

Issue 11 | Summer 2012

BY DESIGN



Excellence in Golf Design from the American Society of Golf Course Architects



Growing together

How long-term relationships
with architects benefit golf clubs

Also: Golf and the environment • Trump Scotland • Future of golf design • Joy in golf





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What goes around comes around. As we brace for summer, it helps to remember it is fall in Argentina, South Africa and Australia.

We have learned to plan for both hemispheres. Whatever time we used to carve out around Christmas and New Year has evaporated. For many, the work is ongoing. Unfortunately, for too many of our brethren, things continue to be slow though we are seeing positive signs. In the meantime, enjoy the time with family and friends.

A subject dear to my heart is the reputation of our organization. We have always been recognizable, but in this difficult time it would be nice for us to gain some traction. My goal is not to make proclamations but to ask hard questions about where we are and what the industry must do to move forward. Do I, do we, have the answers? No, nor, it seems, does anyone else. But our task is to bring people to the game.

Technology means this magazine can be read not only in print but also a myriad of electronic ways. At the same time, the fulfillment of 'instant communication' has the unintended consequence of sometimes drowning out contemplative thought and true dialogue.

This issue of *By Design* shines a light on the work being done by ASGCA members around the world. The cover story discusses why it makes good sense for clubs and owners to develop long-term relationships with an architect; a report from the recent ASGCA Annual Meeting shares a thoughtful look to the game's future from several of our members.

So detach yourself from cyber land long enough to enjoy the peace and enjoyment of the game that first drew you to it. We can't share it if it is not alive in us. What goes around comes around.



Yours sincerely,

Bob Cupp
President
American Society of Golf Course Architects

BY DESIGN

Editor: Adam Lawrence; News: Michele Witthaus; Design: Paul Robinson; Bruce Graham;
Publisher: Toby Ingleton; ASGCA Staff: Chad Ritterbusch; Therese Johnston; Mike Sheffy; Aileen Smith; Marc Whitney; Photography: Chris Cunningham; Brian Morgan; C. Sheffield
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The new-look Church nine at the Wisley club in England

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Sustainability

New guide to sustainable golf

The Golf Environment Organization has published guidance for the sustainable development and renovation of golf facilities.

Designed to support a wide audience including the international golf development community, plus government, environment and community-based organizations, the document sets out practical ideas to help golf projects comprehensively and consistently deliver against the mainstream sustainability agenda.

Sustainable Golf Development: Creating a Positive Legacy is freely available to download on the GEO website, and also available to order in print. Launched in English and Chinese, Portuguese and Spanish editions are also underway.

GEO chief executive Jonathan Smith said: “We want to help people integrate the full range of sustainability issues throughout the unique and complex process of golf development and renovation—creating resource-efficient, ecologically rich, and community integrated golf facilities.”

Theodore Oben, head of sport and environment at the United Nations Environment Programme said: “It’s heartening to see golf engaged in highly credible sustainability action. The amount and quality of guidance, education, practical programmes and communications is indicative of a sector that recognises there is everything to gain and nothing to lose by embracing the subject.”

Veteran Chinese golf leader Dr Aylwin Tai, said he was pleased the guidance had been made available in the Chinese language. “Social and environmental issues are the largest external factors impacting the growth of golf in China,” he said. “Golf must fit the Chinese culture and landscapes, respecting and working for people and the environment.”



ASGCA

New members, president, for ASGCA

The American Society of Golf Course Architects elected three new Associate Members at its recent meeting in Chattanooga, Tenn. Cynthia Dye McGarey, Richard Mandell and Kevin Norby join the more than 175 ASGCA members who practice around the world.

McGarey is principal designer with Dye Designs in Englewood, Colo. Her courses include CTS Tycoon Golf Club in China.

Mandell runs his own firm in Southern Pines, N.C., and has designed courses including the new Skydoor project in Zhangjiajie, China. Norby is a partner of Herfort Norby Golf Course Architects in Chaska, Minn. His courses include The Preserve on Rathbun Lake, in Moravia, Iowa.

ASGCA Fellow Bob Cupp was elected as the Society’s President. He worked with Jack Nicklaus, ASGCA Fellow, as a senior designer for more than 15 years before forming his own firm. As President, Cupp says he hopes to generate a discussion among those both inside and outside the golf industry about the state of the game. “Golf is a fun game; it is why 99 percent of us continue to play,” he said. “So let’s be upfront and ask ourselves some difficult questions that might bring the attention back to the basics—why we play the game.”

