

Issue 34 | Summer 2017

BY DESIGN



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

Nature's gift to golf

Also: Alice Dye, ASGCA Fellow • Adare Manor • John Sanford, ASGCA



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Golf of the highest quality

Only a few days have passed since I was elected American Society of Golf Course Architects president, a role that I am humbled and privileged to assume.

One of the great pleasures of ASGCA membership is the ability to share experiences and learn from other golf course architects, to discover how they have approached the unique and complex challenges that are presented by golf course design projects.

Since the turn of this century, the number of projects to have involved the construction of an entirely new golf course is relatively small, compared to any other period in the history of golf in the United States. But I think we will look back on these years as having produced golf courses of the highest quality, in terms of strategic design, sustainability, beauty, and pure enjoyment to play.

And of those courses that have opened since 2000, Erin Hills must surely rank close to the top. Even before the routing was finalized it was being touted as a potential host course for the U.S. Open, such was the quality of the landscape and reputation of the golf course architects.

In this issue of *By Design*, we discover more about how the design team approached the project, and their reflections on how it has turned out. It's a fascinating insight into the development of one of the country's most remarkable new courses.

I hope you enjoy the read.



John Sanford
President
American Society of Golf Course Architects

BY DESIGN

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CONTENTS

Digest 4

A round-up of the latest from the golf industry, including the UK's first Dye Designs course.

Erin Hills 12

Toby Ingleton speaks with the three men responsible for the design of Erin Hills, and finds out more about the transformation of a glacial landscape into the course that will host the 2017 U.S. Open.

Alice Dye, ASGCA Fellow 20

Learn more about the first lady of golf course architecture, and 2017 Donald Ross Award winner.

Adare Manor 22

Stacey Zinn Roberts and Sabrina J. Russo give us an insight into one of the most eagerly-awaited renovations in golf.

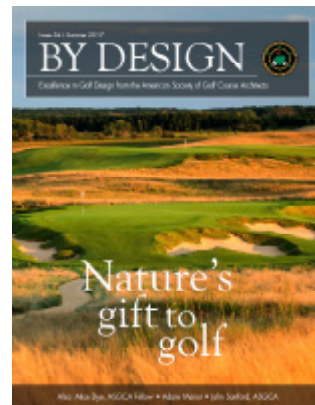
John Sanford, ASGCA 26

The new ASGCA President tells us about his approach to design and ambitions for the year ahead.

Five to finish 28

Our usual five finishing questions are answered by David Dale, ASGCA.

COVER



The ninth hole at Erin Hills Golf Course in Erin, Wisconsin, photographed by David Cannon.

ASGCA promotes benefits of golf



ASGCA Past Presidents Greg Martin, ASGCA, and Rick Phelps, ASGCA, at Capitol Hill in Washington D.C.

Members of the American Society of Golf Course Architects (ASGCA) helped celebrate the 10th National Golf Day on 26 April 2017.

WE ARE GOLF, a coalition of leading golf organizations in the U.S., hosted an all-day event on Capitol Hill in Washington D.C. This was attended by nearly 200 industry representatives from 35 US states.

ASGCA Past Presidents Greg Martin, ASGCA (who was ASGCA President at the time), and Rick Phelps, ASGCA, attended the event. Each spoke with representatives from their respective states about the positive economic, environmental and social impacts of golf, and attended rallies and meetings to draw attention to golf's story.

"National Golf Day was a great opportunity to meet with our specific representatives to share the affirmative story of golf," commented Martin. "First, this was a highly-organized effort to ensure that the positive story of golf reaches those who represent

us. Second, our efforts focused on three specific topics—Waters of the United States, the PHIT Act, which covers fitness tax benefits, and labor issues. Each has a profound effect on how golf is developed and operated. National Golf Day is an illustration of how the industry is coordinating and collaborating to promote the benefits of the game."

ASGCA has a commitment to working with other entities in golf in an outreach capacity, which culminates in the 'big show' in Washington D.C. each year.

"Celebrating our 10th anniversary was an historic moment and significant milestone for the golf industry," says Steve Mona, CEO of World Golf Foundation and administrator of WE ARE GOLF. "The game's economic, charitable, environmental and fitness benefits echoed throughout Capitol Hill as we shared golf's contributions, both locally and nationally, with our country's decision-makers."

ASGCA at #NGD17

During National Golf Day, ASGCA took to social media to highlight the positive impact of the golf industry:

DYK...#USA is home to 15,000+ #golf courses and more than 10K are public facilities. #NGD17 @wearegolf @ASGCA

Did you know: The median 18-hole green fee in the United States is just \$37. Wow! Tee it up, today! #NGD17 @WeAreGolf @ASGCA

#Golf is a nearly \$70 billion industry in the United States, supporting 2 million jobs. #NGD17 @wearegolf @ASGCA

ASGCA members and partners also tweeted their support:

Gary Brawley @gbgolfdesign
#NGD2017 Honored to be a part of a great industry. @ASGCA @GCBA @GCSAA @USGA @cactusandpine @CMAA @SWSectionPGA @pgaofamerica

RainBirdGolf @rainbirdgolf
In the last five years, it is estimated golf has raised close to \$20 billion for charitable causes. #NGD17 #CharityTuesday

Greg Martin @gm_mdgolf
ASGCA Represent. #NGD17 @wearegolf @ASGCA



New course

UK's first Dye course gets green light

The development of a new golf course on the outskirts of London, UK, has been given the green light after planning permission was granted.

Plans for The Dye London have been drawn up by Perry Dye, ASGCA, of Dye Designs. The course is to be built on a site near the London suburb of Edgware, and will be the first Dye Designs course in the UK.

"My design team and I have been working on The Dye London golf course project over a period of five years," Dye said. "This special project, a family-owned Dye Designs Championship golf facility that will be open to the public, located close to one of the world's great capital cities, will attract golfers from all over the globe."

The layout includes an island green on the seventh hole, which has been created as a homage to the seventeenth hole at TPC Sawgrass—a course co-designed by Perry's parents, Pete Dye, ASGCA Fellow, and Alice Dye, ASGCA Fellow.



The Dye London will be the first Dye Designs course in the UK, and has been designed by Perry Dye, ASGCA (left), pictured with his father Pete Dye, ASGCA Fellow



Vicki Martz

Colleagues pay tribute to Martz, ASGCA Fellow

Vicki Martz, ASGCA Fellow, died at her home in Jacksonville, Florida, on 13 April 2017. She was 72 years old.

Martz spent the majority of her 35-plus years as a golf course architect with Arnold Palmer's design business, until establishing her own practice in 2010. Her golf courses include The Legacy Course at Lakewood Ranch in Bradenton, Florida and TPC of the Twin Cities in Blaine, Minnesota.

She was known for her environmental approach to golf design, having served as director of Environmental Design for Palmer and dedicating her own practice to "enhancing the environment through sensitive land management and

designs that creatively use the natural features of the landscape."

"Vicki was one of the kindest, most caring people I have ever met," said Erik Larsen, ASGCA. "She was a talented golf course architect, but that pales in comparison to her character... an awesome lady."

