



# BY DESIGN

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



### FLAT STICK FORMULA

Are putting courses a good investment, and what gives them the best chance for success?

### **NATIVE GRASSES**

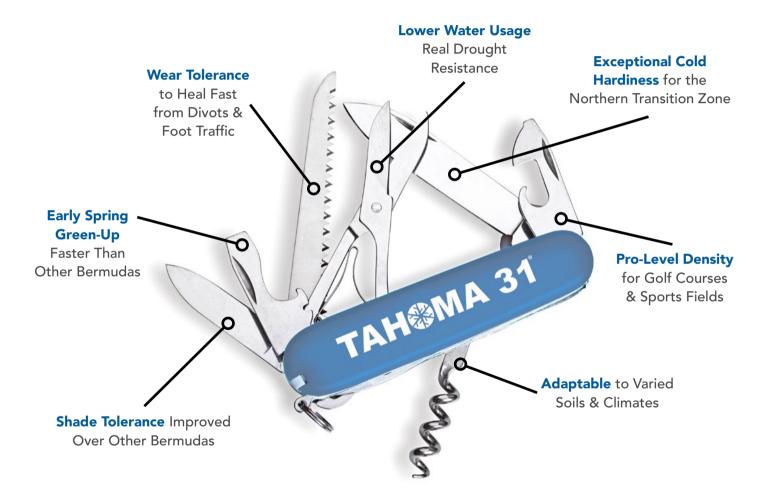
Dave Kaplow provides advice on native grass selection and maintenance

### ALSO:

- // Curracloe Links
- // Settlers Hill
- // GCSAA Show



# Like This, But in a Bermudagrass



Put this powerful tool to work on your next golf course project!

Contact Us Today to Find a Licensed Sod Producer Near You



Sod Production Services 18161 Sandy Point Road, Charles City, VA 23030 757.345.1120 | Tahoma31.com







### **FOREWORD**



Michael Benkusky President, ASGCA

### **Perspectives on putting**

hen I think back to my formative years in golf, one of my first recollections is whiling hours away on the practice putting green at my home course in Marion, Iowa. Like thousands before me and many more since, I would regularly line up putts and tell myself I needed this to win the US Open.

That putting green was a simple affair, with little contour and a few holes dotted around somewhat randomly. But I still found it captivating, presenting a test of skill and focus that kept me coming back for more.

Now, clubs and their golf course architects are taking practice putting to the next level, sometimes laying out a full course with individual holes that each offer a distinct challenge, over a rolling landscape that demands great shotmaking imagination. These courses can be great fun to play, but they can also place a significant burden on the club's maintenance team.

In the main feature story in this issue of *By Design*, we consider the key factors that clubs should take into account when planning a putting course. There are some fascinating perspectives from ASGCA members, drawing from their experiences of working alongside clubs to find a formula that is right for them.

There's plenty more in this issue too, including news of several new golf design projects, insights into native grass selection, a report on a landfill project, scenes from the GCSAA show in Phoenix, and much more.

I hope you enjoy the read!

nelbelg

By Design is sponsored by:





### **CONTENTS**

### 6 Digest

The issue begins with news of the new Curracloe Links course that is now in construction in Ireland. It has been designed by ASGCA Past President Jason Straka and Dana Fry, ASGCA. We also report on projects in Georgia, Iowa and Florida.



### 12 The flat stick formula

Are putting courses a good investment, and what gives them the best chance for success? Richard Humphreys speaks with ASGCA architects to find out more.



### 18 What have native grasses got to do with golf?

Dave Kaplow provides advice on native grass selection and maintenance on a golf course.



### 22 New landscape for landfill site

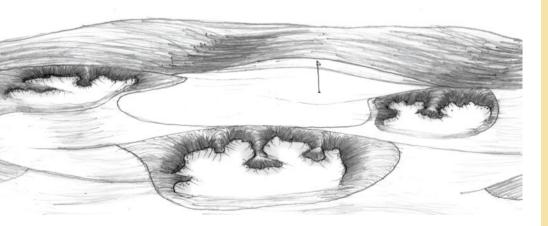
ASGCA Past President Greg Martin has renovated Settlers Hill in Illinois to address issues relating to the site's stabilization as well as the course's drainage and playability.





