



ISSUE 53 // SUMMER 2021

BY DESIGN

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



KEEPING IT SIMPLE

A 'less is more' approach to course design can improve playability and operational efficiency

VALUE OF ARCHITECTURE

Good golf course design is responsible for providing a satisfying experience with every round

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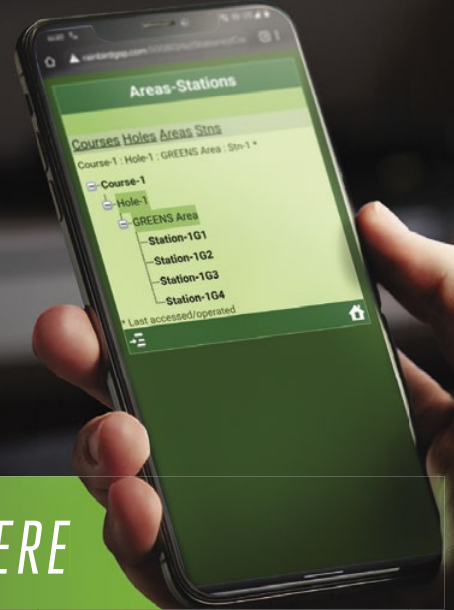
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Forrest Richardson
President, ASGCA

Making the complex simple

Complexities are part of the job description for a golf course architect. They arise from the brief, the site, the budget and countless other factors. Sometimes this demands a complex design. But quite often, a simple solution can be just as effective.

I am a strong advocate for simpler solutions to golf course design. In the future we will need to leave smaller footprints; rethinking golf's water usage, maintenance requirements and use of resources. The challenge is to achieve all of that while providing a golf experience that is enjoyable and sustainable.

For our cover story in this issue of *By Design* (which begins on page 18), several ASGCA members discuss the virtues of a simpler approach, and share details of projects which have delivered a positive impact in many ways, including finances, pace of play and the overall golf experience.

ASGCA Past President Arthur Hills was among a handful of golf architects who subscribed to a newsletter I published about golf design in the 1970s, and he also took time to comment and contribute. We provide a tribute to his life as a golf course architect on page 14. While he left an incredible legacy of work across the world, for me I will always recall the kindness he showed a young aspiring student — a gift we should all pay forward.

I hope you enjoy this issue of *By Design*.

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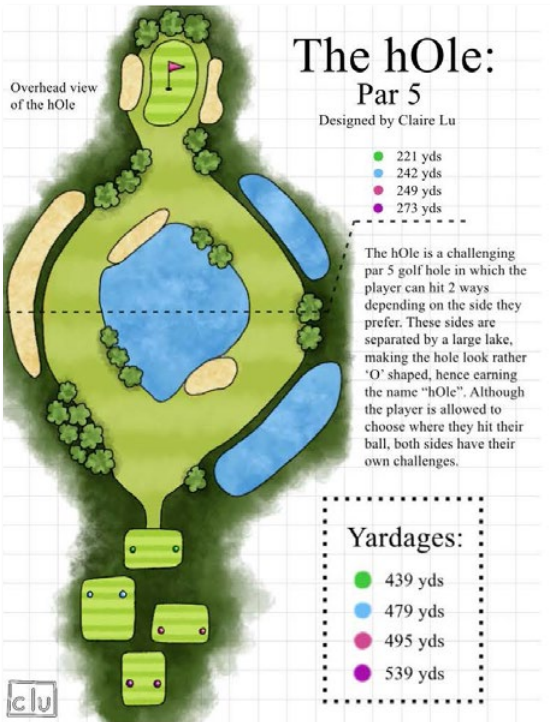
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The Squire course at PGA National in Florida has been 'reimagined' by Andy Staples, ASGCA. Photographed by Evan Schiller

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Ron Kirby renovation gives Apes Hill the ‘wow’ factor



Ron Kirby, ASGCA Fellow, is overseeing a renovation of the golf course at Apes Hill Club in Barbados, with nine holes expected to open this year and the full eighteen in early 2022.

The golf course first opened in 2008, part of a development by Landmark Land Company on an old sugar plantation close to the island’s highest point. It closed in 2017 before the club and residential community was bought in 2019 by Glenn Chamandy, founder of Montreal-based clothing firm Gildan Activewear. A reported \$60

million investment followed, half of which would be spent on the golf course, and renovation work began in late 2019.

Roddy Carr, who is coordinating the golf project, said: “The key focus is to make golf at Apes Hill the most enjoyable golfing experience in the Caribbean. This means softening the golf course considerably by reducing the slopes on greens, eliminating unplayable bunkers and accentuating all the natural assets of the 450-acre site.

“The goal was to get a minimum of 10 ‘wow’ holes from the

finished product, which I believe we will accomplish.”

The four par three holes in particular are expected to stand out. Substantial clearance of vegetation has been undertaken on both the fifth – where the green site is set among ledges of exposed rock – and the twelfth, which now has views of both the Caribbean Sea and Atlantic Ocean.

Carr also highlighted more than 15 acres of land in out-of-play pockets around the golf course will be used to grow produce for the resort.



Kirby pens memoir

A new book by Ron Kirby, ASGCA Fellow, details his journey from caddying at United Shoe Country Club in his hometown of Beverly, Massachusetts, to designing golf courses all over the world, alongside his wife Sally.

Fittingly for a book that is centered on golf, 'We Spent Half Our Lives on the Wrong Side of the Road' is organized into 18 chapters. But instead of representing holes, each is dedicated to a different address at which the Kirbys lived.

"The goal of this book is not to be something mass-produced, but rather to write a story that our children, grandchildren, great-grandchildren, and friends can read and enjoy," wrote Kirby.

'We Spent Half Our Lives on the Wrong Side of the Road' is available to buy at Amazon.



Crenshaw and Coore to receive Donald Ross Award



The ASGCA has chosen Ben Crenshaw and Bill Coore, ASGCA, as the recipients of its Donald Ross Award for 2021.

The annual award is presented to those making a significant contribution to the game of golf and the profession of golf course architecture.

The pair have designed some of the world's most highly rated golf courses, including Sand Hills Golf Club in Nebraska, Sheep Ranch in Oregon and Cabot Cliffs in Canada. They have also renovated many courses, including Pinehurst No. 2 in North Carolina, and their current projects include a new course in Alabama (see page 11 for more).

"Ben and Bill demonstrate the great benefit that comes from collaboration in our profession, especially when the work is carried out with balance and respect," said ASGCA President Forrest Richardson.

ASGCA Past Presidents Steve Smyers and Rees Jones, will present the award to the pair in October at the 75th ASGCA Annual Meeting in Cleveland.

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Bobby Weed course to debut in November

Grassing is in progress on a new golf course in northeast Florida.

The Stillwater layout, designed by Bobby Weed, ASGCA, will sit within a new 550-home community and is the first new golf course to be built on Florida's First Coast since 2004.

"Don't expect a golf course from the past," said Weed. "We'll have things you don't see on north Florida courses, such as sod wall bunkers, lay-down walls... they will be angled, with a much cleaner, elegant finish."

According to Weed, the course will have numerous wetlands, undisturbed native areas and



Photo: Bobby Weed Golf Design

strategically placed bunkers, as well as having no rough. Weed's routing can also be played as loops of three, six, nine, twelve or fifteen holes, with every third hole

returning to the clubhouse.

Grassing should be completed by the end of August, and the course is expected to open by Thanksgiving in November.