Five ASGCA Associates, Jim Engh, Robert McNeil, Doug Myslinski, Ted Robinson, Jr. and Mark Voss, were advanced to Regular member status at the meeting.

Sedgefield goes bermuda

Sedgefield CC in Greensboro, N.C., the home of the PGA Tour’s Wyndham Championship, has become the latest high profile course in the US transition zone to convert its greens to warm season grasses. Course owner McConnell Golf bought the Donald Ross-designed Sedgefield in early 2011. Now, to prevent staff from having to worry about the effects of hot weather on bentgrass, Sedgefield will convert to a more heat-resistant strain of bermuda grass.

Annual Meeting focuses on education

The 66th ASGCA Annual Meeting in Chattanooga, attended by 100 ASGCA members, included golf at several unique courses and education sessions featuring members and some of the golf industry’s leading figures. Presenters included: Mike Davis, USGA; Joe Guerra, Sequoia Golf Holdings; Joe Munsch, Eagle Golf; Darrell Crall, PGA of America. Four days of meeting and seminars gave members a chance to share best practices.

New edition of Darwin classic

American publisher Tri-Horn International has launched a new e-book edition of Bernard Darwin’s legendary 1911 volume *The Golf Courses of the British Isles*. Tri-Horn says the new edition of Darwin’s classic is especially noteworthy as it has carefully restored all 64 of Harry Rountree’s famous illustrations from the original book.

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Tourism

Golf tourism bouncing back

Golf tourism is bouncing back from the economic downturn, according to a new survey by KPMG.

According to the Golf Travel Insights report, 60 percent of golf tour operators experienced an increase in the number of golf breaks booked in 2011, compared to 38 percent in 2010.

Similarly, just 12 percent of tour operators reported a decrease in bookings in 2011 compared to 54 percent the year before.

The survey, published by KPMG's Golf Advisory Practice, included feedback from 90 golf tour operators in 35 countries. Spain and Portugal remained the most popular destinations, ahead of the UK & Ireland, while Turkey, as well as Thailand and Vietnam, continue to emerge as popular destinations.



60 percent of golf tour operators reported an increase in bookings

While North America maintains a strong domestic golf travel market, Argentina and the Dominican Republic are becoming popular outbound tourism destinations for US citizens, tour operators reported.

Golfers from the USA and Canada, the UK, Scandinavia and Germany remain the biggest golf

travellers. KPMG also found that golfers spend significantly more on a holiday than regular leisure tourists.

Andrea Sartori, head of KPMG's Budapest-based golf advisory practice, said: "The quality of the golf courses is the most important factor for a consumer when choosing a destination."

Golf architecture documentary for PBS

The United States' Public Broadcasting System has produced a documentary on golf course architecture in America. Scheduled to air in the U.S. and parts of Canada 3 August, the television special and companion book, *Golf's Grand Design*, will highlight golf architecture in America. ASGCA President Bob Cupp said: "ASGCA members Bill Coore and Billy Fuller, along with myself and Ron Whitten, have participated in the organization of the video and Ron and I are writing the companion book."

New sprinklers from Rain Bird

With irrigation customers seeking cost-effective ways to maintain landscapes and abide by local watering restrictions, irrigation supplier and ASGCA Major Partner Rain Bird says its new NT Series Micro Pop-Ups offer contractors and their customers an ideal solution to irrigate non-turf areas. The NT Series combines the water efficiency of low volume irrigation with the trenchless installation of drip irrigation and the reliability of a Rain Bird spray head.

US Amateur to Riviera

Riviera Country Club in Los Angeles has been named as the host venue for the 2017 US Amateur Championship. The course, designed by legendary architect George Thomas, has hosted the US Open and Senior Open, two PGA Championships and has been a regular Tour stop for more than fifty years.

John Harbottle

Architect Harbottle dies suddenly

ASGCA member John Harbottle III died suddenly on May 24, 2012. He was 53. Harbottle, had run his own design firm, based in Tacoma, Wash., for almost 20 years.

Harbottle was nationally recognized for his commitment to environmentally-sensitive design. A landscape architecture graduate from the University of Washington, Harbottle began his career with ASGCA Past President Pete Dye, with whom he collaborated on projects throughout the world. Harbottle became an ASGCA Associate Member in 1992 and a Regular Member in 1996.