"She has always not only been the sweetest, kindest woman in our profession, but I have never met anyone more positive," said Harrison Minchew.

Greg Martin, president of the ASGCA, of which Martz had been a member since 2000, said: "Vicki was a soft-spoken, pure-hearted pioneer. The twinkle in her eye and the smile on her face cannot be extinguished because we have been graced with her light."



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New course

First Sand Valley course officially opens

The first course at Sand Valley golf resort in central Wisconsin officially opened in May.

The resort is set on a 2,500 acre plot of huge, rolling sand hills and valleys around 100 miles north of the state capital Madison. The resort's first course has been designed by Bill Coore, ASGCA, and Ben Crenshaw, and begins atop one of the property's largest sandhills.

It features a strong set of par fives, several of which feature split fairways, and an especially good collection of one shot holes. These range from the tiny eighth, uphill over a terrifying bunker to a skyline green, to the epic seventeenth, in excess of 240 yards to a largely blind punchbowl green.

The resort's main clubhouse, which contains a bar, restaurant, pro shop and 17 bedrooms, will open in June.

Sand Valley is billing the first course as a 'heathland' experience. Although it is very different from the true heathland courses of England, France and so on, there are a number of overtones of Sunningdale New about Sand Valley, and there are even examples of a plant, native to the sand barrens, that closely resembles real heather.



The 2,500-acre Sand Valley site features rolling sand hills and is set to be home to a number of courses

Short course

New short course created at Wilmington Muni

A new three-hole short course has opened for play at Wilmington Municipal in North Carolina.

Designed by architect John Fought, ASGCA, the course will be used by The First Tee of Greater Wilmington youth programme, and features multiple sets of tees, a short driving range and a practice green.


Fought has previously worked at Wilmington, leading a restoration project on the course back in 2014.

"The short course will be a great place for kids to receive an introduction to the game and get a feel for how to play," said Fought. "It's a very cool facility, as all three holes have their own characteristics and can be played from different distances."



The course will be used by The First Tee of Greater Wilmington youth programme

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Restoration

Tripp Davis completes restoration work at Whippoorwill Club



The Redan eleventh hole at Whippoorwill Club

Tripp Davis, ASGCA, has completed a renovation project at the Whippoorwill Club in Armonk, New York.

The first holes at Whippoorwill were originally designed by Donald Ross in the mid-1920s. However, in 1928, Charles Banks completely reworked the existing course and built a number of new holes.

“Whippoorwill is a wonderful Charles Banks design, so it has always been interesting through the bold and often unique features Banks was well known for,” Davis said. “But, over the years, some of the more important subtleties, such as the width and corners of greens, were lost. Some of the more iconic and deep bunkers were grassed in, and in some places the strategic intent was no longer relevant.”

Davis and the project team started work at Whippoorwill in 2001 with a focus on the course’s tees and some of the bunkers. In 2006, Davis restored the original Biarritz green on the par three eighth hole—a green that was originally 70 plus yards deep but had been reduced. More subtle changes were made, before a complete restoration commenced in 2012.

Architect’s perspective

“There are three primary purposes of golf course renovation and restoration of this nature. One is to ‘modernize’ the structure of things such as tees and bunkers so they are more maintainable to modern expectations. Another is to restore the style to allow the modern membership to best experience the visual art of a golf architect like Banks, while the restoration of strategic intent, or the substance found in things like shot options or unique variety in hole locations, allows the membership to best experience the strategic art. It’s now very much a step back in time that can be



experienced by the modern player in a similar way to the way players in 1928 would have played the course.”

Tripp Davis, ASGCA

Wilczynski creates new holes at Indian Trails



Photo: City of Grand Rapids

Chris Wilczynski, ASGCA, has completed a project which has seen the creation of five new holes at Indian Trails Golf Course in Grand Rapids, Michigan. Wilczynski has removed the former ninth, seventeenth and eighteenth holes. That land is now home to a new driving range and short game practice area. Land to the south of the new practice facility has been developed to house the new par-three ninth hole, par-four eighteenth hole and par-four first hole. A new parthree second hole has also been created, and the splitting of what was previously the par-five sixth hole has also taken place. This hole has now become the new parthree sixth hole and par-four seventh hole.

Renovations to take place at Harborside International



Photo: KemperSports

The two golf courses at Harborside International Golf Center near Chicago, Illinois, are to undergo a series of renovations. A team from the firm of Bob Lohmann, ASGCA—Lohmann Golf Designs—will oversee the project from an architectural perspective, while management firm KemperSports will oversee the construction element. Upgrades will be made to selected bunkering across the club’s two courses—the Port Course and the Starboard Course—both of which were originally designed by Dick Nugent, ASGCA Fellow.

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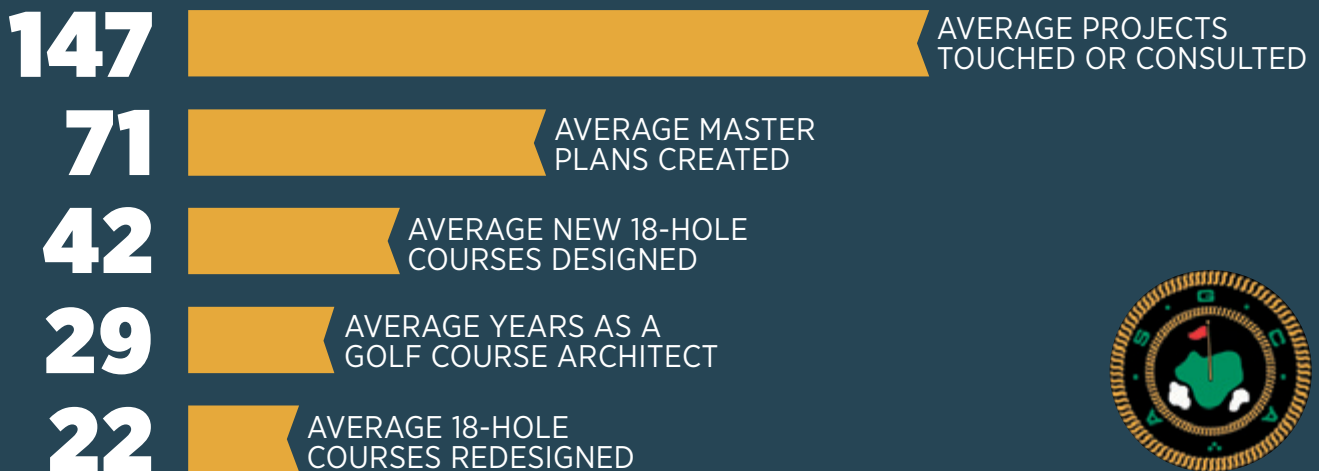


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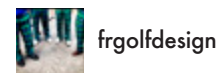
Social update



Great few days spent with @ASGCA in Jupiter, FL. Great entertainment, education & golf. Thanks for having us & look forward to meeting again.



Greg Martin & Forrest Richardson at The Preserve at Oak Meadows... approach to the super cool 15th. Hats off to Greg for his great design.



Mix is being installed in the new putting green today as part of the new clubhouse project at Whispering Pines GC on the @msgulfcoast.