"Golf is a people business"

Bruce Matthews, ASGCA

The latest podcast from *Golf Course Industry's* "Tartan Talks" series sees Bruce Matthews, ASGCA, discuss his family's golfing heritage and how working as golf course superintendent for 13 years prepared him for golf course design.

This experience, Matthews says, has played a role during his career as a golf course architect. "I look at what I can do to balance aesthetics with efficient maintenance," he said.

"Being a former super, maintenance is key to a lot of my designs. Also, golf is a people business. The people always come first."

Golf runs in the family. Bruce's father Wallace managed Grand Haven GC in Michigan and, in his youth, Bruce visited many projects with his grandfather, W. Bruce Matthews, who was a golf course architect, ASGCA member and Michigan Golf Hall of Fame inductee.

His uncle, Jerry Matthews, ASGCA, is also a golf course architect.

"My grandad designed functional, playable and pretty golf courses. He started in 1925... I'm aiming to do four more years to get to 2025, so I can say the Matthews have been in the business for 100 years," he said.

Listen to the full "Tartan Talk" at golfcourseindustry.com.

Here are links to other recent "Tartan Talks," now featuring over 50 episodes:

- Tom Clark, ASGCA, [shares stories from his 50 years working for Ault, Clark & Associates.](#)
- ASGCA Past President Doug Carrick [discusses his career and working in golf-rich Ontario.](#)

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Transformed Michigan course opens for play

Nicklaus Design has transformed the former Grand Haven Golf Club in Michigan into the American Dunes Golf Club, a new public course that has opened for play.

ASGCA Fellow Jack Nicklaus and his team worked on the project alongside 2014 ASGCA Donald Ross Award recipient Lt. Col. Dan Rooney, the founder of the Folds of Honor charity, which provides educational scholarships to spouses and children of America's fallen and disabled service members.

Work has included the removal of more than 2,000 trees that previously lined fairways, revealing hidden sand dunes. Clearing work



Photo: Mike Mulholland | mtlive.com

has opened vistas, with seven holes in view at once on the back nine.

“Other than sitting on the same site, it’s a complete reimagination,”

said Rooney. “And it’s a next-level, amazing design and nothing like the bowling alley, target golf we used to play out here.”

Work begins on new course at Lake Martin

Construction has started on a new golf course designed by this year’s ASGCA Donald Ross Award winners Ben Crenshaw and Bill Coore, ASGCA, that will be the centerpiece of The Heritage luxury residential development in Alabama.

The 1,500-acre project by developer Russell Lands will be built

at Wicker Point, a strip of land next to Russell Forest and Lake Martin.

Crenshaw and Coore’s design, their first in the state, will sit on 250 acres and will incorporate the land’s natural contours and elevation changes and indigenous hardwoods. Six greens are located on the shore of Lake Martin.

“The new Russell Lands golf course will be a showcase of the area’s natural beauty and a first in the region,” said Coore. “Our team has taken the utmost care in designing a golf course from what the land gives us. Players will have an experience that’s unique to Alabama.”



Photo: Russell Lands

Marzolf begins Nassau renovation in New York

ASGCA Past President Tom Marzolf has started a golf course renovation at Nassau Country Club in New York.

Fazio Design’s senior design associate is aiming to create more strategic interest from the tees by a “reimagining of the bunker positions and style.”

This will involve some new and some repositioned bunkers, as well as rebuilding the par-three fifth in a Seth Raynor style (pictured).

“The combination of a bold and classic style of well-placed, strategic, flashed bunkers and low-cut bent surrounds will give members the feel of a brand new course to think their way around,” said Marzolf. “This mowing pattern has long been a part of the game in Australia and is now

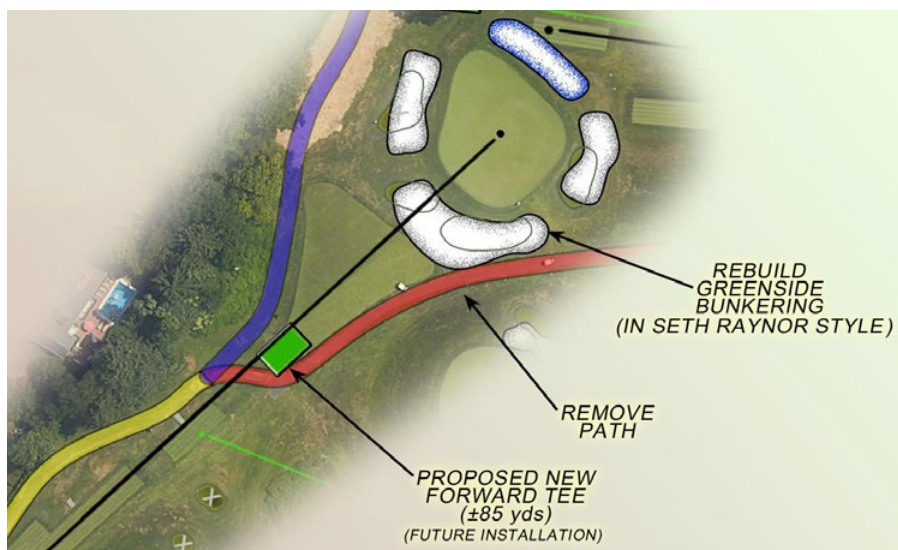


Image: Fazio Design

making gains here in America.”

Proposals also include new forward tees, extending back tees, tree removal, widening of fairways and approaches, and cart path work.

McDonald & Sons began construction work on 6 April

with the course remaining open throughout the project. Work will be limited to two holes at a time with a local rule in place to allow relief from work areas. Marzolf expects construction to be finished by early September 2021.

Clyde Johnston donates trophy to Wake Forest museum

ASGCA Past President Clyde Johnston has donated a cherished trophy to Wake Forest Historical Museum in North Carolina.

The ‘Most Outstanding Golfer’ trophy was presented to Clyde’s father Johnny Johnston, a golf coach at Wake Forest University, in 1950, by golfing legend Arnold Palmer, ASGCA Fellow. It has been kept safe by both father and son for 70 years.

“It has been an honor to be a steward of Mr Palmer’s

trophy, but it deserves to be shared with the thousands that are touched by his accomplishments, generosity and character,” said Johnston.

The trophy was accepted by Ed Morris, executive director of the Wake Forest Historical Museum and Wake Forest College Birthplace Society.

“The 70-year-old trophy will make a great addition to our museum case devoted to Arnold Palmer – a true place of honor,” said Morris.



Richardson and Danner form new design firm



Photo: Richardson | Danner Golf Course Architects

ASGCA President Forrest Richardson and Jeff Danner, ASGCA, have come together to form a new golf design firm called Richardson | Danner Golf Course Architects.

Prior to forming the new firm, Richardson was president at Richardson & Associates while Danner was a golf course architect at Greg Norman Golf Course Design.

“Our personalities, skill sets and approach to things really complement each other, which provides a huge value to clients,” said Danner. “We offer a combination of rich and diverse experience. It gives a client the best bang for the buck when you have two people on the design team who can bounce ideas off each other. It’s a win-win to have that type of collaborative environment.”

Trey Kemp becomes an ASGCA member

Trey Kemp has become the ASGCA’s newest member.

Kemp earned a bachelor’s degree in geography and planning from Texas State University and a master’s in landscape architecture from the University of Texas. He began his career with Jacobson Golf Design, working with Rick Jacobson, ASGCA, and Doug Myslinski, ASGCA, before joining Colligan Golf Design. For the next 13 years, he worked under John Colligan,

ASGCA, on projects such as the newbuild at Texas Rangers Golf Club and a redesign of Irving Golf Club. Kemp is now a golf course architect with Kimley-Horn and Associates.