Extensive travel to Scotland allowed Harbottle to study golf's traditions. He described his design work, especially

its noted sensitivity to the environment, when he said, "Our goal is to create natural looking golf courses with a links touch; timeless classics that fit the terrain as if they have always existed. The indigenous character of the links courses make them not only appear a natural part of the landscape, but also allows them to function as a sustainable part of the ecosystem."

"Losing John is difficult to accept," said ASGCA President Bob Cupp. "We were all together just days ago, with he a familiar and welcome face at the ASGCA Annual Meeting. This is a devastating loss. Our sympathies go *en masse*, to Teresa, the children and to his mother and father."

Long-term planning | Adam Lawrence

Growing together

For golf clubs and owners, building a long-term relationship with an architect is a smart move, says Adam Lawrence

Golf, as the ‘mind game’ coach Bob Rotella tells us, is not a game of perfect. What is true of the game is equally true of its courses: it is hard to imagine that there is a single golf course in the world that is entirely without flaws, and thus could not, at least in theory, be improved. Think of your favorite course, and try to come up with ways in which it could be made better still: I bet you can come up with several ideas for any course in just a few minutes.

But it is a slippery slope. Sensitive, well thought out alterations—whether small or large—may improve even the finest course, but ill-planned changes can just as easily eliminate what little charm a poor track has.

That’s why an ongoing relationship with a consulting golf course architect is of such great value to clubs. The original designer of record is the obvious choice, but this is of secondary importance. What matters most is that course

development decisions are taken in conjunction with a qualified architect.

At Golf du Médoc in Bordeaux, France, the virtues of a long-term relationship with an architect are very clear. Original designer Bill Coore, ASGCA, who laid out the course more than twenty years ago, has returned on a regular basis to tweak the design, and, more recently to undertake a significant refresh. Golf du Médoc hosted the French Open on Coore’s Chateau course in 1999—Retief Goosen was the winner. But time

has taken its toll on both courses, with turf conditions in particular not being as they should be on such a well-draining property. So the resort’s owners, who have invested heavily in the hotel recently, brought the original designers back to Bordeaux to lead a slow but steady process of renovation.

Coore & Crenshaw bunker specialist Quinn Thompson, under Coore’s supervision, has spent several weeks at the resort over each of the last few winters, rebuilding many of the bunkers on the Chateau course.





Golf du Médoc in France, has had a major bunker refresh

The project is concerned both with improving drainage from the bunkers—many of which have a puddling problem at the moment—and returning their aesthetic values to a more typical Coore style. Regeneration of the site's native heather is next on the menu for the resort.

A great example is at the par five second hole. The tee shot on the hole is uphill, though not dramatically, and Coore built a big bunker at the crest of the rise. Thompson has delicately rebuilt this

bunker into a complex and elegant scar on the landscape.

What's most significant about the works at Golf du Médoc is that they represent a carefully paced, evolutionary project. Both Coore and the owners know they are working together for the long haul, and thus there is less pressure to get everything done in a hurry. This thoughtful approach is paying dividends.

Golf courses do not, in general, change overnight, and thus this long-term approach—which is

best manifested through a course masterplan drawn up by the consulting architect and embodied in the club's statutes, thus preventing short-range fiddling by green committees—is the right fit for most.

There is, of course, a long history of golf architects maintaining extended relationships with their courses and tweaking them over time. CB Macdonald, the father of American golf, continued to adjust his masterpiece, the National Golf Links of America, for much of his life, and ASGCA founder

Donald Ross made repeated changes to Pinehurst Number Two. Who is better, after all, at spotting the flaws in a course than its original designer? Who is best placed to understand how the effects of time have impacted on the way a course was intended to play?

A good example of this is the upmarket Wisley club south of London. Wisley, which was opened in the early nineties and designed by ASGCA Past President Robert Trent Jones, Jr, and his then-associate, Kyle Phillips, ASGCA, has a demanding membership including many top European Tour professionals.

Over several years, Jones, along with his design partner, ASGCA Past President Bruce Charlton, are renovating Wisley's three nine hole loops, fixing some of the issues—especially related to turf conditions—that had come about as a result of twenty years' play, and helping to make the club more sustainable in the process.

A quick stroll on the Church nine before the project showed the need for the work. The irrigation sprinklers were several inches below the level of the grass, a sure sign of a major thatch problem, and the holes had significant drainage issues as well. Testing revealed that the depth of thatch on the holes was more than two inches; post the renovation, this has been reduced to one quarter of an inch. Playing the new-look Church holes, it's easy to see the impact of the renovation work; the fairway surfaces are impeccable, and the switch to a traditional British fescue/bent grass mix means that head greenkeeper Steve Byrne should be able to embrace more sustainable maintenance methods, while still ensuring the high end conditions the club's members expect.