@ASGCA member @RichardMandell sharing about restoration, design and ways to utilize the lay of the land! Thx for being with us at Pinehurst!



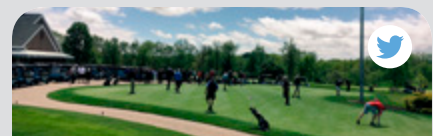
Congratulations & best of luck to new @ASGCA President John Sanford. Follows in footsteps of '47 honorary President D. Ross @DonaldRossSocie



All packed & ready to go for ASGCA Annual Meeting in Jupiter, Florida. Great education on tap, and ASGCA Past President Alice Dye to receive Donald Ross Award 5/20.



USGA Executive Director and CEO Mike Davis on ASGCA's 70th Anniversary: "The contributions of ASGCA, and each individual member, have been instrumental to the enjoyment of the game by millions around the world. Since the 1940's, golf facilities have benefited from the efforts of ASGCA members. Their course design expertise has provided inspiring and enjoyable playing grounds for all of us to deepen our love for the game."



Grand reopening at Sewickley Heights Golf Club today... I am very excited for all the members!



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Nature's gift to golf

The 439-yard par-four fourth hole at Erin Hills,
host course for the 2017 U.S. Open

Photo: Getty Images/David Camron

As the U.S. Open heads to Wisconsin for the first time in its history, Toby Ingleton speaks with the design team responsible for the golf course at Erin Hills, to find out about their approach to this once-in-a-lifetime project.

“Wow...” It’s a word uttered by many when they first set eyes on the golf course at Erin Hills.

And 17 years ago, it was the word that quietly passed the lips of ASGCA Past President Michael Hurdzan, ASGCA Fellow, as he gazed across over 400 acres of pasture land in Erin, Wisconsin.

The land was owned by Wisconsin businessman Bob Lang. Like many who tried to buy it before him, and the cattle farmers it previously belonged to, he could clearly see its potential for golf. Lang had issued a request for proposals and Hurdzan and Dana Fry,

ASGCA, teaming up with *Golf Digest* architecture editor Ron Whitten, were among those who responded.

“The scale and setting is so grand it’s almost unbelievable when you see it,” says Fry. “Your eyes can’t take it all in.”

“The property is so ideal in terms of its dimensions and natural rolls,” says Whitten, “Classic rumped blanket topography.”

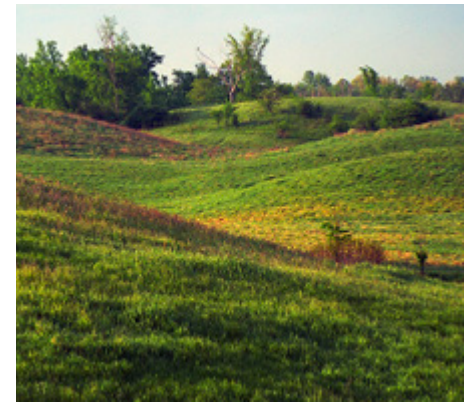
That ‘rumped blanket’ effect is the work of glaciers. Erin lies on the Kettle Moraine, an area in the east of Wisconsin that is typified by its undulations and rolling hills. These landforms were created from deposits

that were left as glaciers receded from the area around 18,000 years ago. Large chunks of ice that remained formed ‘kettle’ depressions in the ground, which have been revealed as the ice melted in the years since.

It’s the type of landscape that many golf designers seek to create. In Erin, Mother Nature had already done the shaping. “This was an opportunity to make a very naturalistic golf course,” says Hurdzan.

He and Fry had worked on a glacial landscape in Canada ten years before, creating the Devil’s Paintbrush course in Ontario, Canada, which is widely recognized as one of the country’s best. “I think we have an affinity for links-type golf courses with the naturalness of the undulation and fescue grasses and a little bit of quiriness and blindness—I call it ‘real golf.’”

The Erin Hills site before work on the golf course began, with fairways simply mown to show potential hole routings



Photos: Paul Hundley

The design team, from left: Ron Whitten; ASGCA Past President Michael Hurdzan, ASGCA Fellow; and Dana Fry, ASGCA

“There are lots of pieces of property that have ups and down to them, and a lot of rolls,” says Hurdzan. “But what makes Erin Hills unique in my mind is that it was a perfect rhythm of that—the humps and hollows didn’t come too quickly together, nor were they too far spread out.”

Working with the land

With a canvas so ideally suited to golf, from the very start of the project the design team committed to moving as little earth as possible.

“We had such a vast piece of property,” says Whitten, “We thought, man, we ought to be able to find eighteen holes out here without having to manipulate things.

“From the beginning, we all felt like Mother Nature is the best architect, let’s try to follow her lead.”

Hurdzan is known for his environmental approach to golf course design. “What sustainability means to us,” says Hurdzan, “is using the least amount of water, fertilizer, pesticide and energy sources, yet produce a market competitive round of golf.”

“When we started out, we weren’t trying to build a U.S Open course,” says Whitten. “We were trying to build a very low budget, inexpensive, daily fee course. I know Mike has preached this for decades, you do that in part by trying to find a piece of topography that allows you to build a course inexpensively, without a lot of work, and then maintain it inexpensively. Much of this is down to grass selection.”

For everywhere except tees and greens, the designers selected a grass species that is unusual for golf courses in the United States, and more commonly associated with British and Irish links courses.

“We chose fescue grasses because of the nature of the soils and because there wasn’t a lot of water,” says Hurdzan. “Fescue grasses are just naturally adapted to that sort of climate.”



Photo: Getty Images/David Cannon

Fescue requires less water than many other grass species that are used for golf, and it can be mowed to very low heights. This combination gives rise to a very firm playing surface, which would allow the designers to make the most of the undulations of the land.

Maximizing potential

For most golf course design projects, the challenge lies in handling the constraints of the property. But at Erin Hills, the lack of constraint was the challenge—and the desire to get the very best eighteen holes from such an impressive site.

one side and wetlands on two-and-a-half sides, and the buffer zones we needed to stay away from. It was then just a matter of trying to find the best eighteen holes we could.”

“We spent three years routing the course,” adds Whitten. “We had all sorts of different routings, we would walk it and re-walk it and re-walk it. We started with trying to identify natural green sites, and then move back and forwards from there.”

Construction began in 2004 and the course opened for play in 2006.

“I think we did get the best out of every golf hole that we possibly

/// We thought, man, we ought to be able to find eighteen holes out here without having to manipulate things

“It’s like a thousand-piece jigsaw puzzle,” says Hurdzan. “You try to find all the edge pieces and then work in. Our edge pieces were a river on

could,” says Fry.

“The tee shots are fantastic. They are visually stunning and there are a lot of angles and risk/reward element to

“A site that really had to have a golf course on it”



By *Design* caught up with Bill Kubly, founder of Landscapes Unlimited, who handled construction work at Erin Hills.

What did you make of the site?

I am very familiar with the Kettle Moraine area, I grew up in Wisconsin. It's just spectacular—a site that really had to have a golf course on it.

Was the key to do as little as needed?