SOCIAL UPDATE



 @ASGCA


Sandy Cross, PGA of America, joins “ASGCA Insights” podcast. Focus on Diversity and Inclusion in the game still hinges on a valuable point: “If you’re not having fun, you probably aren’t coming back.”



 @Tim Liddy, ASGCA

Updating the bunkers at Pete Dye’s Mystic Rock, Nemacolin in Farmington, Pennsylvania



 @gcamagazine

“This has been a ‘triple play’ and if we had not been successful on the North, the club would still be sitting on the other two,” says Rees Jones on @ShadowWoodCC project

Search ASGCA on the below channels for more posts:



A constant improver



ASGCA Past President Arthur Hills passed away in May 2021. *By Design* hears about the qualities he possessed as a designer and a person.

Arthur Hills – who served as ASGCA President from 1992-93 – passed away in May 2021, aged 91.

During his career as a golf course architect, which began in the 1960s, Hills designed more than 200 new golf courses and renovated more than 150 others.

His new designs include The Golf Club of Georgia in Atlanta, Bighorn Golf Club in California, and Hyatt Hill Country Resort in Texas. Hills’ career saw him work on many private courses in Florida, leading Pete Dye, a Past President and Fellow of the ASGCA, to dub him “the Mayor of Naples”.

afforded me the chance to pursue my dream of becoming a golf course architect and to work on projects of varied complexities and challenges all over the world,” says Rogers. “I don’t think there were many others who were willing to take that chance on me!”

ASGCA Past President Steve Forrest says: “He started the business by placing an ad in the Toledo Yellow Pages under ‘Golf Course Architect’ while operating a landscape contracting business. I had the great privilege of learning all aspects of golf course architecture from a distinguished professional practitioner and

while always trying to improve his own skills and increase his personal knowledge every day.”

Continual improvement was a key asset to Hills’ career in the golf industry, says Shawn Smith, ASGCA. “Maybe more than anybody I’ve ever known, Arthur was always trying to improve,” he says. “He was always trying to get better, and he encouraged those around him to do the same.

“One of my favorite memories was in 2004 when he took the entire office to Scotland to visit the home of golf. For a week, 14 of us traveled across Scotland on an unforgettable boondoggle, soaking up everything in an effort to make us better architects. In the evenings, we would sit around having dinner and a few pints and talk about the day’s experiences. For many of us, it was our first time there, and I remember all of us hanging on Art’s every word to get his perspective.

“However, he was more interested in hearing from us! Even with all his experience designing golf courses,

“One of our favorite Arthur-isms was, ‘take the worst hole and make it the best’”

Drew Rogers, ASGCA, worked with Hills for near 20 years, including on projects such as Oitavos Dunes in Portugal. “He

humble gentleman over 42 years. Arthur became a father-like figure to me who was a mentor, an instructor, exhorter and admonisher



ASGCA Past President Arthur Hills oversaw over 150 renovations, including a transformation project at Oakland Hills North. Pictured right with Jack Nicklaus, ASGCA Fellow

he was still picking the brains of a bunch of young kids because he wanted to learn and get better. Art was a passionate man and he pushed those around him to be better and I'll forever be thankful for his mentorship and friendship.”

Hills’ desire to improve was evident in his designs. “One of our favorite Arthur-isms was, ‘take the worst hole and make it the best,’” says Forrest. “Examples of such transformations include the fifteenth at Oakland Hills North, the ninth at Naperville Country Club and the seventeenth at Miami Beach Golf



REMEMBRANCE



Photos: Hills Forrest Smith



The seventeenth at Miami Beach GC and the ninth at Naperville CC (top right). Hills took his team of golf course architects on trips to experience different types of design, including to Scotland in 2004 (right)

Club. Even while designing new courses, he would review the routing and say, ‘OK, which hole is the weakest? Let’s get to work on it!’”

Building and maintaining relationships was very important to Hills. He developed a long-lasting friendship with Brent Wadsworth of Wadsworth Golf Construction, who built Hills’ first golf course near Toledo. “Brent taught Arthur many important aspects of the construction business and their friendship continued for over 50 years,” says Forrest.

Following his parents’ move to Fort Myers Beach and an introduction to Herb Graffis, founder of the National Golf Foundation, Hills began building “an incredible portfolio” of golf courses in southwest Florida.

Forrest says: “In the early 1980s, Arthur would come back home from a construction visit at Pelican Bay,

for example, and announce, ‘I had dinner with land planner Bill Vines last night. He’s got a 27-hole project for us’. That pattern continued with communities such as Quail Creek, Bonita Bay and several others.”

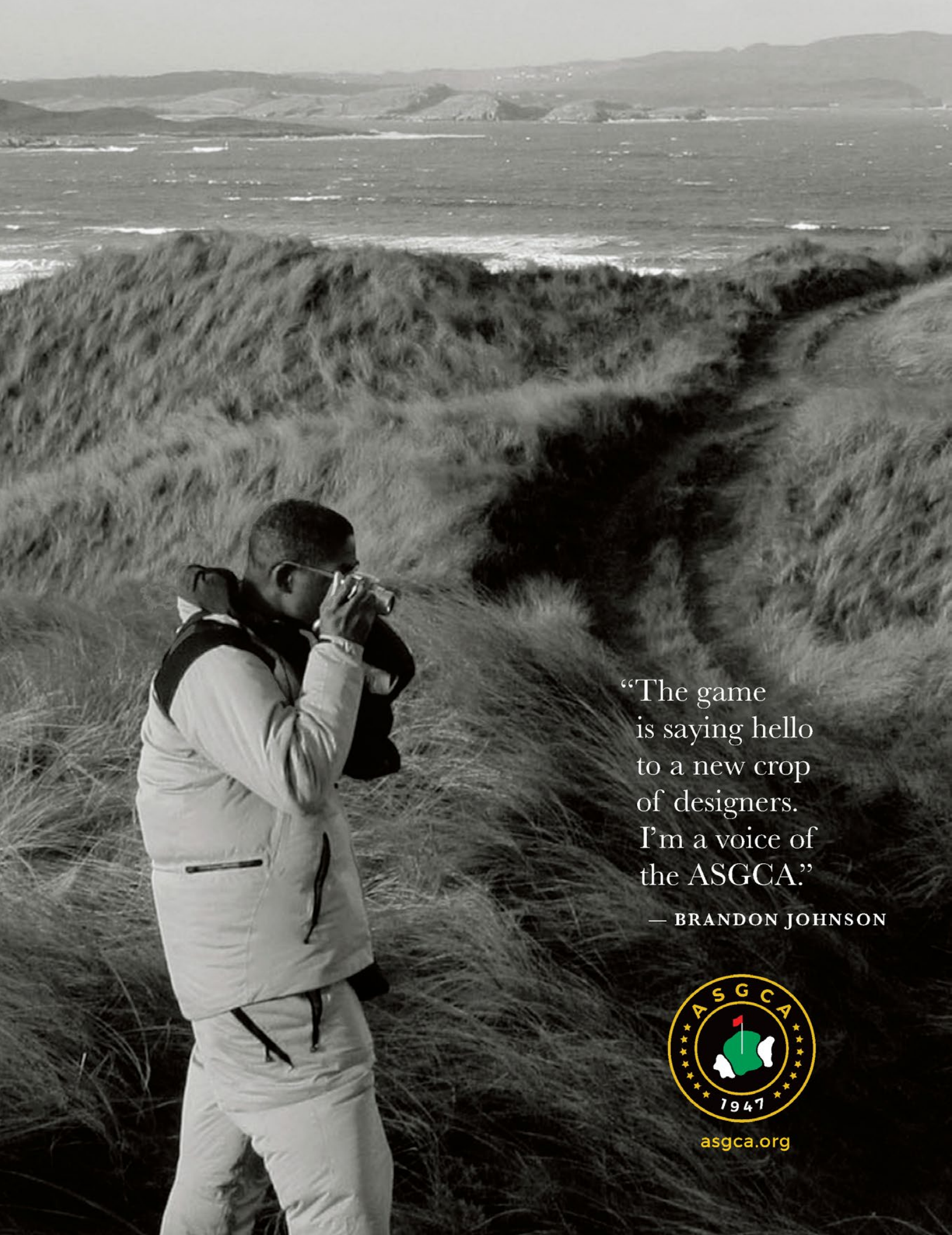
Chris Wilczynski, ASGCA, recalls many fond memories of his 20 years working with Hills. “The thing that struck me the most was his work ethic,” he says. “Arthur was very passionate about what he did and that was evident from the first time I met him.