### 26 Phoenix in photos

Scenes from the 2024 GCSAA Conference & Trade Show, where ASGCA was a Presenting Partner.



### 28 Sketchbook

Jeff Danner, ASGCA, shares a sketch of a green complex for a proposed project in Portugal.





The Drumlin at Erin Hills in Wisconsin. Our feature article on putting courses begins on page 12.

### ISSUE 65 // SPRING 2024

### **Editor and Publisher**

**Toby Ingleton** 

### **Editorial contributors**

Richard Humphreys, Dave Kaplow

#### Design

Bruce Graham, Libby Sidebotham, Dhanika Vansia

### ASGCA Staff

Jeff Brauer, Chad Ritterbusch, Mike Shefky, Marc Whitney, Ann Woelfel

Subscribe to *By Design* at www.tudor-rose.co.uk/bydesign

© 2024 American Society of Golf Course Architects. All rights reserved.

www.asgca.org





### **ASGCA holds Winter Meeting in Phoenix**



The American Society of Golf Course Architects held its Winter Meeting during the week of the recent GCSAA Conference and Trade Show in Phoenix, Arizona.

The meeting included education sessions for ASGCA members and partners. Presentations came from the USGA's Hunki Yun (pictured), who spoke about the changes to the World Handicap System and the impact they may have on golf course design, and Kevin Haushel of GreenSight, who provided insights into robotic mowers.

There was also a panel discussion hosted by Robert McNeil, ASGCA, on how golf course architects can think like an owner. Panelists from Troon and Golf Property Analysts provided insight and answered questions about an architect's role in a club's return on investment, 'the member of tomorrow' and club culture.

Turn to page 26 for our gallery of images from the GCSAA Show.

bunkers, will offer a quintessential Irish golf experience and lure people from all over the world to its fairways," said Straka.

"There are fewer and fewer parcels of land like this available in the world and we are thrilled to be given the privilege to reveal the golf course that lays there," said Fry.

The routing map for the course reveals that the opening hole will play to a green alongside a lake, which also comes into play on par-three seventh. Golfers will then cross the resort road to play holes eight-to-seventeen, before returning to the southern section of the course for the closing hole, which plays over the lake to a fairway shared with the first.

The €20 million (\$27.1 million) project will be Neville Hotel's second golf-oriented property in Ireland, following the completion of the restoration of the Pat Ruddy and Tom Craddock-designed course at Druids Glen Hotel and Golf Resort in 2023.

"Our family has deep ties to County Wexford, and to be able to create Ravenport – a world class golf course and hotel, along with golfing cottages – in the region is hugely satisfying," said Seamus Neville.
"With this, their first opportunity to work in Ireland, we're confident Jason and Dana will create a golf course that's as special as the site upon which its built. We looked at many golf design firms all over the world and are certain Fry/Straka will build something truly unforgettable."

## Scot Sherman begins Dye restoration at Delray Dunes

MacCurrach Golf Construction has started work on plans by Scot Sherman, ASGCA, for a restoration of the Pete Dyedesigned course at Delray Dunes Golf & Country Club in Boynton Beach, Florida.

Sherman has been working with the club since 2019 to develop a masterplan that aims to bring back course features that have altered since it opened in 1969.

"We call this a sympathetic restoration since we're not sure how else to refer to the work we are doing," said Sherman, who has previously worked with Dye. "Some of what Pete built originally



can be recreated, but some things just cannot, due to changes made to the layout over 50 years.

"The course will be a combination of these original features, some restored green contours and inspiration from Pete's other designs built in the late 1960s and early 70s. Make no mistake, Pete is the architect of this course!"

The course is expected to reopen in autumn 2024.

### Tyler Rae restores Langford and Moreau style at Wakonda

Tyler Rae, ASGCA, has completed a project to restore William Langford and Theodore Moreau's style at Wakonda Club in Des Moines, Iowa.

"The restoration focused on addressing Wakonda's infrastructure and reclaiming the original architectural design," said Aaron Krueger, the club's director of golf.