The trust that is built when people partner over an extended period of time is priceless. The development of the two giant Mission Hills resorts in China illustrates this clearly. Design firm Schmidt-Curley, run by Brian

Photo: C. Sheffield



Clockwise from left: Wisley's Church nine, Mission Hills Haikou and Pinehurst No. 2

Curley, ASGCA and current ASGCA Secretary Lee Schmidt (and including several other ASGCA member architects) has been closely partnered with the Chu family, the owners of Mission Hills, for many years.

The role played by Schmidt and Curley in the growth of Mission Hills can't be overstated. Curley, in particular, was central to the birth of the group's second project, near the city of Haikou on Hainan Island.

"When we were doing Mission Hills Shenzhen, we hired a shaper who showed up to shape with five surfboards—and every chance he had he'd go down to Hainan, and he'd come back telling me how great

it was," says Curley. "So I kept saying to David Chu, the chairman, that we should do something down here.

"When the chairman decided to go with Hainan, we took a big tour round the island—I think I've seen every piece of property there is round here," Curley goes on. "Architects are always beefing about not being involved in site selection, but we were totally involved in this one. For us, there were two main limiting factors. Lots of developers are happy to find enough property for eighteen holes and some houses, but we had to find a much larger piece and one where someone was prepared to make a commitment to go ahead straight away." ●

“Architects are always beefing about not being involved in site selection, but we were totally involved at Mission Hills

Brian Curley, ASGCA



LONG-TERM FLEXIBILITY

At Island Hills in Michigan, original architect Ray Hearn, ASGCA, has made the course more accessible to beginners and time-poor golfers

Another example of a long-term relationship between club and architect paying dividends can be seen at the newly renovated Island Hills course in southwest Michigan, which has revamped its facilities to provide more flexibility for players.

Architect Ray Hearn, ASGCA, who designed Island Hills in the late nineties, returned to the course and has created a new, flexible routing that is intended to attract time-short players and beginners by offering fewer holes than the standard 18-hole option. These include a five-hole short course, two seven-hole loops—east and west—along with a 12-hole ‘premier’ routing.

Hearn says: “There’s a lot of rhetoric about growing the game and making it more attractive to people to bring them back to the game, but Island Hills is doing much more than talking about it.”

Club owner Bob Griffioen believes time, cost and difficulty of the game are challenges for prospective players and hopes to grow the club’s customer base by eliminating these, while recognizing that round timings and communication with golfers will be essential. He says: “We are not going to put a group of golfers playing seven holes out in the middle of a weekend day in which the course is already filled with golfers playing 18 holes. We are going to get this right. We have new cart and walking paths being created, and signs will be posted to communicate to the golfer to lessen confusion. We’re committed to it. We want feedback because we want to make it right.”

Working from the original 18 holes, Hearn has ensured golf in the new routings is comparable to the 18-hole experience in terms of shot quality, selection of holes

to be played and views of Island Hills. Six sets of tees, including new positions that are part of the redesign, also give golfers multiple challenge options.

“Island Hills wants the golfer to feel it was a great 12-hole, seven-hole or even five-hole experience,” says course superintendent Joe Jehnsen.

Special scorecards for each layout have been created with carefully designed mapping, measured yardages and color photos. “The golfer will not have to take one of our 18-hole scorecards and try to figure out where to go,” Griffioen says. “That would defeat the purpose. We are taking away the time element. Play the amount of time you have by picking the course you want to play, and know it will be a very organized and great round that will feel complete in the end.”

The future of golf design

A different game

At the recent ASGCA annual meeting in Chattanooga, a high-powered panel of member architects got together to discuss their hopes and expectations for the future of the business. Here's a report on their thoughts

If you were trying to put together a dream team of golf course architects, you could hardly do better. Between them ASGCA members Bill Coore, Gil Hanse and Robert Trent Jones Jr have built courses all over the world, among them some of the most highly rated. When they speak, it's as well to listen. And Hanse, in particular, is the hottest name in golf design right now, having been appointed to redesign the Blue Monster at Doral by Donald Trump, and then, only a few weeks later, winning the much-coveted assignment to design the Rio 2016 Olympic course.