“During construction visits at the height of his celebrity status, there would always be a big group of people and Arthur said his strategy was to walk as fast as he could because eventually, they would fade off. He only wanted to be with the contractor and a couple of others: this focus on servicing the client will stay with me.”

“The most important relationships that Arthur fostered were with his clients,” says Forrest. “He always wanted to create value for them. He must have succeeded since US Home and Lennar Corporation had Arthur design 20 residential courses.

“However, he wasn’t limited to residential settings. At Bay Harbor Resort in northern Michigan and Half Moon Bay Resort on the Pacific coast, he was able to get the most out of very dramatic sites. While ‘Best New Course’ recognition and Top 100 rankings became part of the story, Arthur’s commitment to the success of the client was always at the forefront.

“Continual improvement and life-long relationships. Arthur Hills was a master at both. His remarkable career is certainly evidence of that.” ●



“The game
is saying hello
to a new crop
of designers.
I’m a voice of
the ASGCA.”

— BRANDON JOHNSON



asgca.org

LESS IS MORE

Keeping it simple

Adopting a 'less is more' approach to golf course design can improve a club's operational efficiency and golf experience, as Richard Humphreys finds out.

Ludwig Mies van der Rohe, one of the pioneers of modernist architecture and designer of the Seagram skyscraper in New York, adopted the motto 'less is more'. His most famous designs throughout the US and Europe are known for being functional and simple.

Drew Rogers, ASGCA, was taught by a professor who trained directly under van der Rohe at the University of Chicago, and says this mantra should not be misunderstood. It doesn't mean to simply do or use less, it means to do more with less, which should be

applied very thoughtfully in golf course architecture.

"In recent years, the approach has become more en vogue, what with vast reductions in funding and labor. We're all trying to do more with less. As golf course architects, we certainly have a responsibility



By rerouting two holes on the Squire course at PGA National in Florida, Andy Staples, ASGCA, made space for a new nine-hole par-three layout

to play a part in achieving balance in design, and many times, it's the simple approach that is the all-around winner."

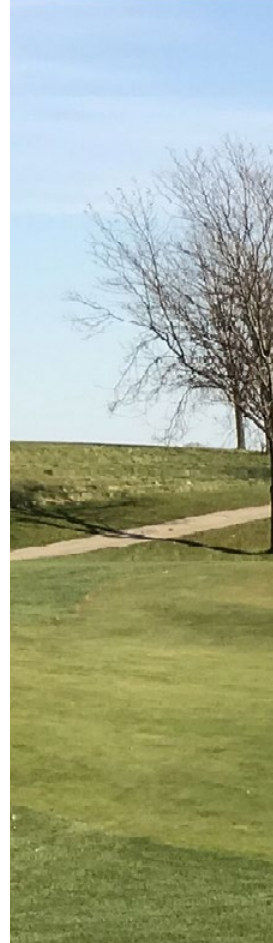
Thad Layton, ASGCA, says the phrase suggests a concept of restraint. "I believe restraint is simultaneously the most powerful,

yet most underutilized tool in the arsenal of the golf architect. The key to the successful use of restraint isn't an all brakes and no gas approach – that would be downright boring. Rather, it is the selective use of restraint through contrast."

In his recent 'Ahead of the Game' film, ASGCA President Forrest Richardson emphasized how important a restrained approach to golf course architecture is. "Playing the game does not rely on hundreds of acres," says Richardson. "That model will live on, but we need to



Photo: Brett Hochstein



Bunkers at Teton Pines in Wyoming, are being reworked as part of a renovation led by Thad Layton, ASGCA

plan smaller footprints or even not leave a footprint at all... rethink the water, the materials, the labor, the resources we use to build and maintain a golf course.”

Less demand for sand

Bunkers are often among the first features to be rethought when considering a club’s operational efficiency. Some clubs are rejecting a flashy, sprawling style – sometimes employed to provide eye-catching visuals – in favor of a more functional style that defines playing strategy but is more economical.

In Asbury, Iowa, for example, Kevin Norby, ASGCA, has reduced the overall bunker square footage at The Meadows Golf Club by nearly 50 percent.

“The city was looking to reduce the time required to maintain their bunkers after a rainstorm,” says Norby. “With an average

annual rainfall of 36 inches, the maintenance staff were spending a lot of time and resources pulling sand back up on faces and pumping bunkers out. They also wanted to improve pace of play as many bunkers no longer came into play for the low handicap golfer but instead penalized the shorter hitter and high handicap golfer.”

Those poorly positioned bunkers were eliminated or relocated, while some new ones were added to enhance the course strategy. Norby also reduced the size of existing bunkers to make the course more playable and easier to maintain.

“The elimination of those bunkers that seemed to only affect the higher handicap player dramatically improved our pace of play,” says general manager Jeremy Hawkins. “We experienced an average of a 45-minute decrease in pace of play for 18 holes last season – all while the

course was full of players due to the increase in play from COVID-19.

“The labor required to maintain our bunkers has also been greatly reduced, which allows our crew to focus on areas that they normally wouldn’t have had time to give their full attention to – especially after rain events.”

Hawkins adds that the club’s golf-related revenues for 2020 are up nine percent year in comparison to 2019. “We were doing pretty well in 2019,” he said. “But we had 4,739 more rounds in 2020, roughly a 20 percent increase. That’s not too bad considering we were closed in parts of March and April, and at one point in April and May were mandated to 15-minute tee time intervals, and people could only play with members of their own household”

Like The Meadows, Westlake Golf & Country Club in Jackson, New



Kevin Norby, ASGCA, has reduced the bunker square footage at The Meadows Golf Club by nearly 50 percent

Jersey, has also completed a project to reduce its sand areas. Undertaken prior to the pandemic, the club wanted to address issues relating to drainage, contaminated sand and deteriorated edges and faces.

The club turned to Drew Rogers for help. “The bunkers were 20 years old and had never been reconstructed or renovated,” he says. “They were in pretty poor shape and the club was in dire need of a solution to address their management challenges as well as the poor playability and conditions that the golfers had to endure.”

Rogers’ plan saw the number of bunkers reduced from 46 to 29. “Redundant bunkers were eliminated, grassy hollows and uneven ground features were employed, excessively large bunkers were reduced in size, green entries were opened up and specific bunker placements were adjusted,” he says.

