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THE FRONT OFFICE

OPINION PAGE

BRIDGING THE GAP AMONG SPORTS



With the January issue, Golf & sportsTURF enters its seventh year of publication. It seems like just a few weeks ago that Denne and I were at the 1985 Sports Turf Institute at Cal Poly Pomona talking about the need for a publication covering the entire recreational turf industry.

Literally hundreds of people had voiced to us the need for a magazine that recognized the common bonds between golf course superintendents and managers of other high-use, recreational turf facilities. Stadium groundskeepers,

park superintendents, school maintenance directors, and college landscape supervisors wanted a voice in the turf industry equal to their associates in golf. They wanted dialogue with others to help solve specific problems related to the stress placed on turf by all types of sports.

At the same time, it became obvious that most golf course superintendents are just as curious about what is required to deliver high-quality surfaces for football, baseball, soccer, polo, croquet, field hockey, horse racing, and lawn bowling. Superintendents don't live in ivory towers despite the high-scale image of their sport. Most superintendents I've talked with are anxious to help out their counterparts at other types of sports facilities. The brotherhood extends beyond one sport.

Every week I hear people remark that the athletic field industry today is where the golf industry was 20 years ago. That statement is usually directed at the safety and quality of athletic fields. Everyone points to inadequate investment in knowledgeable personnel, equipment, and supplies. They know what is possible when athletic directors, park superintendents, and other facility managers make a serious commitment to proper construction and maintenance.

Everybody learns by example. Superintendents improved their golf courses largely in this way over the past two decades. If one course set higher standards, other superintendents responded to compete for golfers. Certain universities adapted their turf curriculum to fit changing standards in golf course maintenance and manufacturers acted in kind with new products.

It's no different for the rest of the sports turf industry. New standards have been set and applied by a growing number of facilities. Quite a few were borrowed from the golf industry. Stadiums, racetracks, parks, polo fields, practice facilities, and universities have begun to learn from examples set by those committed to better, safer turf. Soon universities will be offering sports turf curriculum in addition to their golf course curriculum. Manufacturers have already begun to design and build specialized equipment and supplies.

Overall, the similarities between golf and other sports outweigh the differences. It's not unusual for a superintendent of parks, a resort facilities manager, or a university groundskeeper to be responsible for both golf courses and various sports fields. Furthermore, the number of former golf course superintendents in college and professional sports is rising.

Cooperation between the golf industry and the rest of the sports turf industry is crucial to the future of the turf market. That was the principle on which Golf & sportsTURF was founded. It is clearer today than it was seven years ago. I sincerely hope that this magazine has helped all its subscribers by bridging the gap among sports played on turf.

Bruce F. Shank

EVENTS

CALENDAR

JANUARY

21-23 Midwest Regional Turf Conference, Adams Mark Hotel, Indianapolis, IN. Contact: Jeff Lefton, Dept. of Agronomy, Purdue University, W. Lafayette, IN, 47907, (317) 494-9737.

21-23 Michigan Turfgrass Conference, Clarion Hotel, Lansing, MI. Contact: Michael Saffel, 584G Plant and Soil Sciences Bldg., Michigan State University, East Lansing, MI 48824, (517) 353-9022.

29-30 Athletic Fields/Sportsturf Seminar, Parke Hotel, Columbus, OH. Contact: Sue White, extension associate, Dept. of Agronomy, Ohio State University, Room 202, 2021 Coffey Rd, Columbus, OH 43210, (614) 292-2001.

FEBRUARY

5-12 International Golf Course Conference & Show, Las Vegas Convention Center, Las Vegas, NV. Contact: Golf Course Superintendents Association of America, 1617 St. Andrews Dr., Lawrence, KS 66047, (913) 841-2240.

19-20 Northeastern Pennsylvania Turf & Grounds Maintenance School, Luzerne County Community College, Nanticoke, PA. Contact: William Pencek, Lackawanna County Coop Extension, 200 Adams Ave., Scranton, PA18503, (717) 963-4761.

21-22 Landscape Industry Conference, Holiday Inn I-70 East, Denver, CO. Contact: Associated Landscape Contractors of Colorado, 3895 Upham St., Suite 150, Wheat Ridge, CO 80033, (303) 425-4862.