When you get a site that is so natural, you want to work with the site. The cost of the course was reasonable because we hardly moved any dirt—it's just so rare to get a site that basically was mowed out. The only things that really had to be built were tees and greens, plus a little bit of earthwork in certain places. But it was so natural, which really made it a pleasure to build.

What challenges did the site present?

The soil is very rocky, making it difficult to finish and not bring those rocks to the top. With Mike Hurdzan's assistance we did an almost 'no till' grassing. Probably 90 percent of the fairways are exactly the way they laid in nature. That way we kept the beautiful naturalness of the fairways the way they were before. In the United States, there are very few golf courses that have fine fescue—it really was a great way to finish a golf course.

The bunkering is very distinctive...

The bunkers were roughed in with a bulldozer first and a shaper came in with a knuckle bucket on a mini excavator and did all the 'gnarly'-ness. All three of the architects spent time on those bunkers to get that look they were after. There was a lot of hand work—the fine detail is best finished with a shovel to get those little idiosyncrasies into those bunkers.

them. On number two, for example, you have three different angles you can take off the tee—hit it left, down the middle, or carry the bunkers and go for the green. Choices like that happen continuously.”

It's the same with shots into the green, explains Fry. “You have to pick the spot you want to hit it and let the ball feed down. There're just a lot of completely different shots. And I think the quality of the shot at almost every single hole is really good.”

“Part of it was coming up with some unusual holes,” says Whitten. “We didn't want holes that you have seen a thousand times, and I think we achieved that. Erin Hills has really unique, distinctive holes. I defy anybody to show me a hole that is like the second or twelfth.”

Contour and bunkering

Many of Erin Hill's greens rely on the land's natural contour for protection. On the first and seventeenth, for example, there are no greenside bunkers at all. And several other holes have just one bunker close the green.

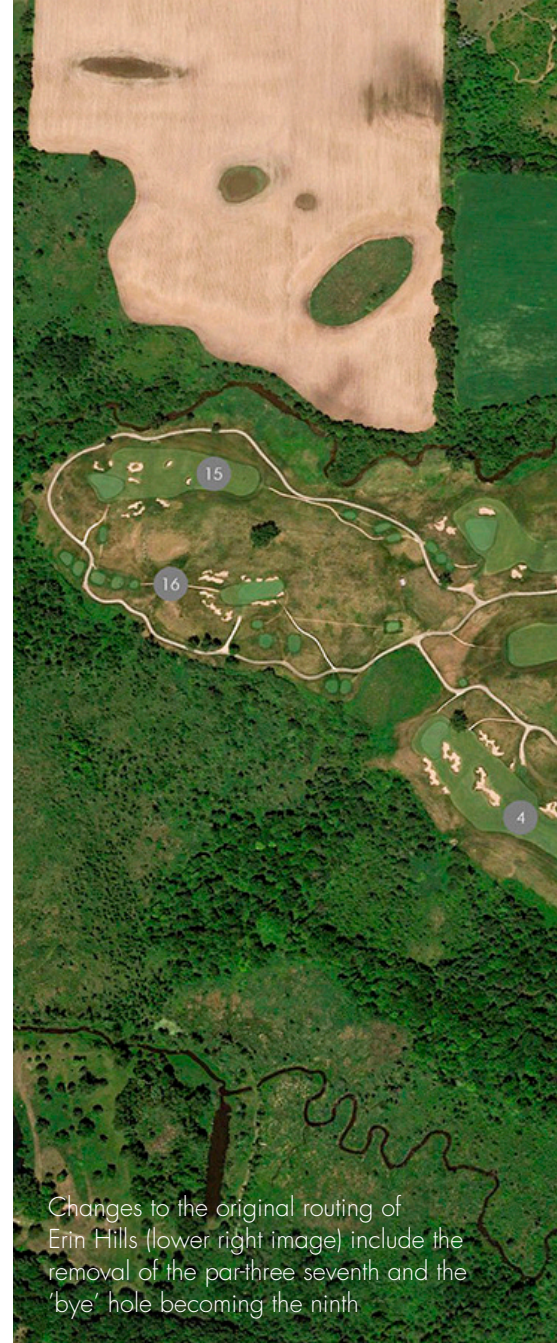
“This was a public golf course and we didn't want to beat up golfers with a whole lot of unnecessary bunker shots,” explains Whitten. “Landforms were king, so when we located natural green sites and we built those greens, we were relying on a lot of those natural contours to protect certain pin positions.

“I have had probably more architects tell me that their biggest criticism with Erin Hills is that the greens are unprotected. Well, I guarantee those greens are protected, but they are protected by contours, they are protected by the tightly-mowed fescue, and they pose a whole lot of different recovery shots.”

The bunkers that were built are truly hazardous. “Nobody is going to be able to play the bunkers very well,” says Hurdzan. “If you hit it in the bunker you are going to pay a big penalty, so a lot of it is, choose your shots and play good course management.”

Open preparation

In 2009, Erin Hills was sold to Andy Ziegler, a Wisconsin money manager.



Changes to the original routing of Erin Hills (lower right image) include the removal of the par-three seventh and the 'bye' hole becoming the ninth

This opened the door to increased investment in the course and, in 2010, the United States Golf Association (USGA) announced Erin Hills as the venue for the 2017 U.S. Open.

With the U.S. Open's reputation for narrow fairways, thick rough and protection of par, would the course need significant alteration?

“You have to understand that Mike Davis and David Fay of the USGA were participating with us from 2004, when we were still finalizing the routing,” explains Whitten. “They were walking the site and they were making suggestions with the idea in the back of the mind if this were to host a U.S. Open, what would they want?”



Photo: Google Earth



Image: Donald Keller

“Surprisingly, they were on board with fairways that are some of the widest in U.S. Open history. The tenth fairway at one point is probably 75 yards wide. It is a windy site too.”

“The things that will make it playable for the average player, and be a good stern test for the great player, are the angles off the tees,” adds Hurdzan. “We have so many tees and, in addition to that, the greens were designed with the thought in mind of competitive hole location. 75 or 80 percent of each green has really reasonable hole locations, but there is maybe 20 or

25 percent of those greens, that the USGA can use for hole locations, that will make it a stern test.”

The course’s evolution from opening day to U.S. Open host has seen some changes along the way. A ‘dell’ style par three hole was removed to allow the following hole to be extended to what is now the par-five seventh hole, and bringing the original ‘bye’ hole into the full eighteen (as the ninth hole—see ‘Pick of the Hills’ box for more).

But it is Mother Nature’s work that remains most evident.

“85-90 percent of that land has never

changed from the day we set foot on the property,” says Fry. “It still is the most natural golf course I have ever worked on in my career since 1983; there was not a lot of dirt moved out of here. We touched parts of five or six holes after it opened, but the bulk of the land is as the way it was.”

Seventeen years on, what makes the design team most proud?

“The golf course embraces all of the principles of sustainability,” says Hurdzan, adding: “You could have a person who is just of average skills go out and enjoy the heck out of the day and then I believe it will test the best in the game as well.”