"Our work on greens has also brought back thoughtful green shapes, perimeters and boldly scaled fill pads, which is a departure from the rounded, eggshaped smaller greens that once existed," said Rae. "Greens will no longer be a one-dimensional, monotonous affair."

All 53 bunkers have been rebuilt, also to a Langford and



Moreau style, and many that were grassed over or out of play have been reclaimed.

"We have placed and shaped hazards and bunkers back to their

original locations, fitting them into the hillsides and natural landforms for historical purposes," said Rae.

The course is expected to reopen in May 2024.

# Nagle hired for NCR and Eagles Mere projects

Jim Nagle, ASGCA, has been hired to restore the Dick Wilsondesigned North course at NCR Country Club in Ohio, and to create a masterplan for Eagles Mere Country Club in northern Pennsylvania, which has a course designed by William Flynn in 1915.

Nagle's work at NCR will begin in 2025. "The North has really not been touched very much since Wilson built it in 1954," he said. "We will focus on peeling back 70 years of growth to revive the original shapes and strategies.

"Eagles Mere is routed through a wooded landscape, with greens played as intended with tricky swells and knobs still being used for hole locations because of the slower speeds. Rock debris piles from the original construction remain untouched sitting between holes. Fairways are pockmarked with small humps and kettles from the cuts and clearing of the forest to build the holes."

NCR and Eagles Mere are the first projects for Nagle's new firm, Nagle Design Works, after an amicable split from long-time collaborator Ron Forse, ASGCA.





## "Nothing compares to having a tight set of plans" Patrick Burton, ASGCA

In the latest podcast from Golf Course Industry's "Tartan Talks" series, Patrick Burton, ASGCA, talks about using drones for golf course projects and his travels during his career.

"Drone technology is the ultimate way of mapping a golf course site," says Burton. "It is useful when we have no topos or the imagery is poor. Using drones helps us to make decisions regarding routing, trees and greens.

"We use drones, GPS and other tech to make a base map. Once we've exported it into a GeoPDF and downloaded it onto a tablet, we can take it on our walkthroughs."

Burton's career has seen him travel around the world, including visiting the British Isles to study its top golf courses, as well as working in China for Schmidt-Curley Design. "In China, it was almost exclusively new construction," he says. "It was an eye-opening experience

building new courses in a country that was new to golf.

"The biggest lesson I learned was that nothing compares to having a tight set of plans. You might have a language and culture barrier, but if your plans are spot on, the construction team should get pretty close. It was important to develop the best directions possible."

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

Here are links to other recent "Tartan Talks," now featuring over 90 episodes:

- Joel Weiman, ASGCA, explains the methodology he uses to maximize confined spaces
- Raymond Hearn, ASGCA, describes what it takes to develop and complete big projects

# ASGCA members show support for BIRDIE Act

Some leading members of the American Society of Golf Course Architects have shown support for H.R. 7228, the Bolstering Intellectual Rights against Digital Infringement Enhancement Act (BIRDIE Act).

The bill would update the Architectural Works Copyright Protection Act of 1990 to extend the protections to include golf courses.

"The BIRDIE act is simple – it adds golf course architecture to existing laws and protects both architects and business owners," said ASGCA Past President Robert Trent Jones, Jr. "By securing the copyrights to their work, golf course architects can pass on that benefit to owners as those courses will establish their unique design and retain their value for the long term.

"Right now, other countries provide better protection for the work of golf course architects even though the vast majority of architects doing that work are from the United States. By securing these copyrights, we inspire them to continue creating original designs and playing experiences for the huge numbers of golfers in the United States and around the world. This protection will ensure that if someone wishes to copy their work, then the architect will be involved to make sure it's represented accurately and properly for the benefit of all."



ASGCA President Mike Benkusky as well as ASGCA Past Presidents Forrest Richardson, Jan Bel Jan and Jason Straka have also voiced their support.

"The BIRDIE Act isn't just good for golf course architects, it's good for golf course owners as well," said Bel Jan. "It acknowledges golf courses for what they are: creative works of art. Golf course architecture isn't just planned on paper; it's also created on site by visionaries making the most of a setting. While physical plans can be copyrighted, decisions made in the field cannot. So, it makes sense that a finished golf course would be protected as well."