“The bunkers were reconstructed to ease management as well as improve playability, using Better Billy Bunker lining system and a high-quality sand and turf type tall fescue grass surrounds.”

At Teton Pines Country Club & Resort in Jackson, Wyoming, a renovation by Thad Layton of Arnold Palmer Design Company includes work to reduce sand areas.

“The plan calls for an overall reduction of 25 percent of the sand area, which should create more avenues for play and a more interesting golf experience.”

Layton also took a more simplified approach to sand areas for his 2018 renovation of The Saticoy Club in California. “The focus was on bunker shifting and reduction while adding short grass to create strategy

“We experienced an average of a 45-minute decrease in pace of play for 18 holes last season”

“The catalyst for the project was the bunkers. The liners were 10 years old and starting to breach the sand surface,” says Layton. “Adding a new, heavy-duty liner evolved into a conversation about bunker styles, purpose, locations, sizes and

and variety,” says shaper Brett Hochstein, who worked with Layton at both The Saticoy and Teton Pines. “Both projects have a stylistic response to history, context and the surrounding landscape – The Saticoy plays off the hilly topography

LESS IS MORE



At Quail Ridge Country Club in Florida, Bobby Weed, ASGCA, has reduced maintained turf areas by 15 percent

and historical context of Billy Bell's bunkering and Teton Pines draws inspiration from the surrounding mountain ranges – but both at their core are about maximizing playing interest while working within a limited scope and budget.”

Trimming turf

Clubs can also improve operational efficiency, and the golf experience, by reducing the amount of maintained turf on their golf courses. This in turn reduced the applications and resources required, and can help a golf course to sit more in harmony with its environment.

Palm Aire Country Club in Sarasota, Florida, hired Michael Benkusky, ASGCA, earlier this year

to renovate its Champions course.

“We’re looking to remove 12 acres of turf and incorporate crushed shells in many areas,” says Benkusky. “The plan is to create playable areas under trees and in areas where it is difficult to grow turf. Removing turf that isn’t needed will also allow the club to expand its cart traffic areas by using shells as paths.”

Benkusky says that the biggest advantage that clubs like Palm Aire will get from reducing turf is that it will “eliminate water and the need to mow these areas, as well as creating better course aesthetics by adding another texture to contrast with the grass, trees and bunkers.”

Erik Gowdy, director of agronomy at Palm Aire, says “there are

multiple offsets into turning out-of-play areas, which were once weak turf areas at best, into shell areas. It cuts down expense in three major areas of our budget: labor, chemicals and irrigation, while increasing minimal expense in annual shell purchase. Florida is a perfect environment ergonomically and environmentally for these transition areas to be adopted as these areas fit the overall Florida landscape motif.”

Florida’s climate and associated high water costs mean that clubs located in the state stand to benefit greatly from projects designed to conserve water. At both Quail Ridge Country Club and Ponte Vedra Inn & Club, Bobby Weed, ASGCA,



Photo: Larry Lambrecht



Image: Michael Benkusky, ASGCA

Michael Benkusky, ASGCA, is replacing 12 acres of turf with crushed shells at Palm Aire CC in Florida

oversaw recent renovations that involved turf reduction.

On Quail Ridge’s South course, Weed replaced turf with coquina-like screenings and pine straw. And at Ponte Vedra, he introduced 14 acres of coquina-like screening areas to replace rough grasses. Both projects reduced water usage on the course, saving the clubs time and money.

“The new course at Quail Ridge has seen a 15 percent reduction in maintained turf areas,” says Weed. “There has also been a substantial reduction in maintenance problems, which had been linked to irrigation and drainage issues. This affords the agronomy team the flexibility to allocate their human

resources to more important areas of the operation, such as greens, bunkers and tees.

“Better yet, real estate and membership sales at the club have experienced a strong positive response from prospective buyers. Year-over-year performance includes a 46 percent increase in home and membership sales, while non-resident memberships are up 12 percent.”

Leaving a smaller footprint

Perhaps the ultimate application of a ‘less is more’ approach is to reduce the number of holes at a club. This might free up land to be sold for real estate, providing some lifeline revenue for clubs that

are struggling to operate in their current form, and making way for a golf experience and other facilities that may appeal to a new audience.

One such project can be found in Wisconsin, where construction of a thirteen-hole par-three layout is progressing. Pioneer Pointe – designed by Todd Quitno, ASGCA – is being built on the site of the former 18-hole Tumbledown Trails golf course and will become the centerpiece of a new development, which is expected to include 82 home sites, a fitness center, tennis and pickleball courts, a restaurant and more.

“One factor that led to Pioneer Pointe being a short course was the lack of available land,” says

LESS IS MORE

Quitno. “The community land plan maximized the housing component, which led to corridor restrictions based on the desired density and adjacent land uses. Our assessment for golf was that it was too narrow for ‘driver’ length holes but could suit par threes where teeing areas and yardages were controlled.”

Quitno’s design has holes ranging between 95 and 280 yards and includes green layouts inspired by

Landing Golf Club],” says Quitno. “Another benefit for the club is that by limiting the maintained turf footprint, it therefore limits the club’s labor needs. We’re using grasses and an irrigation strategy that minimizes herbicide use and tolerates drought conditions. Outer rough areas will be left unmown.”

The non-traditional element of shorter courses is a factor that Quitno highlights as a draw for some people. “These layouts inspire

restoration, storm management, ecological development and multi-recreational use.

“But most simply, they require less land and resources to build and maintain, and less time commitment to play.”

In Stuart, Florida, Sanford Golf Design is transforming the former 36-hole Martin County Golf Course into a 27-hole facility called Sailfish Sands, which includes a reversible nine-hole course.

A 40-acre expansion of the airport runway protection zone into the course, combined with a feasibility study that revealed there wasn’t a need for 36 holes, drove the decision to transform, explains ASGCA Past President John Sanford. “Many local patrons still wanted a 36-hole facility, hence the reversible nine.”

“By reducing the number of holes and the overall golf course footprint, Martin County is able to reduce their maintenance inputs, such as fertilizers, pesticides, mowing, labor and water,” says

“Shorter courses require less land and resources to build and maintain, and less time commitment to play”

some of golf’s most famous holes, including a Double Plateau, a Biarritz, a Punchbowl, and the iconic short seventh at Pebble Beach.

“Creating this shorter course means that the club can share its maintenance resources with the owners’ other course [Hawks

fun without the constraints of ‘real golf,’ they encourage other forms of play, taking the emphasis off score; and they foster golfers of all abilities,” he says. “Shorter layouts can also facilitate other land functions due to their minimal footprint, such as environmental



Image: Todd Quitno, ASGCA

Pioneer Pointe is a thirteen-hole par-three layout designed by Todd Quitno, ASGCA, which will be the centerpiece of a new residential development



Sanford Golf Design has created a nine-hole reversible layout at the renamed Sailfish Sands municipal facility in Florida

David Ferris, ASGCA, golf course architect at Sanford Golf Design.

The new design reduces the amount of water used in irrigation by 30 percent, and water from the nearby Willoughby Creek stormwater treatment area can now be used to irrigate turf.

“We purposely kept the bunkers, fairways and greens very simple for playability and ease of maintenance,” said Sanford.

Kevin Abbate, the Parks and Recreation director, says that the renovation “not only addresses sustainability from a maintenance standpoint, but also provides a great experience for players of all ages and skill levels.”