Jones—who must be a strong contender for the title of 'Most Traveled Golf Architect' drew some parallels between the state of today's golf development business and an earlier downturn. "In 1974 we all went to Japan to work, because that's all there was, now it's China," he said.

But Jones told the group it was a mistake to think that golf will not change as it becomes more popular in new countries. Instead, he said, the game will develop to suit the culture of the country. "The game is changing already," he said "In different cultures, it is a different game. In China, people are multi-tasking. They are on the phone while playing golf, and they're gambling all the time. That's their culture, that's how they play golf."

Jones also said he felt that professional golf, especially the PGA

Tour, had an unfortunate impact on the game as a whole, presenting golf as a game that was extremely difficult and required high maintenance levels to make it worthwhile.

In this light, Bill Coore's comments were especially interesting. Coore, who, along with his partner Ben Crenshaw, designed Sand Hills Golf Club in Nebraska, the most highly ranked golf course constructed in the last seventy years, spent several years in the early part of his career working as a golf course superintendent, because of a lack of opportunities in the golf design business. "I thought becoming a superintendent was the worst thing that could have happened to me, but I was wrong," he said, telling the group that his time as a greenskeeper made him a much better architect, as he learned more about how course design played out in real life. Coore said that today's aspiring architects need to have a flexible mindset, and an ability to do more than just plan out a golf course. "Don't give up on your dream, but prepare yourself to do many more things connected to golf," he said.

Gil Hanse offered further advice on how to build a career in a market where course design opportunities are harder to come by than they have been in the past. He said that he had always kept his business small and lean, even when times were much better, relying on collaboration

with independent but like-minded contractors to deliver on projects when he was busy. Building a strong network of contacts across the world of golf, people you can call on when the need arises, is essential. This, he said, made perfect sense from a financial point of view, but also in terms of delivering high-quality work.

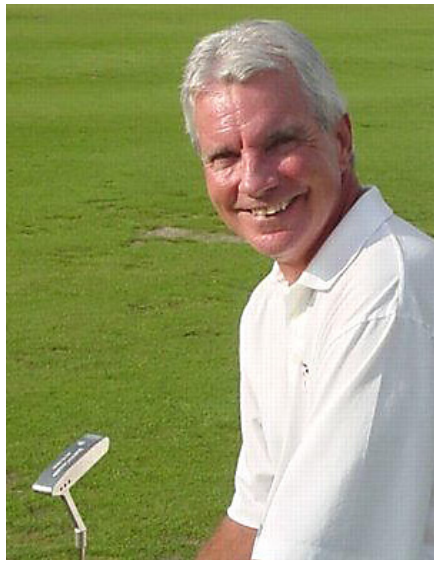
"For me, it's always been about being out in the field, about being on machinery," Hanse said. "We want to be in full control of the detail work." His argument was that close supervision of construction work, especially fine shaping, is essential to deliver the best results for clients, as well as demonstrating more clearly the value of the golf course architect's role.

Hanse went on to talk about the Olympic course project, which will consume much of his time for the next few years. He said he wanted the course to be a case study for the long-term sustainability of golf, with maintenance requirements that would not make it unreasonably expensive for local golfers to play, but also acknowledged that—like a referee in a major sporting event—he would be successful only if his role was no longer talked about. "If we get to 2016 and the story is about the golf course, not the competition, then we will have screwed up," he said.

Jones said he felt the Olympics were vitally important for golf as a whole,

but that the competition to win the design job—in which his company participated—was a salutary lesson for golf course architects. “Rio 2016 was a pageant of sorts,” he said. “We gave our intellectual property for free, to benefit the game. But people in China are watching that too! We have to be very careful not to let the industry become so much of a buyers’ market that we get exploited.”

Coore finished the discussion by highlighting the importance of a wide variety of golf facilities in driving the growth of the game. Pointing out that he himself had learned to play golf on a nine hole course, he said he felt that the emphasis on long, difficult ‘championship’ courses hurt the game, not least because of the image of golf they portray. Citing his wife as an example, he suggested that simpler, lower profile, lower maintenance courses might be a good thing for the game, not just because they are more accessible to ordinary players, but because they play into the negative image that some parts of society have of golf as expensive, elitist and harmful to the environment. “I wonder if our courses looked a little less offensive, meaning less consuming of resources, there may be greater acceptance of golf,” he asked. “If there is a good thing to come out of this downturn, it might be the acceptance of alternative forms of golf.” ●



“I thought becoming a superintendent was the worst thing that could have happened to me, but I was wrong.