## Cassini brothers hire Tripp Davis for new course in Georgia



Nick and Dimitri Cassini are the developers behind The Rose

Tripp Davis, ASGCA, has been hired to design a new course at The Rose, a new invitation-only private golf club near Athens, Georgia.

The club's founders are Nick Cassini, a two-time All-American golfer and member of the 2001 Walker Cup team, and his brother Dimitri. The Cassinis have been joined by three professional golfers as founding members, two-time Masters champion Bubba Watson and multipletime PGA Tour winners Brendon Todd and Chris Kirk.

"The vision is to create a strategically interesting and varied golf course over firm and fast conditions, while taking advantage of the amazing long views," said Davis. "Beautiful native grasses and great bunkering will frame shots over the rolling landscape, creating a visually stunning golf course. We wanted a site to give us unique landforms to work with and be able to support having those elements. The first time Nick and Dimitri brought me on this site, I was in awe of the beauty of the long views and rolling hillsides. And the soils and topography will promote the firm and fast playing conditions. It's perfect."

Watson added: "I'm excited that Tripp Davis has been picked to design The Rose. I met Tripp on a recent visit to The Rose property and he shared a vision for blending tradition and modern design using the natural landscape that sounded incredible."

Course construction is set to start in summer 2024.

### SOCIAL UPDATE





RTJ2 Golf Design @RTJ2GolfDesign

Join our president Bruce Charlton at Design Boot Camp this September at Erin Hills. He'll teach students how to design golf holes, draw routing plans, and walk the land. Get some dirt on your boots!



Brandon Johnson, ASGCA @Brandon Johnson, ASGCA

I'm excited to announce the official launch of Brandon Johnson Golf Course Design, a firm dedicated to creating thoughtful, strategic, and personalized golf courses.





Nathan Crace, ASGCA @lipouts

Great story from @Forbes on how the golf industry is leading the sustainability movement, with reports from the @GCSAAConference and insight from my friend and past @ASGCA President, @janbeljan

Search ASGCA on the below channels for more posts:









# The flat stick formula

Are putting courses a good investment, and what gives them the best chance for success? Richard Humphreys speaks with ASGCA architects to find out more.

t's St Andrews, Scotland, in the mid-19th century, and the caddies are disgruntled.

They had laid out a small putting green on land close to where the Rusacks hotel now stands, a place for them to pass time while waiting for a bag. But several young ladies — daughters of Royal & Ancient members — had decided to play there too.

To appease all, Old Tom Morris was asked to lay out a nine-hole course for these new golfers, on a patch of land away from the caddies. They were limited – by their dresses and what was considered a dignified range of movement – to short swings, so each

hole was designed to be played with just a cleek and putter.

St Andrews Ladies' Golf Club was born and – a little later, once the course had been extended onto undulating land nearby – so too was the Himalayas, the famous putting course at the home of golf and inspiration for countless more around the world today.

The Himalayas became a social hotspot, with over 400 lady members and 200 'gentlemen associates' by the start of the 20th century, plus countless children enjoying their first steps into the sport.

Today, anyone can book online and pay £4 (about \$5, or half that for children and seniors) for



a round. On a summer's day it is typically swarming with people of every generation, and a great way for anyone to experience golf in the town, in a wonderful location right between West Sands beach and the first green of the Old course.

Unlike a practice putting green, putting courses have distinct holes – 18 of them, in the case of the Himalayas – that are usually played in a set order. These miniature golf courses have become particularly popular at



'The Himalayas' at St Andrews has inspired countless putting courses around the world

resorts – Pinehurst, Streamsong and Erin Hills all have one – as a fun, accessible and social way to while away a spare hour or two.

But can a putting course work for any club, and what should be considered before making such an investment?

### A plot for success

"Location is absolutely critical," says Kevin Atkinson, ASGCA, who has designed putting courses at two country clubs in his home state of

Colorado: Red Rocks and Boulder. "If you aren't tripping over it, don't bother," he says. "It needs to be in a place where friends can have a sandwich or a beer and just goof around."

