association for 24 years and a USGA committeeman for about the same period.
BEST SUPPLIED GOLF MARKETS

<table>
<thead>
<tr>
<th>Metropolitan Area</th>
<th>Golfers Per 18 Public Holes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sarasota</td>
<td>715</td>
</tr>
<tr>
<td>Fort Myers/Cape Coral</td>
<td>998</td>
</tr>
<tr>
<td>Naples</td>
<td>1,003</td>
</tr>
<tr>
<td>Glens Falls, N.Y</td>
<td>1,183</td>
</tr>
<tr>
<td>Bellingham, Wash.</td>
<td>1,261</td>
</tr>
<tr>
<td>Fort Walton Beach</td>
<td>1,431</td>
</tr>
<tr>
<td>Elmira, N.Y</td>
<td>1,446</td>
</tr>
<tr>
<td>Fort Pierce</td>
<td>1,448</td>
</tr>
<tr>
<td>Bradenton, Ala.</td>
<td>1,472</td>
</tr>
<tr>
<td>Jackson, Mich</td>
<td>1,496</td>
</tr>
</tbody>
</table>

Source: National Golf Foundation, Sept. 1, 1989

Florida cities lead nation

Sarasota leads six metropolitan areas in Florida listed among the nation’s ten “best-supplied” with public golf courses, according to figures released by the National Golf Foundation Sept. 1.

The west coast city has only 715 resident golfers for each 18 public holes, a ratio that is twice as good as the sixth-best metropolitan area (Fort Walton Beach) and more than five times better than the national average of 3,677 golfers per 18 public holes.

Jersey City, N.J., is the nation’s worst-supplied city, with 60,334 golfers for each 18 public golf holes.

Based on annual surveys, the NGF calculates “participation rates” — the percentage of the population which plays golf — for each of the nation’s 357 Standard Metropolitan Statistical Areas and applies those rates to population estimates from the U.S. Census Bureau to determine the number of golfers in each metro area.

The folks around Sarasota aren’t quite as well off as the figures suggest, however. The study is based on resident population. In winter, the area’s population swells to 650,000 and many — if not most — of the nearly 400,000 visitors are golfers.

WORST SUPPLIED GOLF MARKETS

<table>
<thead>
<tr>
<th>Metropolitan Area</th>
<th>Golfers Per 18 Public Holes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jersey City, N.J.</td>
<td>60,334</td>
</tr>
<tr>
<td>New York City</td>
<td>21,562</td>
</tr>
<tr>
<td>Texarkana, Tex.</td>
<td>19,125</td>
</tr>
<tr>
<td>Houma/Thibodaux, La.</td>
<td>15,387</td>
</tr>
<tr>
<td>El Paso, Tex.</td>
<td>14,910</td>
</tr>
<tr>
<td>Montgomery, Ala.</td>
<td>13,020</td>
</tr>
<tr>
<td>Los Angeles, Calif.</td>
<td>12,421</td>
</tr>
<tr>
<td>Tuscaloosa, Ala.</td>
<td>12,192</td>
</tr>
<tr>
<td>Houston, Tex.</td>
<td>12,108</td>
</tr>
<tr>
<td>Albuquerque, N.M.</td>
<td>11,951</td>
</tr>
</tbody>
</table>

Source: National Golf Foundation, Sept. 1, 1989

TWO TIMES THE POWER IN HALF THE HOURS.

Country Club 19-4-6 with RONSTAR

Do two jobs in one operation for maximum efficiency! Country Club premium homogeneous granular fertilizer with 26 percent organic nitrogen (3 units of WIN) combines with Ronstar for a feeding base you can build on, year after year, plus pre-emergence control of crabgrass, goosegrass and other annual grasses. And for areas where soil-potash levels are low, try our homogeneous formulation of Country Club 7-3-22 with Ronstar — all from the source for premium quality turf products — your local Lebanon distributor. In Florida, call Terra International, Inc., at 800-752-6615 or Gulf Shore Turf Supply, Inc., at 904-968-0731.

Ronstar® is the Registered Trade Name of Rhône-Poulenc Inc. for oxadiazon.

THE FLORIDA GREEN / WINTER 1990
Nematode and mole cricket protection that elevates your turf.

Mobay raises the standards for turf by burying the pests.

For nematodes, there's NEMACUR® Turf and Ornamental Nematicide. It has a 20-year history of preventing yellow grass by controlling more kinds of nematodes than any product on the market. To top it off, it lasts longer, eliminating costly multiple applications.

For mole crickets, there's OFTANOL® insecticide. It kills mole crickets so fast, they don't have a chance to crawl to the surface. Better yet, treatments cost about 30% less per square foot than the closest competitor.

Treat your tees, greens, and fairways with NEMACUR and OFTANOL. Nothing works better. Nothing works more economically.

For more information, contact your Mobay distributor or Mobay sales representative. They can help you take your turf to new heights.

Nemacur
Oftanol

Mole crickets can burrow up to 20 feet per night, feeding on grass roots and leaving mounds of soil on the surface. Prevent them with OFTANOL.

To identify nematode damage, look for wilted turf with a stunted root system. Then, treat with NEMACUR. In the interim, you can mask the damage with frequent, light watering and increased fertilization.