Another reinvention project is approaching completion just a few miles down the coast, at Palm Beach Gardens. Andy Staples, ASGCA, has overseen a ‘reimagining’ of

The Squire course at PGA National Resort & Spa.

Staples’ plan has seen the former first and eighteenth holes, which played parallel to each other, converted into a nine-hole par-three course. The remaining 16 holes have been renovated and two short holes added to create a new 18-hole layout that plays to 5,744 yards.

“I focused on the three most innovative trends in the industry: firstly, reducing the time it takes to play; secondly, increasing player enjoyment, and thirdly, instilling classic design principles that spur interest in the game of golf,” says Staples.

Areas of existing turf have been converted to coquina shell-style paths for both its visual effect and to reduce overall maintenance. Hazards have been kept to a minimum, with Staples focusing

on expanding short grass fairways, chipping swales and grassy hollows.

“The obvious benefit of a short layout is the continued reduction of resource use and labor intensity, both areas of increased concern over the past 20 years,” says Staples. “Shorter courses that are designed thoughtfully will check the sustainability boxes while providing a design that is unique, interesting and fun to play in less time than traditional ‘championship’ length courses.

“A par-three course not only provides the resort with a needed top-quality practice facility, but also an opportunity to expand its user base by attracting many of their guests that aren’t avid golfers. These types of courses become social centers that all levels of golfers can enjoy, which make for fun and relaxing environments.” ●

The value of architecture

An extract from 'Designs on a Better Golf Course' by ASGCA Past President Jeff Brauer, an essential resource for golf course decision makers.



**ASGCA Past President
Jeff Brauer**

'Designs on a Better Golf Course' is a collection of articles conceived and edited by ASGCA Past President Jeff Brauer, with the goal of giving committee members, superintendents, and others in charge of a golf course a broad overview of the thinking, philosophy, and some practical specifics of designing golf course renovations. "Anyone involved with a renovation program strives to help their club make good decisions," says Brauer. "This book should help them head in the right direction."

The book includes information on more than 50 topics raised by committee members as they consider improvements at their golf courses. "Given the cost of construction, especially post-Covid, we hope to help them rebuild better and avoid costly mistakes," says Brauer.

Some people fail to recognize just how important golf course architecture is to their daily golf enjoyment. Golf course architecture is the arrangement of landscape elements that facilitate the human activity of golf. It follows that without good architecture, there is no good golf, and without great architecture, there is no great golf. It also follows that bad architecture results in... well, you can guess.

When you think of your course (or church) you really think of the experiences you have there. In both cases, the architecture is there to facilitate the religious experience (the comparison is apt for many golfers). Good golf course architecture is more than providing tees and greens, it is about creating satisfying shared experiences every time you decide to play.

Golf course architecture stands along with other fine arts of architecture, landscape architecture, fine dining, theatre, etc., in being considered important enough to warrant its own critics, lists, rankings, and even coffee table books and

monthly magazines. It may be even more important than others. If you love literature, you can read voraciously, but never read Danielle Steel. Moviegoers can avoid any genre they don't like, simply by not buying tickets. TV watchers can easily change channels. But, as a golfer, you can't skip a hole.

It inspires nearly endless debates about what style, which architects and which courses are better than others. It makes us question whether less is more, more is more, or if more is a bore. It creates both shouts of joy and cries of despair, creating the drama that makes us all love golf.

The real value in golf course architecture isn't obtaining rankings or stunning photographs. It lies in creating something pleasing for you every time you golf, and avoiding anything less. Golf can range from deadly dull to inspiring.

While everyone prefers the latter, they often preclude even the chance for inspiration by treating golf course architecture as less important than it truly is.



Photo: Hugh Hargraves

Golf course architecture is about creating satisfying experiences, says ASGCA Past President Jeffrey Brauer, whose recent projects include the redesign of Tempest Golf Club in Gladewater, Texas

One bad feature can ruin a hole, and every bad hole reduces your golf enjoyment by at least 1/18th and possibly your entire round, or day. Who needs that from golf?

Everything on your course is designed, either well or badly. If you start with the idea of building something merely functional, “functional” is the most you will get. “Functional” results are hard to justify when almost any change to a golf hole is an opportunity for a talented designer to create something that is “inspirational” and satisfying for very little extra up-front cost.

A bad design costs just as much – or more – to build than a good one. That’s why every feature on your golf course should be designed, not just built.

If a green dies, you might think you are simply rebuilding an “object.” Golf course architects

think in terms of “creating a space” to maximize enjoyment.

Yes, golf course architecture is a pretty big deal; without it, there is no golf.

Golf course architecture starts by organizing nature sufficiently to allow golf, but that function is just the first task. The architect simultaneously weaves artistic expression with that function. Every green, tee, bunker and even cart path is an opportunity to create naturalistic beauty and inspire emotions, including delight, serenity, joy, as well as doubt, despair and anger.

Yes, architects really do think this way.

While golfers do intuitively know good golf course architecture by being inspired or bored, they are rarely versed in the principles of the art. Only golf course architects

know how to make every piece of ground the best golf experience inherently possible. The fact is, if you want to create something of beauty that inspires golfers and is better than merely functional, you need a golf course architect.

When you have a chance, don’t shortchange your course when it comes to maximizing its long-term prospects. As mom probably told you (more than once), “if it’s worth doing, it’s worth doing right.” While she probably never mentioned it, this also applies to golf courses and golf course architecture. ●

To read more, [order ‘Designs on a Better Golf Course,’ produced by the ASGCA Foundation, from Amazon](#)



Grass selection with purpose

Stacie Zinn Roberts and Dr Yanqi Wu explain how research and real-world performance shows Tahoma 31 Bermudagrass is bred to play great and address common golf course issues.



Stacie Zinn Roberts and Dr Yanqi Wu

Stacie Zinn Roberts is an award-winning writer focused on the field of golf and turf science. Dr Yanqi Wu is a professor in grass breeding and genetics in the Plant and Soil Sciences Department of Oklahoma State University.

Perhaps the best way to select a grass variety for your golf course project is to read the university research results and then witness for yourself, or talk to colleagues who have seen the turf’s performance in a golf course setting. That’s what Jeff Lawrence, ASGCA, who is president of South Carolina-based Lawrence Golf Design, did when he found his go-to grass, Tahoma 31 Bermudagrass. A new vegetative, warm-season grass, available as sod or sprigs, Tahoma 31 is the latest bermudagrass variety developed by the highly successful turfgrass breeding program at Oklahoma State University. Previous releases include Latitude 36, NorthBridge, and Patriot bermudagrasses.

The research shows that Tahoma 31 is rated number one of bermudagrasses studied in National Turfgrass Evaluation Program (NTEP) trials, and other university tests, for early spring green-up, cold tolerance (winter survivability),

lower water use and wear tolerance, and tied for the top spot in turf quality.

In South Carolina, Lawrence tested Tahoma 31 on a few tees and green surrounds at 3’s Greenville, specified all tees and 18 fairways at Greer Golf, and is in the process of changing over all the tees at Pickens Golf Club, with a proposed nine-hole, par-three course to come, also using the grass.

“For the application that we’re using it for here in South Carolina in the transition zone, and seeing the benefits of the turf green-up sooner in the spring, with green color that lasts a little bit longer in the fall, and the density and the recovery time, that’s something that is very attractive when thinking of playability and visual presentation,” says Lawrence. “We’ve had success with Tahoma 31, and I look forward to expanding its usage to other courses.”