“I am just very proud to have been a part of this,” says Whitten. “I have worked with two of the very best golf architects out there in Mike and Dana.”

Fry concludes: “For guys like us to be part of a golf course that is now going to host a U.S. Open and hopefully more in future, that is probably the biggest achievement we will ever get in our lifetimes.” ●

The 117th U.S. Open Championship takes place at Erin Hills on June 12-18, 2017. For more detail on the golf course, including a video flyover and commentary of each hole, visit usopen.com/course.



The 357-yard par-four fifteenth and (below) 594-yard par-five fourteenth



Photos: Getty Images/David Cannon

Pick of the Hills

We asked the team responsible for the design of Erin Hills to pick out their favorite holes.

HOLE 9 — Par 3, 135 yards

"I think it will be known eventually as one of the great short inland par threes in all the world," says Fry of the distinctive ninth hole, which requires a drop shot to a green surrounded by bunkers. "That green site was going to be used one way or another—we had it coming in from three different directions in our different routings. It's going to be just a nine iron on most days. But if the wind is blowing, it is unbelievably difficult. If you get a 20mph wind it is just horrible. I think the ninth hole is going to be the one that most people talk about."



HOLE 12 — Par 4, 464 yards

"It's sort of an S shape with a green that's in a valley," says Hurdzan. The fairway twists and turns and players could face awkward sidehill or downhill lies for their approach shots, to a narrow green that slopes away at the front and back. "It is a neat golf hole and if the wind is blowing, it will be hard as heck. But if the wind is in their favor, guys are going to be hitting short shots in there. It is going to be a hole that people haven't seen very much of outside of Ireland."

HOLE 18 — Par 5, 637 yards

"I think it will prove to be one of the most dramatic finishing holes in major golf," says Whitten. "You could have 50,000 spectators sitting on that hillside watching it. It is directly lined up, by design, with Holy Hill nine miles in the distance. Mike Davis can set it up for players to hit driver and iron, or so they can't reach the green with driver and a three wood." Hurdzan adds: "It's not like a typical par five where the pros are always going to be thinking it's a birdie hole." Players left with a long approach will face, according to Hurdzan: "just one of the hardest shots you will ever see in your life."



The first lady of golf course architecture

A pioneer for women's golf and one of the industry's most influential golf course architects, ASGCA Past President Alice Dye, ASGCA Fellow, has been presented with the 2017 Donald Ross Award. *By Design* spoke with Dye and reflects on her achievements in the game.



Born in Indianapolis, Indiana, in 1927, ASGCA Past President Alice Dye, ASGCA Fellow, enjoyed a highly successful amateur golf career. She triumphed at the Indiana State Championships on nine occasions, won eleven Indianapolis City Championships, and three Florida State Championships. She also won the Doherty Cup, and earned herself a place on the U.S. team for the 1970 Curtis Cup.

She met her future husband Pete at Rollins College in Winter Park, Florida. The couple married in 1950 and moved to Indiana, where Pete worked as a salesman for The Connecticut Mutual Life Insurance Company.

According to a 2003 article by Ron Whitten in *Golf Digest*, Pete came home from work on a summer day in 1955 and said to Alice: "I'm tired of the insurance business. What I really want to do is build golf courses."

Pete was also an elite amateur golfer, and had been learning about golf course maintenance while chairman of the green committee at the Country Club of Indianapolis. Both Dyes gradually turned this interest into a profession, designing their first nine holes, El Dorado (now named Dye's Walk Country Club), in Greenwood, Indiana,

in 1959. Soon after, the couple designed their first 18-hole layout, at Maple Creek Golf and Country Club, also in Indianapolis.

Their commitment to golf course design was cemented after a tour of Scottish golf courses the Dyes undertook after Pete competed in the 1963 British Amateur. They brought home the ideas they saw on the links of Scotland.

"Both Pete and I were champion golfers and played famous courses, which influenced our design features," Alice tells *By Design*. "I think our golfing ability was significant to our design work."

“Every course we have built has been a special project for us

"It helped us to make tees for all abilities, as we truly understood the game. I have worked hard on playable yardages for women," continues Alice.

Her 'Two Tee System for Women' encouraged clubs to introduce an additional set of forward tees for women. "Her system was devised to accommodate female players with differing skill sets," says ASGCA Past

President Greg Martin, ASGCA. "This may seem obvious to us today, but when she came up with the system decades ago it was ahead of its time."

Over the years, the couple went on to create some of the most highly-rated golf courses in the U.S. and beyond, including Crooked Stick in Carmel, Indiana; Harbour Town Golf Links in Hilton Head Island, North Carolina; the Ocean Course at Kiawah Island Resort in South Carolina; the Straits Course at Whistling Straits in Kohler, Wisconsin; and the Stadium Course at TPC Sawgrass in Ponte Vedra Beach, Florida, where Alice famously

suggested an island green for the par-three seventeenth hole.

"Every course we have built has been a special project for us," says Alice. "All of our course features are designed on site, so each course has original holes and greens."

The Dye's golf course legacy stretches far beyond the courses they designed themselves. Many of golf's leading



Photos: Getty Images, David Cannon

Alice at the 2017 ASGCA Annual Meeting with husband Pete (right), Rees Jones (left) and Jack Nicklaus, all four of whom are ASGCA Fellows; Right, Alice shows 2005 European Solheim Cup Captain Katrin Nilsmark around Crooked Stick Golf Club in Carmel, Indianapolis; Lower right, Alice was a pioneer in work on multiple tees, having devised a 'Two Tee System for Women'

CREATING A TWO TEE SYSTEM FOR WOMEN

IT'S TIME TO MOVE FORWARD.

BY ALICE DYE
Member of the ASGCA Board of Directors
and ASGCA Fellow

More than a decade of playing from different tees has proven the need for additional tees. Women's golfers are playing from tees that are often 100-150 yards longer than men's tees. The result is a frustrating experience for many women golfers. It's time to move forward and create a two tee system for women. The larger tees should be the same size as the smaller tees. This will allow women to play from a tee that is the same length as the men's tees, but with a shorter carry to the hole. This will allow women to play from a tee that is the same length as the men's tees, but with a shorter carry to the hole.

CURRENT RESEARCH

- Researcher: The National Golf Foundation, one of the largest golf organizations in the world.
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WHY THE TWO TEE SYSTEM IS GAINING MOMENTUM

- 1 There is a growing desire among women players. The size of the golf ball has changed and women's golfers are playing from tees that are often 100-150 yards longer than men's tees.
- 2 Women are playing from tees that are often 100-150 yards longer than men's tees. The result is a frustrating experience for many women golfers.
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HOW TO CREATE NEW FORWARD TEES

Women's golfers are playing from tees that are often 100-150 yards longer than men's tees. The result is a frustrating experience for many women golfers. It's time to move forward and create a two tee system for women. The larger tees should be the same size as the smaller tees. This will allow women to play from a tee that is the same length as the men's tees, but with a shorter carry to the hole.