Pinehurst recognized this too. In advance of the 2014 U.S. Open, it had built its Thistle Dhu putting course 150 yards away from the clubhouse. A few years later, when Gil Hanse, ASGCA, was hired by the resort to redesign the No. 4 course, his brief also included rebuilding

Thistle Dhu in a new location right under the clubhouse veranda.

John Fought, ASGCA, says: "A putting course needs to be managed just like any area of a golf course. It should be built near the clubhouse so employees in the golf shop can manage it properly."

In 2020, Fought created a 12-hole putting course, Little Meadow, for Black Butte Ranch in Oregon. Designed as a distinctive out-and-back loop that can be set up to play in either direction – on a plot



Kevin Atkinson, ASGCA, adopted a "wilder the better" approach for his putting course at Red Rocks in Colorado

of land between the range and eighteenth hole. It's in full view from the entrance road, just a stone's throw from both the golf shop and maintenance facility and, crucially, right beside the resort's pub.

So, with the location set, what about the design?

### Walk on the wild side?

"My mentality is almost the wilder the better, because this is for entertainment," says Atkinson. "We're not creating these putting courses for practice, it is about laughing and having fun.

"At Red Rocks, the area closest to the pro shop is flatter where players can practice more traditional putts. But the further you get away, the wilder it gets. There are little islands, railroad ties, you can ricochet shots and then it kind of hooks around like a boomerang to tie into the second green." There is a limit, points out Atkinson. "We can't make them too mad! There are examples where the contours are too extreme, making

### "We're not creating these putting courses for practice, it is about laughing and having fun"

Atkinson also references a conversation with Sean McCue, who was previously superintendent at The Country Club at Castle Pines in Colorado and laid out The Crags, the club's cliff-edge putting course. "He said that the crazier the course was set up, the more usage it got."

them very difficult to maintain. I've been to places where the maintenance staff have a different mower for the putting course, which hits the return on investment."

Raymond Hearn, ASGCA, echoes that warning, highlighting cost and difficulty as potential stumbling blocks. "One major mistake to



avoid is having the contours so extreme that the putting experience becomes too difficult and reduces the enjoyment factor," he says. "Creativity and visual interest are all still key to success but you can cross the line with the challenge.

"I always like my putting course designs to be visually appealing, fun and interesting to play, reasonable to maintain and have an infinite number of ways to be played."

Fought adds: "I like movement that allows for breaks and rolls that inspire a player to think out of the box. You should not make holes too long, however, otherwise players may take divots when trying to whack their putter! You also need to have flexibility – you can achieve this by moving the cup around

or playing backwards. I do not think we need to have bunkers on these courses, but rather focus on interesting contours."

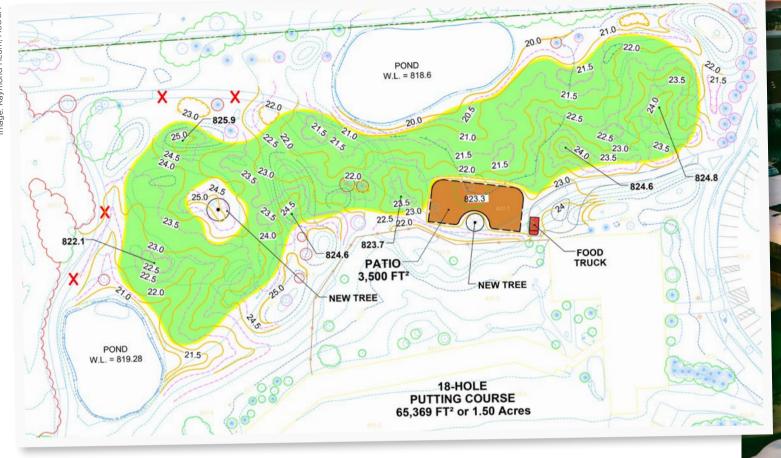
### Putting for dough

Hearn says that a return on investment (ROI) feasibility assessment is essential for clubs before proceeding with a putting course. He has two putting courses opening at resorts this year: Boyne Highlands Resort and the Saint John's Resort, both in Michigan, and designs in progress at two private clubs: Sugarloaf Golf Club in Carrabassett Valley, Maine, and White Lake Golf Club in Whitehall, Michigan.