26-28 Western Pennsylvania Turf Conference, Pittsburgh Expo Mart, Monroeville, PA. Contact: PTC, Landscape Management Research Center, Orchard Rd., University Park, PA 16802, (814) 863-3475.

MARCH

1 Seminar on Recreation, Golf, Sports and Landscape Turf Management, Cuyamaca College, El Cajon, CA. Contact: Bill Mitchell or Michael Hall, Cuyamaca College, Ornamental Horticulture Dept., 2950 Jamacha Rd., El Cajon, CA 92019-4304, (619) 670-1980.

Send announcements on your events two months in advance to editor, Golf & SportsTURF, P.O. Box 8420, Van Nuys, CA 91409. Fax: (818) 781-8517.

GOLF GROWTH TO BLOSSOM THROUGH THE '90s

Golf will thrive through the end of the century, according to industry leaders at the recent Golf Summit 90 in Palm Springs, CA. More than 600 golf industry executives from across the U.S. attended the biennial leadership conference, which was the third in a series sponsored by the National Golf Foundation (NGF). The two-day event included eight general sessions, a "networking" breakfast, and luncheon speeches by Deane Beman, PGA Tour commissioner, and Patrick J. Reilly, PGA of America president.

A segment on golf industry growth in the '90s consisted of three brief presentations followed by panel discussions focusing on different aspects of industry growth.

H. "Terry" Williams, a director of McKinsey & Company, a management consulting firm which helped the NGF develop the industry's "Strategic Plan For Growth of Golf," stressed that although individual companies must continue to plot their own strategies, collective actions such as special industry task forces on specific issues are also needed. He suggested that industry members could, for example, join forces to

to form a mutual fund that would underwrite worthy golf course development projects.

Dr. James Chalmers, a partner in the accounting firm of Coopers & Lybrand, presented an analysis which focused on the interaction of supply (number of golf courses) and demand (players/rounds played). On the demand side, he emphasized the impact of the Baby Boom generation (born 1946-1964) on projections for the 1990s. He said the most conservative scenario shows rounds played increasing from the current level of 474 million per year to 540 million per year by the year 2000. However, if rounds played continue to grow at their present rate, the number of rounds played by the year 2,000 could be as high as 900 million per year.

Golf player development, particularly among women, minorities, and Baby Boomers, was addressed during the conference. The topics were discussed during two panel sessions.

"The industry has ignored women," said Shirley Englehorn, golf director at Redhawk Resort in Temecula, CA, and for-

mer LPGA tour player. "And our profession hasn't done enough to educate women golfers."

Dr. Betsy Clark, LPGA director of education, cited a study by the organization which points out that while women are the fastest-growing group of golfers, a number of them are also leaving the game. The report concludes that manufacturers and professionals could profit through increased attention to the women's market.

"Although our study shows that women take more lessons than men, indicating their desire to play better, women just aren't sustaining participation," said Clark.

The panel on minority participation in golf was moderated by John Saunders, a host of ESPN's "Sports Center" program. It focused on measures to assure continued growth and success of minority player development. The panel stressed that stimulating greater minority participation begins with juniors, and that access to courses is a key to success in junior golf programs.

"Role models don't mean a thing if a kid can't get on the course," said Calvin Peete,

continued on page 14

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Golf Growth

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a PGA star who recently founded the Calvin Peete National Minority Junior Golf Foundation in Atlanta, GA.

In a follow-up to this session, Beman, the PGA tour commissioner, issued a statement that said the Tour will be "in the forefront of developing programs that will provide access and will work with the private and public sectors to make golf affordable for minorities."

During an environmental session, Lewis Crampton, associate administrator of the U.S. Environmental Protection Agency, said the organization's major concerns regarding the golf industry are wetlands loss, impact of development, and concentration of pesticides and fertilizers in groundwater. Jim Snow, director of the USGA green section, pointed out that golfers need to start changing their expectations of course maintenance standards. "Being green is not going to be easy," he said.