ADDING FORWARD TEES TO EXISTING COURSES

Four Tee Holes

- Recommended playing length for back tees for women: 200-250 yards
- Recommended playing length for forward tees for women: 100-150 yards

Four Tee Holes

- Recommended playing length for back tees for women: 100-150 yards
- Recommended playing length for forward tees for women: 200-250 yards

Four Tee Holes

- Recommended playing length for back tees for women: 100-150 yards
- Recommended playing length for forward tees for women: 200-250 yards

CONSTRUCTION OF THE NEW FORWARD TEES

- 1 Prepare the hole and the surrounding area. The hole should be 4.25 inches in diameter and the surrounding area should be 100-150 yards in length.
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COST

The following are the estimated costs of creating a two tee system for women:

100 Yards (good) or 150 Yards (bad)	\$10,000	\$20,000
200 Yards (good) or 250 Yards (bad)	\$20,000	\$40,000
300 Yards (good) or 350 Yards (bad)	\$30,000	\$60,000
400 Yards (good) or 450 Yards (bad)	\$40,000	\$80,000
500 Yards (good) or 550 Yards (bad)	\$50,000	\$100,000

HOW WILL THIS CHANGE EFFECT HANDICAPS, TOURNAMENTS AND DAILY PLAY?

As a woman's handicap is determined by the difference between her best score and her average score, a two tee system will allow women to play from a tee that is the same length as the men's tees, but with a shorter carry to the hole. This will allow women to play from a tee that is the same length as the men's tees, but with a shorter carry to the hole.

course designers honed their craft while working alongside the Dyes, including Jack Nicklaus, ASGCA Fellow; Bill Coore, ASGCA; Bobby Weed, ASGCA; and Tim Liddy, ASGCA.

The couple's sons, P.B Dye, ASGCA, and Perry Dye, ASGCA, have also gone on to develop their own rich golf course design portfolios. "Growing up, they loved riding on the equipment," says Alice, "but approached their parents' occupation slowly." Many other members of the extended Dye family are now also involved in golf course architecture, including Alice and Pete's niece Cynthia Dye McGarey, ASGCA, whose eagerly-awaited West Cliffs course in Portugal is opening this summer.

Alice's significant contributions to the game of golf have seen her recognized as the ASGCA Donald Ross Award winner for 2017.

"She and Pete Dye were a dynamic duo, a genuine partnership, in every sense of the phrase," says Martin. "Long before it was fashionable, Alice was an advocate for women's golf, thoughtful forward tees and playability for varying skill levels. She is devoted to mentoring young designers, and is tireless in her service to ASGCA and the profession of golf course architecture. I know my fellow ASGCA members join me in acknowledging Alice as very deserving of this award."

"Being their first female member, I have always had a great respect for the ASGCA," says Alice Dye. "The Donald Ross Award means that they respect my work, so I am deeply touched." ●

Image: Dye Designs

A world of firsts at Adare Manor

The golf course at Adare Manor in Limerick, Ireland, will reopen in 2017. Stacie Zinn Roberts and Sabrina J. Russo find out more about the project, and discover how Profile Products has contributed to its success.

In Limerick, Ireland, there is a golf course rejuvenation underway, the likes of which the Emerald Isle has not seen before. Tom Fazio, ASGCA, and ASGCA Past President Tom Marzolf, ASGCA, of Fazio Golf Course Designers, Inc., renovated the course at historic Adare Manor Hotel & Golf Course—originally designed by ASGCA Past President Robert Trent Jones, Sr.—with the goal of hosting world-class golf events. Rumors of a Ryder Cup bid for the landmark property are backed up by infrastructure and design methods that ensure the highest level of playability when the course opens later this year.

The construction methods included hydraulically applied mulch on fairways that held contours in place and protected fragile grass seed during the harsh Irish winter. Infrastructure was built into the course with the intention to make televised golf matches an integrated part of the layout, as opposed to an afterthought. Buried television-cables and wide roadways rather than cart paths were designed to accommodate trucks moving grandstands and TV towers. Massive

drainage systems and greens constructed with a rootzone blend of sand and Profile Porous Ceramics were strategically designed to keep greens fast, firm and dry in even the wettest Irish weather. Iconic Adare Manor is poised to become the most technologically-advanced golf course facility in Ireland.

When J.P. McManus, known for world-class golf projects such as Sandy Lane in Barbados, purchased Adare Manor from its previous owner, Tom Kane, in 2015, he already had

“The largest project built in Europe this year, Adare Manor’s renovation is one of the most extensive in the history of Irish golf

big plans for the future of the course. McManus’s goals demanded the creation of a course that could host the JP McManus Pro-Am and other major events and, potentially, the Ryder Cup itself. Adare Manor was already the number one parkland golf course in Ireland, when the Fazio team was brought in to redefine it.

“From day one, Mr. McManus said he would play the Pro-Am here,” says Marzolf. “The course is set up for hosting large gallery events so part of our design was to lay out locations for skyboxes, grandstands, and seating.”

Large-scale tournaments require a great deal of infrastructure to support their operation, but Fazio and Marzolf were meticulous in their planning to ensure that Adare’s layout could accommodate seating, corporate pavilions, and access

roads for semi trucks. While cutting-edge fiber optic and underground electrical wiring certainly establish a seamless and elegant solution to hosting large, televised events, a tournament is only as good as the course where it is played.

Fazio’s design for Adare Manor retains the original routing of the RTJ





Photos: Adare Manor

course, but virtually nothing else of the former design remains. Every inch of soil was turned over and recontoured, redesigned, reimagined. But it took more than just creativity to make the beauty of the course functional. Innovative products and unprecedented construction methods were key.

According to Marzolf, when Mr. McManus purchased Adare Manor he knew he wanted to create something remarkable. A resident of County Limerick himself, he dreamed of bringing well-paying jobs and an exciting new way of life to the place he'd come to love. To elevate the already-renowned Adare Manor, whose castle-like manor house was built in 1832, McManus knew that he had to overcome the obstacles created by the volatility of playing a game outdoors in Ireland's changeable weather. According to Marzolf, McManus "wanted to have no rough, low cut turf, no fescue, no tall grass. Mr. McManus had some goals for the presentation of the property that were fast and firm and a well-drained golf course."

The largest project built in Europe this year, Adare Manor's renovation is one of the most extensive in the history of Irish golf. With an annual



rainfall of 55 inches, the weather in Limerick was an unavoidable factor in the construction of the golf course. In the near-constant mist and rain of Ireland, a well-draining course is a unique design challenge. In order to create optimal playing conditions, the entire course was sand-capped and graded to drain quickly so that it would stay fast and firm, no matter the weather. The new design incorporates 77,000 meters of drainage spread over just 150 acres of land—that's one drain every 15 feet.

"This is the most drainage Fazio Golf Course Designers has ever put into a course," Marzolf says.

The entire course was seeded with cool-season grass varieties. Tees and fairways were seeded with perennial ryegrass. Greens are Pure Distinction bentgrass. The course is designed with no rough, with Augusta-style fairways 'shaved down' to the edges.

To hold the grass seed in place, the seed was applied through a hydroseeder using Flexterra® High Performance-Flexible Growth Medium™ from Profile Products to promote germination on fairway and semi rough areas. Over 120 tons of Hydromulch 2000 wood fiber hydraulic mulch, also from Profile Products, were used to keep the seed



Hydromulch from Profile Products helped the Fazio team get to a playable golf course faster, by holding the seed in place until it was ready to germinate

in place and stabilize slopes in the outer rough areas.