"An ROI feasibility study varies from club to club in terms of

detail, but it usually involves studying soft costs, construction costs and maintenance costs versus forecasted income over a five-, ten-, 15- and 20-year basis," says Hearn. "The general managers, superintendents and course managers I have spoken to agree that a putting course can have a positive and synergistic impact on the entire golf operation.

"Construction and maintenance costs need to be carefully considered and discussed with the client early in the design process. The four facilities I am working with wanted another profitable amenity they could offer to their patrons, with putting courses being able to grow the game and act as another revenue source for clubs."



The Little Cardinal putting course designed by Raymond Hearn, ASGCA, for Saint John's Resort will open in 2024, and be located alongside a patio with space for food trucks

Revenue can come in several forms: a fee to play, higher membership dues (or attracting more members), merchandise and, perhaps most significantly, increased spending on food and drink.

"For resorts, the presence of a captive audience means it makes more sense as you're giving guests something else to do," says Atkinson. "They might end up spending more money on food and drink or in the pro shop.

"Putting courses work best at private clubs as an added amenity. It can attract more players, give existing members more things to do, driving club usage and bring in money through food and beverage. "At Red Rocks we had a championship for the local pros. We set up food trucks and drinks stations all around the putting course and so, when they were finished playing golf, as a fun thing to do, we held a putting competition. Those guys were laughing and having a ton of fun and that's what it is all about."

For Boulder, Atkinson transformed the practice green to also incorporate a putting course and teeing area for the tenth hole. This multi-functional space now hosts putting leagues and competitions.

"The direct ROI from the Boulder and Red Rocks putting courses is the food and beverage," says Atkinson. "That's why at both clubs we are in the process of incorporating lights and fire pits so we can keep people on site longer and they can enjoy the club's hospitality into the evening, bringing more money into the club.

"A big part of having a putting course is that it also becomes a source of pride for the club. It is something to show off, it helps to sell memberships and drives usage."

Little Meadow has not only become a source of pride at Black Butte Ranch, but it has also been a financial success according to Jeff Fought, director of golf at the club. The putting course cost \$350,000 and in 2024 – less than five years after opening – the resort will have paid off its construction cost.



PopStroke has 11 venues and more planned. Its growth is testament to the appeal of putting

"We average about 8,200 rounds or \$82,000 each year," he says. "The average cost per month in expenses is \$1,700 through mowing, rolling, cup changing and repairs." With a six-month season, that's an annual cost of just \$10,200.

### A social hub

"Golf is at an interesting point," says Atkinson. "Golf clubs are starting to realize that it's not just about their 18 holes, but there's an entertainment factor that needs to be considered and can be financially rewarding. Topgolf has influenced these clubs to start thinking about how they are offering entertainment. It's an evolving industry that has been fun

to watch as people start doing more creative things."

The emergence of entertainment venue chains like Puttery, Puttshack

"I think the future of putting courses and other golf entertainment amenities is going to be interesting. There will be

## "Golf clubs are starting to realize that it's not just about their 18 holes"

and PopStroke, which are all focused on putting, emphasizes the power of golf to drive social interaction. "Not long ago, if I used the word 'fun' to describe a proposed design, it wouldn't have been that well respected," says Atkinson. "That always confused me. What's wrong with fun? We should all be having fun.

successes and failures and I think we'll look back at this time and learn from it. We're in the middle of this wave and it is exciting for golf."

For advice on the feasibility of a putting course at your club, contact an ASGCA member. You can find a full list—organized by location—at www.asgca.org/architects.

# What have native grasses got to do with golf?

Dave Kaplow provides advice regarding native grass selection and maintenance on a golf course.



**Dave Kaplow** 

Dave Kaplow is the owner of Eco-Management, Inc, and an expert in native grasses having worked as a consultant for golf clubs and superintendents for over 30 years. Years. Kaplow can be reached at:

any cool season native grasses across the northern United States and Canada are either identical or closely related to those of Scotland, England and Ireland. Many of these relationships continue across Eurasia, all the way to China, Korea and Japan. If you are trying to design and establish a true Scottish links, look to your local native grasses. You will have a rough that is true to Scotland and true to your region.