The challenge of the 1990s is to control golf course costs while increasing availability, according to the progress and trends panel which was moderated by Chalmers. Richard Norton, vice president and general

manager of NGF Consulting, concluded that careful market analysis is the key to responsible growth. Both supply and demand factors must be addressed for each market area. Although macro demand trends remain positive, golf development potential must be earned by carefully balancing income potential with an appropriate level of investment and selection of appropriate markets.

William Sherman, president of Golf Realty Corp., focused on the need to make appropriate investment decisions. He estimated that two-thirds of the golf courses opening in recent years are being constructed by real estate developers who care little or nothing about the operating profitability of golf courses.

The conference concluded with a session on the international market. Golf is played in 126 countries, according to Gary Wiren, who moderated the session. However, as in the U.S., there are not enough courses to meet the needs of the growing number of golfers worldwide. A recent survey conducted by the Royal and Ancient Development Panel determined that in England alone, 700 new courses are needed in the next ten years.

"There is a dearth of public courses," said John Laupheimer, a vice president of International Management Group and former commissioner of the LPGA. "Demand far exceeds supply."

FRED V. GRAU



The entire turf industry lost one of its greatest organizers in December when Dr. Fred V. Grau died after an extended illness. Grau's turf management career spanned 60 years and touched all segments of the industry.

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His list of achievements includes becoming the first extension agronomist in turf in the United States, the first director of the United States Golf Association Green Section, first chairman of the American Society of Agronomy's Turf Committee, and organizer of the Musser International Turfgrass Foundation and the National Sports Turf Council. He participated in the development and release of Merion Kentucky bluegrass, Penncross bentgrass, Meyer zoysiagrass, Penngift crownvetch, and improved bermudagrasses for turf.

Grau collaborated in the initial design of the turf aerifier, seed harvesting equipment, and hydraulic seeder. He was also the first Golf & sportsTURF Man Of The Year.

Grau was born and raised on a farm in Bennington, NE in 1902. He received a bachelor's degree in science from the University of Nebraska in Lincoln and master's and doctorate degrees from the University of Maryland in College Park.

In 1935, Grau teamed up with Professor Burton Musser at Pennsylvania State University to serve as the country's first extension turf agronomist. His influence spread from Pennsylvania across the country as director of the USGA Green Section from

1945 to 1953 and as author of hundreds of articles, publications, and books on turf management. He spoke at conferences around the world about the benefits of improved turfgrasses and scientific maintenance practices.

Grau's home in College Park, MD, served as his base of operations for almost 45 years. He also maintained a crownvetch production farm near State College, PA, with his son, Fred V. Grau, Jr.

"Finding Penngift crownvetch on a highway slope in 1935 was the discovery of a lifetime," Grau always said. However, his contributions far exceeded this discovery and impact every golf course superintendent, groundskeeper, landscape contractor, and home gardener in the U.S. today.

ASGCA PRESIDENT SAYS EUROPE CAN LEARN FROM U.S.

Europe can accelerate its golf boom by learning from the errors of its American counterparts, according to Dan Maples, president of the American Society of Golf

Course Architects (ASGCA), who made the remarks during a recent speech he delivered to the Golf Course Europe Conference in Paris, France.

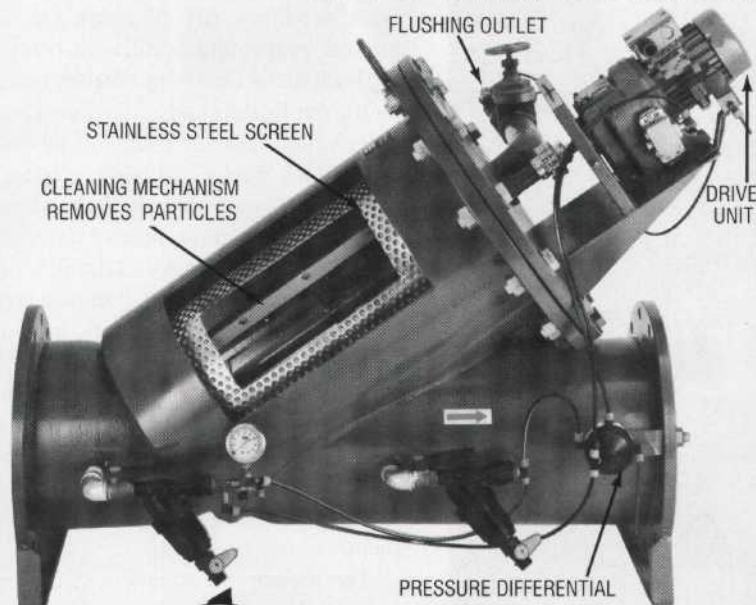
Maples encouraged attendees to take advantage of the demand for new facilities by building more golf course. "Frankly, we in the U.S. were slow to take advantage of the situation and could have been in our current boom five years sooner if we had done the necessary market research earlier," he said.