Bill Coore, ASGCA



“If we get to 2016 and the story is about the golf course we will have screwed up

Gil Hanse, ASGCA



“In China, people are multi-tasking. They are on the phone while playing golf, and they’re gambling all the time

Robert Trent Jones Jr, ASGCA Fellow

Golf takes care of the planet

Golf courses are more than just venues for our great game. As large, managed areas of open space, they have a vital role to play in supporting and enhancing the ecosystems of their surrounding areas.

Playing areas—which are highly maintained—are only a small part of the total surface area of most courses. Thus, on almost every project, there is the opportunity for the golf course to provide habitat for wildlife and vital ‘green lungs’ for urban areas. Here are three short examples of golf projects that, in their own way, have served to enhance their environments to the benefit of everyone in the area, not just golfers. ●

RECLAIMING A DEGRADED SITE

How an old uranium mill became the acclaimed Hideout course in Utah



While restoring the land from a degraded uranium mill to its natural condition, architects Forrest Richardson, ASGCA, and the late Arthur Jack Snyder worked with the town of Monticello, Utah, the US Department of Energy and the Environmental Protection Agency to develop a financially successful open space and golf course development that provides numerous environmental benefits. From the 1940s through the 1960s, Monticello was home to a large uranium mill consuming nearly 100 acres. The mill was subsidized by the US government. In the 1980s, under EPA directives, the DOE had to clean up the mill site and restore the land to a natural condition. The mill site was located right across the highway from an old nine-hole golf course, and the town thought there was potential to expand the old course using the land occupied by the mill. Among the environmental issues considered were stabilization of hillside topsoil, wetlands establishment and configuration, wildlife corridors and habitat enhancement, and stream alignment. These environmental considerations could possibly be met by developing a golf course at the mill site, which would also lead to the long-term viability and stabilization of the site.

The terrain of the old uranium mill proved to be a difficult due to its steep slopes that were void of any vegetation.

Richardson and Snyder suggested restoring the mill site to a natural meadow setting, and at the same time expanding the overall recreation area of the golf course and adjacent land. By expanding the course independent of the old mill site; there would be two simultaneous projects, one to restore the old mill land and another to create a new golf course. This plan not only funded the restoration of the mill site, but it established an entire recreation area, not just for golfers, but for hikers, picnicking and fishing.

Construction on The Hideout Golf Club involved moving just 80,000 cubic yards of earth, with holes carefully routed in natural glens and across ridges. The work included a fully automatic irrigation system delivering water to just 85 acres of turf. Environmentally sensitive areas preserved during construction included naturally running springs, wetlands habitats, and forested areas. The team also restored an existing stream to its historic alignment and incorporated wetland pockets, a trail system, and stabilized grassland slopes.

WATER CONSERVATION AND HABITAT ENHANCEMENT

Virginia's Hunting Hawk club plays a key role in the local ecosystem



Bill Love, ASGCA, designed Hunting Hawk Golf Club in Glen Allen, Va., with an eye toward the area's unique location adjacent to the headwaters of the Chicohominy River. Love incorporated naturalized areas, created wetland buffers for water quality protection, reduced the amount of high maintenance turf, formed habitat for indigenous wildlife and an on-site water recycling system, and established

an irrigation system for water conservation.

Due to minimal groundwater resources and a low base flow in the nearby river, the architect designed a series of ponds and streams throughout the golf course to capture surface runoff during rain events and to recycle irrigation water. Rainfall provides the only source of water for irrigation. The ponds and streams are incorporated as strategic and aesthetic features for golf holes, but they also all flow

into one large impoundment of over eight acres in the lower portion of the property, which is the source for irrigation water.

Conservation areas were used as vegetative buffers to the ponds for water quality control. Surface drainage is filtered through these buffers and again through the created system of wetlands before running into the existing wetlands and then on to the river. The irrigation system is designed to allow reductions in the application of water to

the highly maintained areas of each hole, as well as the primary roughs during dry weather conditions, and no irrigation is provided in the secondary roughs or conservation areas.

Keeping conservation and management of water resources as priorities, maintained areas were limited to spots necessary to provide a reasonable challenge and pace for public play. Besides a minor amount of secondary rough, all other out-of-play areas were established as conservation areas. Residential areas were placed on the periphery of the course to minimize wetland impacts. Using the wetlands and conservation areas as features helped establish the course's natural character and enhance the diversity of wildlife habitat on the property.

Environmental considerations in the design of Hunting Hawk Golf Club have led to lower than average water usage and annual maintenance costs on the golf course.