“We knew that we’d be seeding through the fall and winter time, so the decision was made to use a hydromulch to protect the seed,” says Marzolf. “We might be doing some seeding during the dormant part of the year, and we thought the Profile product might hold the seed in place on top of the sand cap, reduce the erosion and allow us to have a better-finished grade.”

The Flexterra was mixed in a tank and sprayed across 135 acres, coating and nourishing the seed through germination. Flexterra is comprised of a wood pulp that adheres to the surface it lands on, and appears green in color to indicate where it has been applied.

The process worked.

“We never lost grade anywhere, it was an amazing thing to see. It saved us a lot of time and helped us get to a playable golf course faster by holding the seed in place until it was ready to germinate in the conditions here in Ireland,” Marzolf notes. Although the

course is set to open this summer, it’s actually been playable since this past spring, aided by the hydromulch that held the seed and soil in place.

“It’s been a great product,” he continues. “We never had any erosion anywhere on the site, which is kind of hard to believe. I never thought I’d be saying that in my life! The hydromulch is great. It holds the grade. No washouts, no repairs. On 135 acres of applied area, we might have had 10,000 square feet of minor, minor touch ups.”

On greens, Fazio’s design includes 570 tons of Profile Porous Ceramic soil amendment blended into the sand root zone mix at an 85:15 blend (sand to PPC) “to provide a permanent improvement to the root zone, improving infiltration rates, water and air porosity percentages, and water and nutrient retention,” explains Gavin Kelly, who is based in Ireland and consulted on the Adare Manor project for Profile Products.

The greens mix was extended 120 feet beyond the greens in all directions in an 8-inch sand cap, Marzolf says, to

increase drainage and playability. This was another design first, established to promote drier conditions in swales and landing areas.

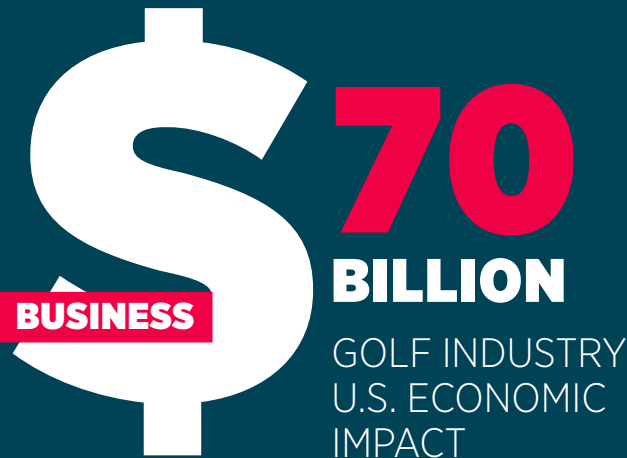
In order to oversee the project’s progress, Marzolf moved to Ireland from his home in Greenville, South Carolina. He spent about 250 nights on site during construction in 2016 and returned for 10-day periods throughout the winter. He says the developer kindly provided a home and vehicle for his use during the project, which was a tremendous help to him, working so far from home.

After 34 years with Fazio Golf Course Designers, Marzolf says he’s surprised to have experienced so many firsts at this, his 84th golf course project. Slated to open in autumn, Adare Manor isn’t so much a renovation as it is a rebuild, the culmination of McManus’s vision and Fazio’s renowned ability to innovate.

Of his experience helping to bring the golf course at Adare Manor to life, Marzolf says: “It’s been a lot of fun and a lot of hard work. It’s been amazing.” ●

GOLF BY THE NUMBERS

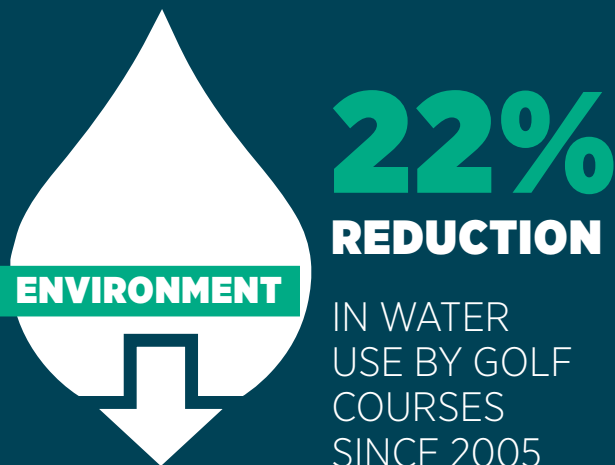
THE GAME OF GOLF REMAINS STRONG. AS THESE STATISTICS FROM ASGCA, GOLF 20/20 AND WE ARE GOLF ILLUSTRATE, MORE GOLFERS ARE PLAYING MORE OFTEN, AND LIKELY ON A COURSE TOUCHED BY AN ASGCA MEMBER.



- 2 million – U.S. jobs with direct ties to golf
- \$3.9 billion – Annual amount raised by golf industry for charity (more than all other sports combined)
- 76% – Golf played on public courses



- 2 million – Those trying golf for the first time in 2015 (more than any year since 2002)
- 29% – Increase in number of youth golfers ages 6 to 17 in the past three years



- 65% – Golf course facilities who have upgraded irrigation systems in the past 10 years
- 77% – 18-hole U.S. golf facilities that have taken steps to conserve energy



- 96% – Advise clients on water quality/availability
- 93% – Help clients improve/expand practice areas
- 93% – Add tees to accommodate juniors, women & new players

DATA COURTESY OF

WORLD GOLF
FOUNDATION

Strategic, estratégico, stratégique...

In any language, the work of ASGCA President John Sanford, ASGCA, is strategic in nature. Marc Whitney reports.

ASGCA President John Sanford, ASGCA,—who assumed the leadership position at the recent ASGCA Annual Meeting in Jupiter, Florida—is an accomplished golf course architect and a really good guest to have at your next cocktail party.

Not many people can transition so easily from tales of one life-changing experience to the next: remembering his father, major league pitcher Jack Sanford, who started three games of the 1962 World Series; stories of Hall of Famers Willie Mays and Juan Marichal; flying over the polar caps on his way to design courses in Japan; working on projects in the U.S. and around the world with Jack Nicklaus,

ASGCA Fellow; or joining Egyptian President Hosni Mubarak for tea on the ninth green of a Sanford-designed course in Sharm El Sheik.

But during a conversation on his career and the state of golf course architecture, only one story caused Sanford to choke up a bit.

“My first ASGCA Annual Meeting in 1999 in Charleston, South Carolina,” he recalled. “It was intimidating. I only knew four or five members at the time. But at the opening reception, Jay Morrish introduced himself to me and let me know I was welcome.

“I loved Jay’s work! He told me, ‘If there is anything you need, come to me and I’ll take care of you.’”

Sanford paused to collect himself before continuing.

“I felt like maybe I was an outsider until that moment,” he said. “But with Jay, I had a ‘go-to’ guy.”