The demand in the U.S. was fueled, Maples explained, by the nine million golfers who took up the game in the 1980s, which represents a growth rate of more than 60 percent. However, during that same period there was only a 6.6-percent increase in the number of new golf courses.

The situation improved with the 188 golf courses that opened in the U.S. last year, and 345 more are set to open this year. Maples urged Europeans not to wait for a "golfer glut," as he called it.

Maples also noted the growing trend of building new courses in conjunction with residential developments. Nearly half of the U.S. courses under construction are connected with residential developments.

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The Building Of Shattuck Inn Golf Course

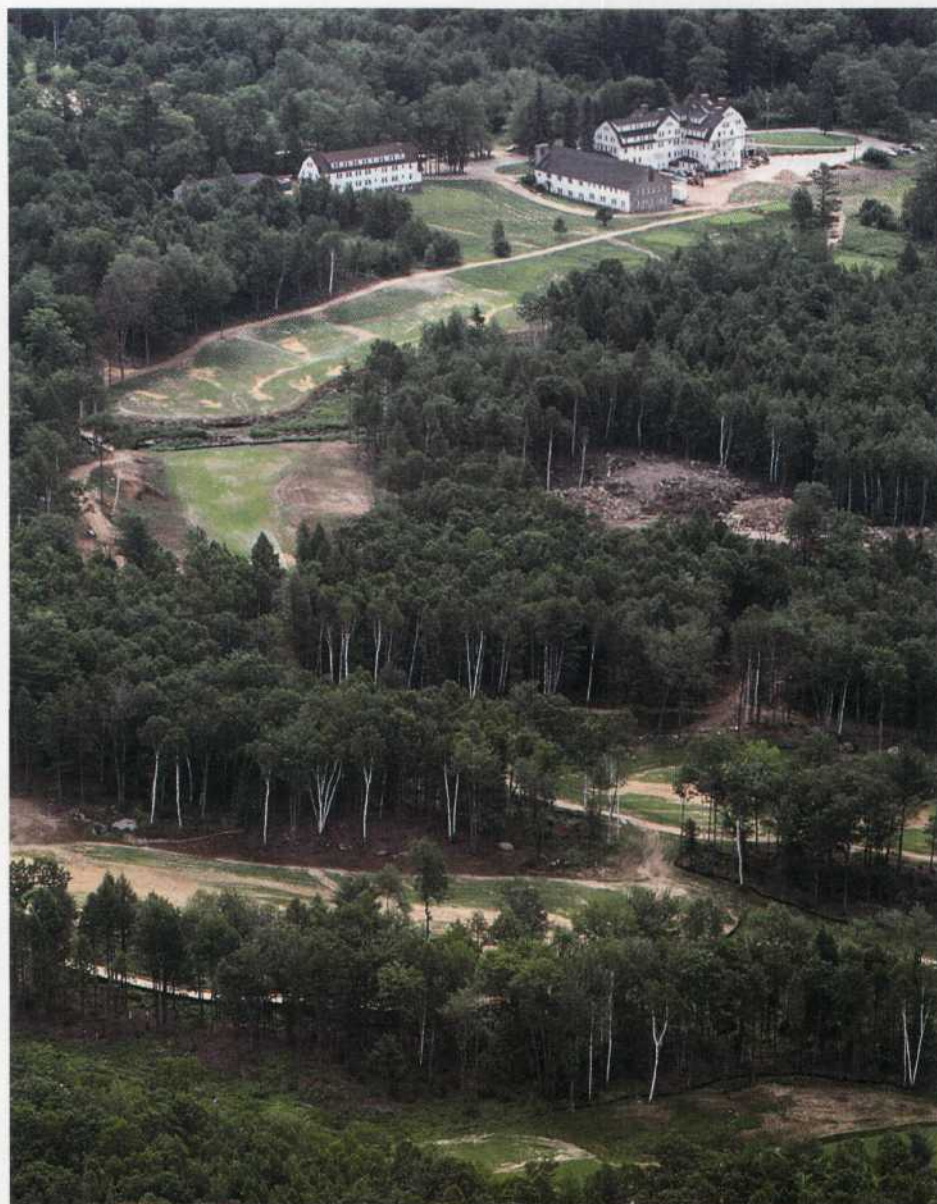
As the great Scottish golf course architect Donald Ross said nearly 80 years ago, "The Lord made golf holes. Golf architects merely discover them."