There are many species that grow around the world along the northern latitudes. This is not limited to grasses; many trees, shrubs, sedges, rushes and wildflowers do the same thing. For example, the red fescue (*Festuca rubra*) that grows in North America is the same species as in the British Isles that is commonly supplied in seed mixes.

Sheep fescue (Festuca ovina) from Europe and Idaho fescue (Festuca idahoensis) from the western US were once considered the same species and were later separated.

Common bent (Agrostis capillaris) in Europe is very similar to Autumn bentgrass (Agrostis perennans) on the east coast and Seashore bentgrass (Agrostis pallens) on the west coast. While bentgrass benefits from light irrigation, the most popular variety in California is Pendleton, named after Camp Pendleton, located just north of San Diego. In the wild, this grass survives with 11 inches of rain in the winter and six months of drought during the hottest time of year.

Europe has many grasses the US does not, while the US has grasses not found in Europe, but most of the foundational grasses are the same. The grasses are often quite compatible with each other. For example, perennial ryegrass is from Europe, but works well with natives from the US.



Twenty-year-old native rough at Half Moon Bay Golf Links in California

It is widely believed that a natural area has a messy, unkempt appearance, and the best thing to do is leave it alone. The opposite is true. Well managed native grasslands benefit from management and will look more like a golf course rough or meadow, but not a weed patch. It should have a park-like quality.

Native rough is part of a golf course. It needs to be neat and attractive, and golfers must be able to find their ball and play it... wherever it is likely to land.

Mowing helps the health and vigor

of the plants. Grasses evolved with grazing and fire. Those tools are not available, so we replace them with mowers. It's a matter of adjusting the mowing heights and frequencies to favor natives and discourage restore a native landscape is to seed first, followed by maintenance. It is far better to reverse the order. Begin the maintenance program first, then do the seeding later. This allows you to learn the systems

### "If you are trying to design and establish a true Scottish links, look to your local native grasses"

weeds. It is even possible to restore an area to native plants by mowing alone, without the need for seeding or planting, assuming there are at least a few remnant natives to start.

To date, the common process to

and techniques to have a successful project, as well as the necessary staffing, timing and equipment. In addition, you will be able to develop a predictable long-term maintenance budget. If the site is







Red fescue is a grass species that grows around the world along the northern latitudes

seeded first, the superintendent is likely to be unprepared for what should be a normal, ongoing management program.

Following construction, the superintendent understandably

lead to an attractive and playable course. The transitional cover also gives the opportunity to reduce or eliminate weed competition, which greatly increases the chance of success when seeding long-

### "Native grasses make it possible to reduce or even eliminate most maintenance costs"

concentrates on growing in the fairways, tees and greens. That is where their attention should be. It is best to "park" the native rough for a year or two, using maintenance alone where possible. If there is open soil from construction, use a transitional groundcover. This will immediately term natives. Seeding with longterm natives immediately after construction should be used only where you absolutely need it.

From a practical perspective, native grasses make it possible to reduce or even eliminate most maintenance costs. This is because there are native species for all site conditions, from wet to dry, poor soils to rich, and from shady sites to sunny.

Turf management uses a narrow range of species. They are made to perform uniformly throughout the course, using frequent mowing, irrigation, fertilizers, herbicides, growth regulators, dethatching and so on.

In many ways, management of native rough does the opposite. Instead of modifying the site conditions to get even performance, we modify the species to those that will thrive on all the varied site conditions. This reduces maintenance costs, while creating an unmatched golf experience.

# New landscape for landfill site

ASGCA Past President Greg Martin has renovated Settlers Hill, a public course built on landfill in Illinois, to address issues relating to the site's stabilization as well as the course's drainage and playability.

Settlers Hill is a public golf course in Batavia, Illinois, built in 1990 on a landfill site in the Forest Preserve District, near the Fox River.

Since then, the course has experienced issues relating to settling, compaction and drainage. In 2015, ASGCA Past President

Greg Martin was brought in to develop a renovation plan that would address these, as well as improving circulation and playability.