PRACTICAL AND ENVIRONMENTAL RESEARCH

The FarmLinks course in Alabama is an important location for fertilizer research

ASGCA members Michael Hurdzan, Dana Fry, and David Whelchel helped the Pursell family build FarmLinks Golf Course in Sylacauga, Ala. As a research and demonstration facility, the course integrates many ecosystems providing observations on the impacts of design, construction, and maintenance inputs.

The Pursell family's fertilizer company pioneered work on encapsulating fertilizer and chemicals in polymers that release their materials at precisely the rate that plants can use them. This approach reduces or even eliminates the leaching of necessary maintenance materials into groundwater, sharply curtails excessive or unneeded applications, and saves fossil fuel and manpower by reducing the frequency of applications.

The family decided to develop a golf course where their products could be showcased and their story told. The course would become a living laboratory and test ground.

After the developer and architects decided to integrate as many ecosystems and ecotones as practical, such areas were mapped and reviewed. The course was then routed permitting the holes to flow one to the next, but also minimally disturbed each environment, keeping them isolated and functioning as they



had before the golf course was built. In addition, the architects protected adjacent non-disturbed areas of the property.

FarmLinks opened in 2003 and has hosted thousands of superintendents, students, educators, and researchers for demonstrations of its on-going projects. As an outreach education and research facility, the organization consistently works to reduce the input amount of water, fertilizer, pesticide, and fossil fuel on its course. FarmLinks is a continual work in progress, providing lessons that can give way to far-reaching impacts.

“The construction team often found stockpiles of sand two meters high blown away overnight

Trump Scotland | Gavin Kelly, Profile Products

Delivering on a grand dream

Surely no golf course has had so high profile—and highly pressured—a birth process as the new Trump International Golf Links in Scotland. When the developer is one of the most high profile businessmen in the world—and he goes on record predicting the course will be the best anywhere, long before a shot has even been played—it is inevitable that the spotlight will be intense, and the pressure on those building it to get everything spot on even more so.

No-one could question the spectacular nature of the Menie Links site. The huge dunes that line the holes make the course appear more like something in the west of Ireland than most Scottish links. But the mobile dune system that was the source of controversy during the planning process presented formidable problems for the construction team.

Stabilizing the mobile dune was the first priority. The site is exposed to high winds on a regular basis, and contractor SOL Golf often found large stockpiles of sand losing two meters

in height overnight, as the sand was blown across the site. Stabilizing the site was very difficult, as the wind would move the dunes around before the planting that was intended to produce the stabilization had been able to establish itself. SOL tried a number of traditional erosion control methods, including blankets and sand catching fences, but none worked.

I met with SOL construction manager Esie O'Mahoney at the BIGGA exhibition at Harrogate in January 2011, and the following month we began a trial of our Flexterra HP FGM on a large sand dune system on the site. Other mulches were trialed at the same time; after one week, all the other products had blown off the site, last seen heading in the direction of Iceland! The Flexterra was 100 per cent intact.

The following month, SOL placed an order for sufficient mulch material to cover 110 acres—the largest area of hydroseeding on any golf project that I have seen. Over the next three months, the contractor hand sprigged over 60,000 indigenous

marram grass plants, before hydroseeding the planted area with the Flexterra mulch, plus a mix of fescue and bent grasses.

Flexterra is effectively a spray on blanket. It creates an intimate contact with the soil and seed and provides a matrix or loft for the seed to germinate in. Due to the high winds, desiccation was a major concern but our thermally refined wood fibers can absorb, retain and release rainfall or irrigation over time, up to 13.5 times their weight in water—a key benefit on a site like this, where, contrary to the usual image of Scottish links courses, excessive dryness is a big issue! Despite winds in excess of 100mph that lasted a week, the Flexterra held in place and the dunes stabilized that summer.

“The site for the Trump course is spectacular but not without its construction and grow-in challenges,” says O'Mahoney. “Moving dunes and strong winds meant that we had to find a solution to stabilize the site as well as guarantee establishment of hand sprigged marram grass. We trialed a number of mulches on the sand dunes





The dramatic location of the Trump Scotland course

in February including Flexterra HP FGM. The paper mulches disintegrated within a week but the Flexterra HP held the dunes in place and continues to protect the hand sprigged grasses.”

Once the dune stabilization was complete, the course’s fairways were hydroseeded using our Terra Matrix SMM product. The product was selected for use on the areas less impacted by wind and potential soil erosion. Had those fairways had greater sloping or higher potential sediment loss, Flexterra HP would have again been an ideal product.