Brian Silva, a golf course architect in the firm of Cornish & Silva, is an unabashed fan of Ross. He recently discovered 18 of the Lord's golf holes in the mountains of southwestern New Hampshire. Shattuck Inn Golf Course, which opens this spring, is the first phase of a 400-acre residential community in the rugged New England countryside.

Situated amidst granite ledges, brooks, and wetland meadows below Mount Monadnock in Jaffrey, NH, Shattuck Inn was a popular year-round destination resort dating back to the Civil War. Wealthy businessmen from Boston and other New England cities would take their families by train to the inn for weeks of hiking, playing croquet, fishing, or reading in the fresh mountain air. Cows from nearby dairy farms grazed in the meadows and drank from the bubbling brooks. The low-pressure lifestyle of the resort was just hours from most major cities.

Unfortunately, this type of retreat faded after World War II as motels and more transient guests became common. Some resorts survived by appealing to skiers in the winter. Shattuck Inn was not one of them.

The memory of summers in the mountains of New Hampshire lingered in the minds of those fortunate enough to have experienced them. Richard Bryant, an attorney and successful developer of light industrial and office parks in Washington,



Shattuck Inn sits above its new golf course in Jaffrey, NH.

***“The Lord made
golf holes. Golf
architects merely
discover them.”***



More than 33 bridges span 3,000 lineal feet of wetlands, beaver ponds, and brooks.

DC, spent many summers as a child at his parents' summer house on 100 acres next to the inn property. The fabulous natural beauty of the area made an indelible impression on Bryant. Eventually he decided to take a personal interest in the old inn and the land around it.

In 1952, the Shattuck family sold the inn to the Catholic Church to serve as a seminary. Twenty years later the inn was again for sale. When Bryant heard this, he contacted the seminary to confirm the boundary between his parents' parcel and the inn's. Instead he ended up buying the 120-room inn and the 180 acres around it.

After a lease to a group operating the inn as a Christian conference center expired, Bryant began to explore the possibility of operating the inn with hiking, tennis, and swimming as its only amenities. He was informed by experts in the hospitality industry that the building was too large and too remote for success without a major amenity. That's when the idea of a residential community surrounding a golf course was born.

His experience as a developer taught him that there was one particular type of attraction that could restore the area's popularity: golf. People will drive a few hours to enjoy golf in a beautiful location. Even if they don't play, they like to live or relax in golf communities. The drawing power of the game, as well as the New England countryside, are well established.

However, a land planning firm discovered that the existing 280-acre site was not large enough to contain both homes and a golf course. Bryant purchased a neighboring 120-acre farm to gain additional space.

The only way such a development could fly in New Hampshire was by extreme consideration of environmental preservation. Bryant and his managing partner in the Shattuck Inn project, Ed Pittman, had to calm the fears of local residents, satisfy all environmental issues, and demonstrate a true concern for the unique characteristics of the area.

Pittman had spent much of his career working for the Bureau of Land Management, preparing and evaluating environmental impact reports. He had come to know and value the area while developing bicycle routes for American Youth Hostels. The former park planner understood how to take an undeveloped area and make it accessible to the public without harm.