To further compare research data to actual performance in a golf course setting, we spoke with



After renovating fairways and tees with Tahoma 31, Naval Academy GC in Maryland no longer needs to overseed

Lawrence and two golf course superintendents who have Tahoma 31 in use at their facilities. They highlighted a number of attributes.

Early spring green-up

“One of the advantages of Tahoma 31 is the shoulder season color,” says Lawrence. “In the spring, in the fall, you’re going to have better color, better contrast, which is great to have on that shoulder season. Obviously, during the peak season, the high season, it’s going to have pristine conditions.”

In NTEP tests from 2014-17, Tahoma 31 ranked at the top spot for early spring green-up among all vegetative bermudagrass cultivars tested in 16 states.

At the William Flynn-designed Naval Academy Golf Club in Annapolis, Maryland, all fairways

and tees were renovated in May 2020 with Tahoma 31. Eric David, golf course superintendent, says because Tahoma 31 only goes dormant for about three months in the winter, versus the six months of dormancy the course previously experienced with common bermuda fairways, he no longer overseeds his fairways.

“We basically stopped mowing it in October...and it was green until the middle of December,” says David. “The members are extraordinarily happy with the decision” to plant Tahoma 31.

Winter survivability

The winter of 2013-14 swept a polar vortex into the Midwest that created record low temperatures. Dr Cale Bigelow, a professor of turf science and ecology at

Purdue University, located in West Lafayette, Indiana, participated in the NTEP study that winter. In a December 2019 article in *Golf Course Management* magazine, Dr Bigelow was quoted as saying only nine of 42 bermudagrasses tested survived with at least 50 percent ground cover by spring. Some 14 of the grasses completely died. By the end of the NTEP study, Tahoma 31 was rated with by far the greatest winter survivability in Indiana at only 4 percent winter kill. Mean scores in two states where winter survivability was measured, Indiana and Kentucky, confirmed Tahoma 31’s top status.

Tahoma 31’s cold hardiness allows the grass to be planted further north in the transition zone than previously seen with other bermudagrass varieties. The grass



Photo: Jared Burgess

Chillicothe CC in Ohio converted fairways and tees from bentgrass to Tahoma 31, and it has withstood hard winter conditions with no issues

is in use as far north as Colorado and New Jersey, where winters can be brutal. The benefit in northern climates is to be able to change out cool-season grasses, such as bentgrass, with Tahoma 31, a warm-season grass that can survive through the winter and thrive in hot summers when bentgrass struggles.

In Ohio, Jared Burgess is the golf course superintendent at Chillicothe Country Club, a 1915 Donald Ross design. In April of last year, the club's fairways and tees were converted from bentgrass to Tahoma 31.

As for winterkill, Burgess says: "I don't think that's going to be an issue. We had the hardest winter here that we've had in four years...I think it's almost impossible to kill it off."

Low water use

A field trial conducted from 2013-15 at Oklahoma State University

published in the [release documents](#) for Tahoma 31 (designated in research trials as OKC1131), showed that, averaged over 24 recorded dates in three years, Tahoma 31 used 18 percent less water than TifTuf, a competitive variety of bermudagrass known for drought tolerance.

Before changing over to Tahoma 31, Burgess says: "Our city water bill was running up around \$40,000 a year, and it was not even enough for the bentgrass not to burn out" in the middle of the summer. Now, his course's need for irrigation is minimal. Burgess says: "Mother Nature takes care of most of it, as long as it gets some rainfall during the week."

Wear tolerance and turf quality

In tests of bermudagrasses grown under traffic stress at the [University of Tennessee](#) in Knoxville, Tahoma 31 was rated the top performer for turfgrass quality.

At the Naval Academy Golf Club, David says Tahoma 31's recovery from traffic is so good, along with tees and fairways, he uses it for cart paths leading in and out of his maintenance facility in areas that would otherwise be a muddy mess. The grass's lateral recovery, even when it starts to slow down vertical growth in the fall, is where it truly shines, he says.

"On tees where we have people hitting from an area, we move the tee markers, and three days later, it's recovered. It's really, really traffic tolerant," says David.

Tahoma 31 tied for the top spot in turf quality in the 2013-17 [NTEP](#) study on bermudagrass. "It's so much better than the standard varieties that we're typically used to," says Lawrence. ●

For more information, download a [comprehensive summary of all research cited.](#)

“It’s always
been part art,
part science —
and pure joy.
I’m a voice of
the ASGCA.”

— DR. MIKE HURDZAN



asgca.org

Future designers?

By Design showcases a few of the many wonderful designs created for ‘The Great Junior Golf Design Challenge of 2021.’

The Great Junior Golf Design Challenge, originally launched by the ASGCA in 2020 to encourage creativity among young people spending time at home during the COVID-19 pandemic, returned in 2021. Those aged 17 and under were asked to submit their design ideas for a golf hole with no limitations: any par, style or strategy, from fun to serious.

The 2021 challenge attracted almost 100 entries, with our junior designers demonstrating wonderful creativity and a definite preference for the penal school of design, with hazards including gigantic bunkers and shark-infested water features. Our panel of judges selected 14-year-old Claire Lu from New Jersey as the winner, for her 539-yard par five creation called ‘The hOle’. A large lake in the center of the fairway forces players to choose one of two distinct routes from tee to green.

The ASGCA Foundation awarded Claire a prize of \$250, with a donation of the same amount also made to her local First Tee chapter. Two runners-up, Olivia Sheaffer of Arizona and Sabrina Chen of Texas, were also selected to receive \$100 each in merchandise or equipment from U.S. Kids Golf. ●

View all the submissions on the [ASGCA website](#).



Designer: Claire
From: New Jersey
Age group: 14-17

Players will have to make a decision about which side of the lake to play around in Claire’s winning design.

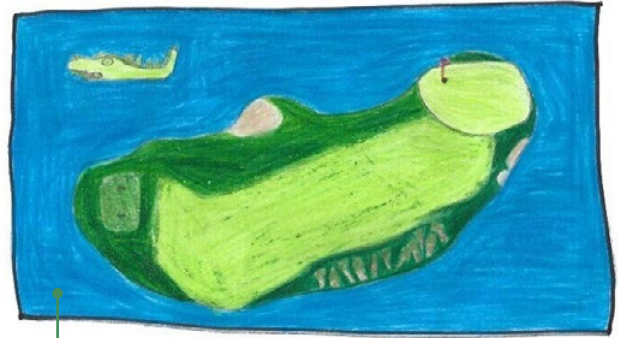
RUNNER UP!



Designer: Olivia
From: Arizona
Age group: 9-13

With a green perched on a hilltop, a par will be a good score on Olivia's design.

Par 4 290yds



Designer: Isabel
From: Wisconsin
Age group: 9-13

An alligator lurks menacingly close to the tee of Isabel's short par four, set entirely on an island.



Designer: Darcy
From: Michigan
Age group: 1-8

A river bisects the entire fairway on Darcy's design, with the green protected by a bunker complex that Pete Dye would have been proud of.

Par 5

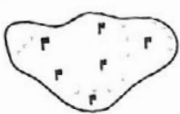
Champion	567
Back	528
Middle	499
Forward	442



Designer: William
From: California
Age group: 14-17

William's artistic and sophisticated design requires a strategic approach, with two distinct routes from the tee and various sand hazards to negotiate to reach a double plateau green.