Scheduling the work was a central challenge. The hydroseeding teams had to follow almost immediately after the shapers, otherwise the wind would blow through and remove all evidence of the work that had been done.

With the course set to open in July, golfers will soon get their first views of the dramatic site at Menie and the course that has been created there. Conditioning is vital for any golf course, but when the eyes of the world will be on the course from day one, getting the right conditions is even more essential.

“The Trump International Golf Links Scotland is one of the toughest locations in the world to grow high quality turfgrass,” says course superintendent John Banbury. “We have dune systems that are over five stories high and strong winds that blow across the site on a daily basis from the North Sea. We have found Flexterra to be the perfect solution for gaining successful establishment. We now have fantastic establishment on surfaces including dunes which at one point looked impossible to seed. Using Flexterra has contributed significantly to helping us achieve pristine surfaces in a challenging environment.”

Only the golfers who will play there in the years to come can judge whether or not the course lives up to the grand claims made for it by Donald Trump. But one thing for sure is that they will be blown away by the spectacular nature of the property. They may never learn about the struggle to grow grass on such a windswept site, but those of us who were involved with the construction know it—and we are very proud of the role we played. ●



Gavin Kelly

Gavin Kelly is Western European Sales Manager with Profile Products

The joy of golf | Don Knott, ASGCA

A game of life-long fascination



Don Knott

ASGCA Past President, is a partner in California-based Knott & Linn Golf Design

The feel and shape of a perfectly hit ball is pure magic. The near perfect shot deposits itself directly into the long term memory banks. I still remember one especially spectacular five wood from the right rough. The ball just missed the arching branch of the massive valley oak and was heading for OB and forest beyond. Then, just as envisioned, it began its 30-yard fade, landing ten yards short of the green, bouncing past the cavernous right front bunker and on to its rest three feet from the pin.

It was a one in 50 shot, perhaps even more. It was at the limits of my ability. The *game* of golf allows the freedom to continuously attempt such shots without the stifling fear of OB and a high score. The *sport* of golf would have me playing a safe chip out, then a standard mechanical approach.

The game of golf is what young children enjoy. A game that is free of fear and expectation. The game of golf is the pure joy of hitting a ball with a stick, finding it, hitting it again. The game is the pure satisfaction of hitting the ball around the putting green until it finds the hole. The youth has no expectations and could not care less about keeping score. The beginner soon learns the magic, the special feel and the pure joy of hitting a ball squarely on the club face.

The sport of golf is what we see on TV. It is the highly competitive endeavor focused on score. This is

the golf most instructors teach, and is the focus of virtually all media. The competitive and championship qualities of golf are the focus of seemingly all publications, public relations, prestige, and ratings. The sport is the endless search for a lower score and more length.

We all marveled at Phil Michelson's brilliant shot from behind the pine on the thirteenth at Augusta. Why? Because all golfers can understand

“The game of golf, free of fear and expectation is what young children enjoy

and even participate in the immense satisfaction of success. We can all appreciate that Phil, embroiled in a major competition, played the game and not the sport.

Learning the game is difficult. It is the task of discovering inner joy and self satisfaction. We strive to discover true gravity and being in the zone. The game involves the cultivation of the mystical and spiritual qualities of golf. The game of golf is an art.

The sport of golf is more of a science. We humans seem innately competitive and therefore the Sport seems quite logical. It is easily understood. The objective elements

of scoring and statistics make for a rational system to see how we stack up. At some time in our golfing life the curiosity of how we stack up captures us all, and we spend great time, energy, and resources attempting to improve, to be 'the best that we can be.' For most golfers, this search for a lower score and more distance is damn frustrating! For some, the anxiety and reality of how they compare leads to the sticks

gathering cobwebs in the garage.

The key to the kingdom is learning the game. To play golf for a lifetime one must eventually learn and return to the game. The reward of a well hit shot is not the subsequent shot. The reward of a one in 50 shot is the immediate satisfaction of pulling it off. The less concerned we are about score and the more often we attempt the long odds, the more often we can bank another special memory. Smelling the roses is rarely accomplished in the sport: but it is a requisite for the game.

Golf should be a game of lifelong fascination! ●



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**2012.11
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Mr. Alex Goodman
T: +1-203-840-5641
Ms. Sandie Peng
T: +86-755-33358859
E: info@reedguanghe.com