One reason Cornish and Silva were selected to design the golf course was their combined experience in environmentally sensitive projects. Silva had pioneered various types of environmental impact monitoring during the design of The Captains Golf Course on Cape Cod. He'd learned the complexities of obtaining permits for golf courses. Cornish had gained a great amount of trust and respect as the leading architect of golf courses in New England. An important feature of Cornish and Silva's practice is that both men were agronomists before they were golf course architects.

Cornish, a Canadian by birth, taught agronomy at the University of Massachusetts in Amherst alongside Dr. Lawrence Dickinson, a pioneer in turfgrass education. In 1952, he entered private practice as a golf course architect.

Silva, a Massachusetts native, taught at the University of Massachusetts 20 years after Cornish with Dr. Joe Troll. After completing degrees in turf management and landscape architecture, Silva became an instructor at Lake City Community College, Lake City, FL. In 1981, he became the northeastern regional agronomist for the United States Golf Association Green Section. Cornish invited Silva to join his practice in 1983.

"It's funny," said Silva. "All I ever wanted to be was a golf course architect. My father was a feature shaper [bulldozer operator] for golf courses. I marveled at the way he could take raw land and a set of plans and turn them into golf holes. He'd let me study the plans and try my own luck pushing dirt into shapes. When I was nine years old, I met Geoffrey on a course while watching my dad work. From then on he counseled me on how to become a golf course architect.

"I was pretty exasperated when I graduated and couldn't find a job with a design firm. But as things worked out, I wouldn't change a single thing. I got to see nearly every great golf course in the Northeast and Southeast. I learned more teaching and working with superintendents than I would have if I'd gone straight into practice."

The Captains, Brian's first project, was selected by Golf Digest as the Best New Public Course of 1985. In the next six years, he designed many more courses, including the new West Course at Firestone Country Club in Akron, OH, and remodeled or

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Shattuck Inn

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added to 32 other golf courses from Missouri to Maine. But the Shattuck Inn Golf Course is the one he looks upon with greatest wonder.

It was snowing heavily when he first walked the site with Pittman in December of 1986. "The ground was covered with snow and it continued to snow heavily during our four-hour walk," Silva recalls. "It was rocky, wet, and thick with trees, pretty severe topography for a golf course. We had to navigate around brooks, large wetlands, and steep ledges. I just hoped that Ed knew how to find our way back to the inn without a compass."

Silva and Pittman found it impossible to view any clearing larger than 50 feet. They could see however, that the greatest potential for 18 corridors for golf holes were those areas wrapped around ledge outcroppings, beaver ponds, and streams.

Over millions of years, soil and material eroding from the slopes lined the base of the valleys. Dairy farmers had cleared part of the forest for grazing their cattle. Over a century, maples, white pine, birch, beech, and oak reclaimed the meadows. The wetlands were actually a recent development caused by beavers building dams in the brooks. The only remaining workable land surrounded the wetlands in between the rock ledges.

Silva's job was to find corridors for golf holes in the maze of rock, streams, and wetlands. He had to make the area accessible for recreation without disrupting its spectacular nature. All the time he had to consider problems with construction and permitting.

"The course had to be set into the land to moderate construction costs and reduce



The golf course opened up spectacular views of Mount Monadnock and created new wildlife habitat.

permit difficulty," Silva states. "The ultimate goal for the golf course was playability within the parameters of reasonable cost and obtaining permits."

The site required a great deal of back and forth between Jaffrey and Silva's office in Uxbridge, MA. "We did seven different preliminary layouts," he remarks. "Ed [Pittman] had the hard job, negotiating with the permitting authorities. He worked literally seven days a week for two years to work out compromises. He fed us their requirements and we came back with three more layouts." After choosing one of them, Silva still didn't want to go to final drawings.

"Brian wanted part of the fairways cleared so he could get accurate readings on the terrain in relation to the wetlands and ledges," Pittman explains. "The Soil Conservation people wanted all clearing done in the winter when the ground was frozen so we wouldn't disturb the subsoil. The Corps of Engineers insisted that we build silt fences to protect the wetlands from eroding soil during spring rains."

Pittman got the go-ahead to clear two-

thirds of the fairways from several local and state agencies. Starting in November 1987, tree removal began, opening up entirely new vistas of the dramatic mountains. The trees were fed through a whole-tree chipper and sold to a wood energy plant. By December, more than seven miles of silt fence and 11,000 bales of straw were in place. Jackhammers were needed to bury the fence in the frozen soil.