Green Map

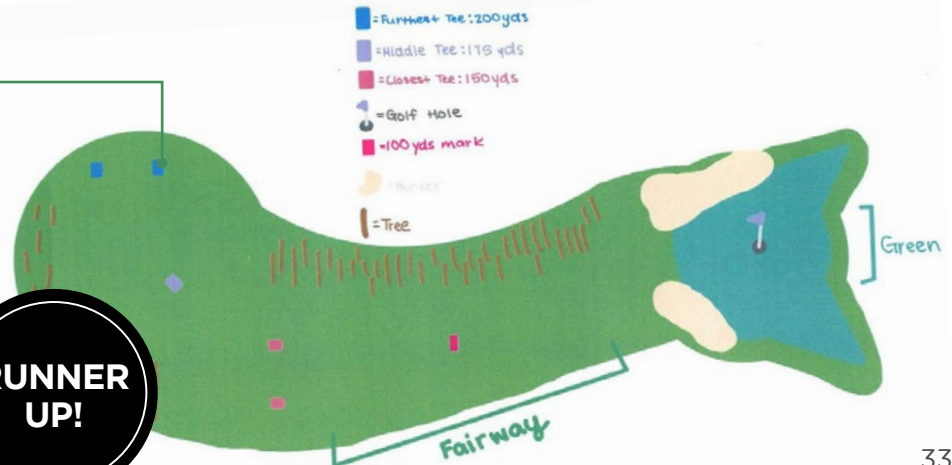


60 yards
1 inch

Designer: Sabrina
From: Texas
Age group: 9-13

Sabrina has created a hole that is playable for golfers of all abilities. Those who choose the back tee need to be able to hit a huge draw or a high shot over trees.

RUNNER UP!



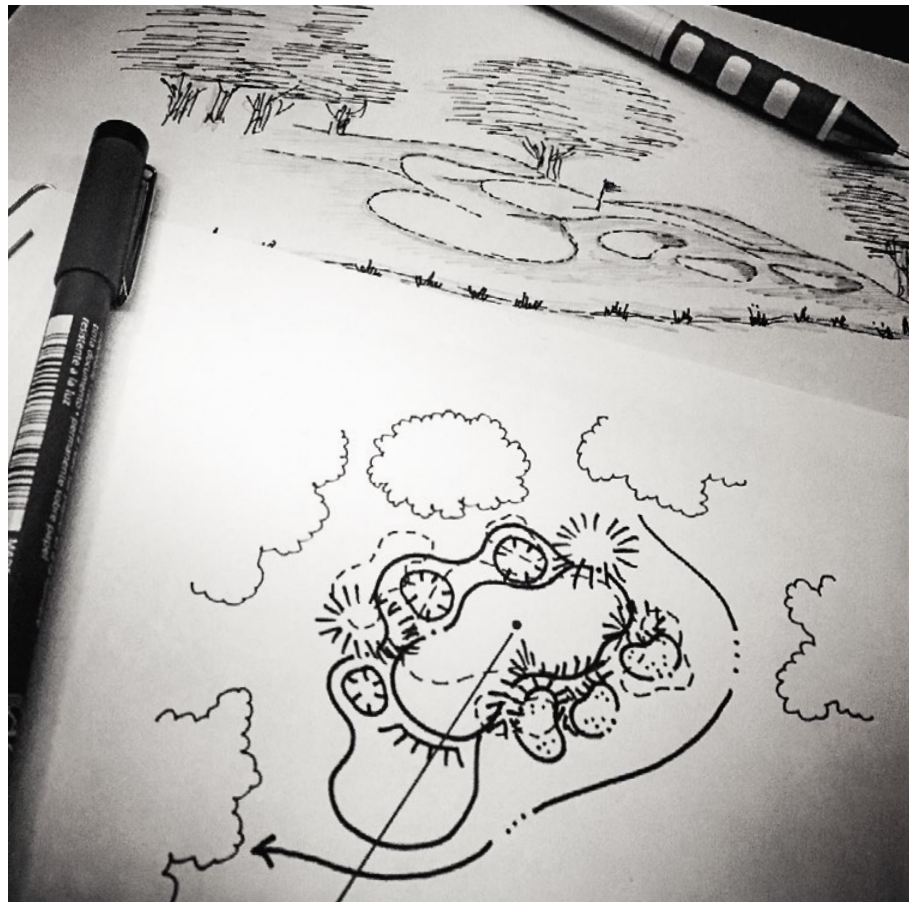
Colonial Country Club

By Design inspects a couple of pages from the sketchbook of Nathan Crace, ASGCA.

Over the past few years, Nathan Crace, ASGCA, has been working toward a renovation master plan for Colonial CC in Memphis, Tennessee.

His proposal for the par-three fifth hole includes a creek running in front of the green. “The hole plays slightly uphill with a shallow swale that runs across the hole from the right of the green back towards the tee on a diagonal,” he said. “That area stays wet after big rain events, so I wanted to convert that to a dry stone-lined creek bed dotted with native plantings for color. The existing green’s surface needed to be recontoured and enlarged, but the positioning of the existing four bunkers left little or no room for players to miss the green without finding the sand that surrounded it.

“I wanted to maintain the existing angle of the green from front-left to back-right while opening the front-left pin more and creating a much-needed bailout and collection area to the left with mounding to help mis-hits back towards the putting surface. To give the green a feeling of more separation, I would elevate the surface slightly while lowering the areas around it from the hillside behind the green. The result would be elevating the green along the front and back where it would tumble down into the connected



chipping area and approach while the traditional ‘Sunday pin’ would still be back-right.”

The project remains on hold following changes in management, the pandemic and new development plans for the adjacent property, but Crace is optimistic about the possibilities.

“The new hole would be more forgiving for the average golfer while still requiring precision for aggressive play by better players,”

said Crace. “With the pin back-right, higher handicappers can play safe to the left of the three bunkers and if they miss the green, they’ll likely end up in the collection area behind and left of the putting surface. Better players, however, will want to challenge the bunkers to get closer to the pin. That said, the front-left pin is no pushover with the green elevated above the approach, which will require some creativity to get up and down for par.” ●



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Tahoma 31® Bermudagrass

Developed by the turfgrass experts at Oklahoma State University, Tahoma 31 Bermudagrass pushes the geographic boundaries of bermudagrass into the northernmost reaches of the Transition Zone. Highly cold tolerant, the name "Tahoma" comes from the Native American word that means "frozen water," and the grass lives up to its name. Golf courses as far north as Chillicothe Country Club in Ohio (fairways and tees), and Liberty National in Jersey City, NJ, (driving range tee), benefit from Tahoma 31's ability to stand up to cold winters yet thrive in hot summer temperatures. Tahoma 31 creates a sustainable and maintainable golf course with dramatically lower disease pressures compared to cool-season grasses. A tight, dense turf generally mowed as low as ¼ to ½-inch for excellent playability, with notable wear tolerance to heal quickly from divot damage, and strong drought tolerance to save water, its deep blue-green color offers stunning visual contrast for golf course design.

Tahoma31Bermudagrass.com



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In 1919, Toro provided a motorized fairway mower to the Minikahda Club, in Minneapolis, Minnesota, to replace horse-drawn equipment. By mounting five individual reel mowers onto the front of a farm tractor, Toro developed the Toro Standard Golf Machine and helped create the motorized golf course equipment industry. Today Toro continues to lead the global market with best-in-class turf maintenance equipment and precision irrigation solutions. Approximately two-thirds of the top 100 courses in the world use Toro irrigation systems. The company also leads the way in environmental innovations, making products safer, cleaner and quieter whenever possible.

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