Sanford was born in Philadelphia, when his father was pitching for the Phillies (see sidebar). The family moved to West Palm Beach, Florida, when John was eight, and the area has been his home ever since.

“There was no money in baseball in those days, so dad had an offseason

job building and managing golf courses,” Sanford said. “He fell in love with golf, and I thought it was pretty cool, too.”

As a young teen, Sanford had another of those ‘life-changing experiences.’ While at the home of architect Bill Mitchell, he saw a set of golf course design plans on the dining room table.

“Wow, the light bulb went off,” he said. “You can make a living drawing and designing golf holes!”

With his dad now out of baseball and director of golf at President Country Club in West Palm Beach, Sanford became an excellent golfer. He even competed in amateur events against his now-fellow ASGCA members Steve Smyers, ASGCA, and Jack Nicklaus II, ASGCA.

Sanford attended Louisiana State University, where he played on the golf team for two years.

“I studied building architecture, and after a year my teachers sent me down the hall to see the landscape architecture folks. It was the correct decision. My future was going to be in design, not playing.”

After several years as a landscape architect, he earned his first golf course design opportunity.

“I was invited to the Dominican Republic to look at a property,”



Sanford (left) and Nicklaus at Trump Golf Links at Ferry Point in New York, one of many projects they have collaborated on



Sanford designed the Granite Links course near Boston using fill from the city's 'Big Dig' highway and tunnel excavation project

Sanford said. "A resort had been developed on the beach, but there was marsh land in the back."

Sanford was tasked with designing what would become Bavaro Beach Resort.

"I was too naïve and young to think that I couldn't do it," he said. "I was very lucky."

A meeting with a Japanese businessman two years later opened the door to numerous projects in the United States and Asia, building relationships and friendships Sanford continues today.

"We did a couple projects in Japan where we moved parts of mountains; just crazy stuff," he said. "I was traveling around the world and had no idea how lucky I was. I was willing to go anywhere."

"Every project is an adventure. Everywhere you go, there are different conditions, soil, topography, not to mention the different cultures and personalities."

Sanford's professional passport includes stamps from Japan, Vietnam, Egypt, and Dominican Republic, with additional projects in Puerto Rico and the Caribbean.

"From the very first course I designed, I have tried to emphasize interesting strategic design," he said. "I haven't got a signature or visually

consistent style, because it is different with each property. I have always been intrigued by strategic shot making. All of my courses should have a distinct strategic quality."

Since 2005, Sanford has also worked on a number of projects with Nicklaus and his design team, starting with Palm Hills Golf Club in Cairo, Egypt. In fact, Sanford is currently working with Nicklaus on a redesign/repurpose of that same President Country Club course, now called Banyan Cay, where Sanford learned to play the game.

"I always thought my strategic approach was solid, but I have learned so much from Jack," he said. "His repertoire of strategic experiences is so extensive. Jack sees the game at a unique level."

And how does Sanford view his upcoming year as ASGCA President?

"ASGCA is in a great place," he said. "We are becoming a professional organization that continues to raise our profile in the industry."

"Historically, we were seen as the fraternal group behind the scenes. But ASGCA members are smart people who know their craft and benefit the golf industry in a number of ways. I want to help raise ASGCA brand awareness and continue working with our partners to bring more value to our members." ●

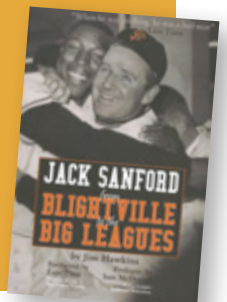
From Blightville to the Big Leagues

Jack Sanford spent eight years in Minor League Baseball before making it to the majors. Perhaps that, more than anything else, has resonated most with his son, ASGCA President John Sanford.

"Persistence pays off," Sanford said his father taught him. "Keep grinding away." Jack Sanford is the subject of the book *From Blightville to the Big Leagues*, now available on Amazon.com (www.amazon.com/Jack-Sanford-Blightville-Big-Leagues/dp/0988230070).

The elder Sanford earned National League Rookie of the Year honors with the Philadelphia Phillies in 1957 at age 27. His 12-year big league career was highlighted in 1962, when he was the ace of the San Francisco Giants staff (24-7 record) and the starting pitcher in Game 7 of the World Series against the New York Yankees.

Jim Hawkins, longtime baseball writer for the Detroit Free Press, wrote the book.





/// The most riveting four-ball would be filled with discussion of architectural theories by Donald Ross, Alister MacKenzie, James Braid and Harry Colt

David Dale, ASGCA

David Dale, ASGCA, has been a golf course architect for almost 30 years. He joined the Ronald Fream Design Group in 1988—a firm also globally known as Golfplan. Dale was made a senior architect in 1992 and partnered with Fream in 1996. In 2006, Fream chose to retire and invited David and his now-business partner Kevin Ramsey to purchase Golfplan. Dale resides in Windsor, California, with his wife Laurie.

How is your game?

Ha! Really, what game? The romance of believing I would play every week of my life has long gone. When I do play, it is usually with borrowed clubs in a country far away from home or a special day with my son and grandson on a nearby course. Boy oh boy, give me more time to play with my son and grandson. That's my definition of true joy.

What is your favorite hole in golf?

I have a few. Some are drivable four pars, such as the tenth at Riviera Country Club. Some are dramatic par three holes on coastal sites, such as the fifteenth hole at Pine Beach Golf Links. Perhaps my favorite hole is the hard dogleg left, par four fourth hole at the Club at Nine Bridges in Jeju, South Korea. Selecting between a long iron up to driver for a proper ball position

for the pin of the day is vital. The second shot—wow. If you could only walk the surface of the green, you would fully understand that fairway position off the tee is key.

If you could change or add one rule, what would it be?

The divot, that nasty torn depression in the turf, should be ground under repair. Having to continue play with the ball down, is this truly fair? I understand the challenge in how to define a divot and at what point the divot would be considered healed, but how many amateur players have the skill level to execute the shot? Not many!

Which three people would make up your dream four-ball?

My first choice would be with my father, son and grandson. My second

choice would be with Arnold Palmer, Tom Watson and Gary Player, and certainly the most riveting four-ball would be filled with discussion of architectural theories by Donald Ross, Alister MacKenzie, James Braid and Harry Colt. I would be the keeper of the card and taking down notes at every step!

What projects are you currently working on?

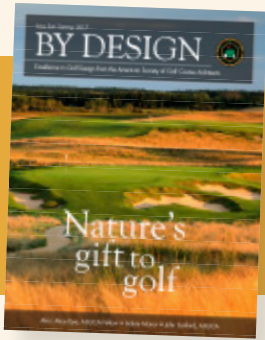
We have some very interesting new projects that are keeping us active around the world. In Uganda, on the shores of Lake Victoria, we have nine holes open for play, with the second nine progressing with rough shaping. In Thailand, a new 18-hole course is under construction near Silver Lake, with numerous holes overlooking Khao Chi Chan—or Buddha Mountain. ●



The approach to the fourth hole at The Club at Nine Bridges in Jeju, South Korea

Photo: David Dale

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