In the early 1800s, the area had been cleared and sectioned off with rock walls by farmers to create pastures for their dairy cows. Pittman wanted to save as many of the walls as possible. The combination of rock walls and ledges further complicated design.

Now able to see all the site's features clearly, Silva went to work on the plan that would be presented to the Wetlands Commission and the Corps of Engineers. A soil scientist and wetland biologist were also hired for their advice on the layout.

During the few months it took the group to produce a revised plan, the guidelines used by the commission and the Corps changed. Now a greater portion of the site was considered wetlands and could not be filled in during construction. Silva went back to the drawing board for yet another revision, changing half the holes to meet the new rules. By February 1988, Pittman had all local approvals. The final approval from the U.S. Corps of Engineers didn't come for another year. More than 20 different permits were required just for the golf course.

"There are holes where you must hit over wetlands to reach the fairway and again to reach the green," adds Pittman. "More than 33 bridges totaling 3,000 linear feet were required to preserve the wetlands and satisfy the Corps."

As the ground froze in the fall of 1988,



The fairways were capped with six inches of sand to improve drainage and speed establishment of the bentgrass.

Golf Course Builder Vinnie Bartlett and his Fallbrook Landscaping crew moved onto the site to clear the remaining trees in the fairways and to begin the process of blasting out the areas for greens and tees. "Each hole has four or five small tees," explains Silva. "We wanted to keep blasting to a minimum and lay the course into the existing terrain as much as possible. The multiple tees also make the course playable for a wide range of golfers. Still, some of the carries bother me. But you have to draw the line somewhere when you're faced with permitting."

One of the most difficult hurdles to clear in the rocky terrain was the installation of the irrigation lines. Pittman wanted the course to be a year-round source of recreation by using its trails and cart paths for cross-country skiing in the winter. This meant water had to be available for snowmaking equipment. White Turf Inc. of Barre, MA, was assigned the challenge of installing the multipurpose irrigation system.

A five-acre brook-fed pond was built as an irrigation reservoir. Water from the pond would be pumped throughout the course for both golf and snowmaking by a variable-frequency-drive Best Equipment pump station. Since the system had to be active year-round, ductile iron mains had to be buried five feet deep in the rocky soil. That required large equipment and a great deal of dynamite.

Silva knew the importance of having the golf course superintendent on site early in the construction process. The construction of The Captains was still fresh in his mind. He had been fortunate to have two skilled superintendents on hand in Cape Cod - Sherwood Moore and his assistant, David Robinson. The two were a team, having worked together at Winged Foot in Mamaroneck, NY, before taking on The Captains.

Robinson visited Pittman and Silva at Jaffrey on a crisp winter day in early 1989. "The site had just been cleared," Robinson remembers. "It was beautiful, but I knew growing grass there was going to be a challenge. The Captains was all sand. This was all rock. Jaffrey also seemed like an ideal place for my family to live."

Robinson signed on in the spring of 1989 and went to work alongside the Fallbrook specialists on building the greens and tees, finishing the irrigation system, and constructing the bridges. Irrigation lines had to cross the brooks and wetlands by the bridges. "We strapped poly pipe

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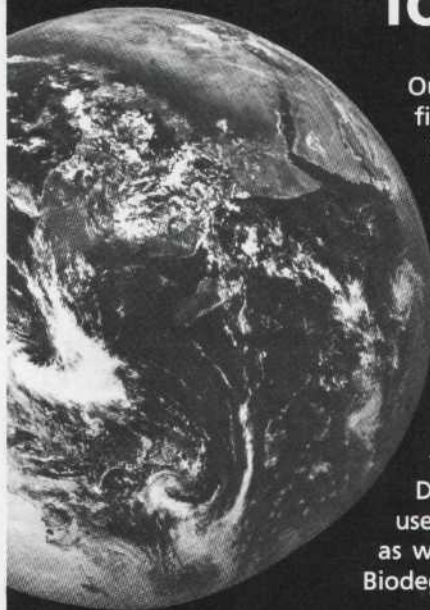


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