Wadsworth Golf Construction started work on Martin's plan in 2020, rebuilding bunkers, reshaping fairways and greens, and regrassing tees, fairways and greens. The project also included a realignment of the layout so that each nine returned to the clubhouse, which included the introduction of two new par threes.

A critical aspect of the project was the importation of around 80,000 cubic yards of clean, free, off-site fill. This was shaped to allow for



Settlers Hill imported around 80,000 cubic yards of fill, which was shaped to drain the site effectively



effective drainage of the course, with excess water diverted away from playing areas and towards appropriate collection points. This also enables the new irrigation system to operate more efficiently, reducing the risk of cap infiltration and soil erosion.

"Superior irrigation technologies and thoughtful drainage strategies are the basis of the improvements," says Martin.
"Doubling the number of sprinkler heads has allowed for more precise application – relating to soil sensors and individual head control – while reducing total irrigated turf coverage."

There is now more underground drainage, reducing the volume

of water moving over the surface of the golf course property and therefore preventing erosion and minimizing the chance of pollutants leaving the site by diversion channels, buffer systems and slower release rates, and improved turf varieties.

"A project like this has significant long-term effects. Immediate

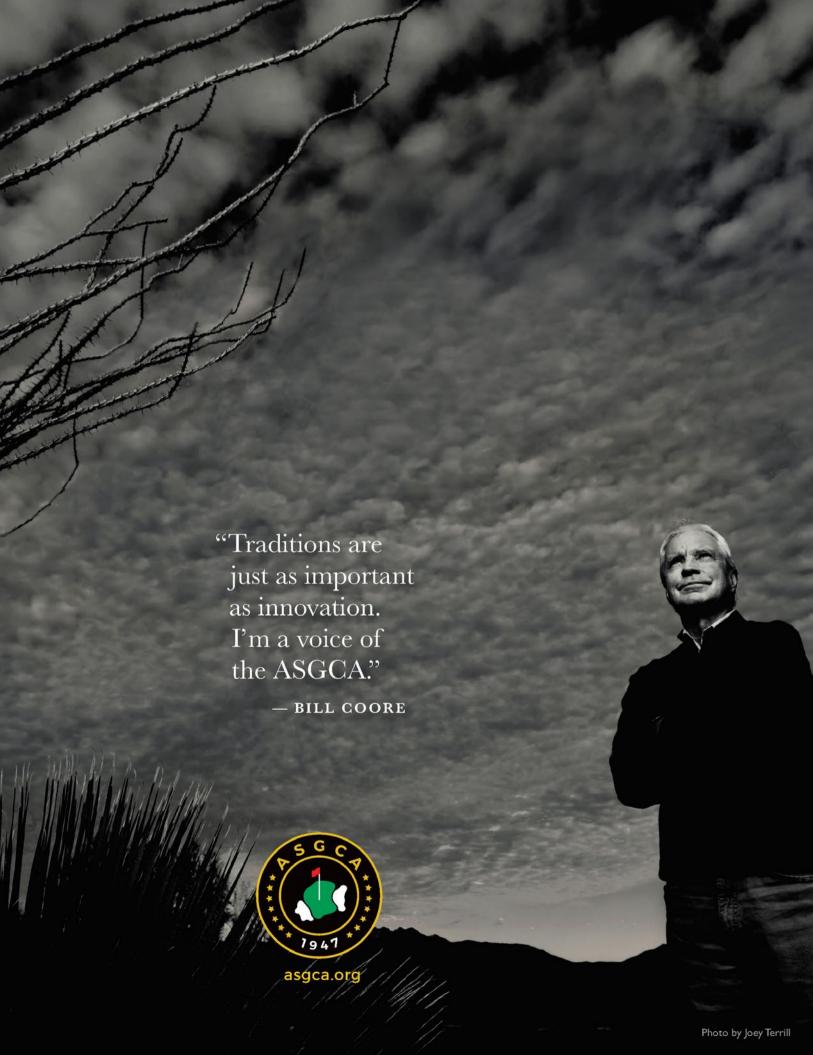
# "A goal was to create a positive encounter that is both environmentally rewarding and recreationally engaging"

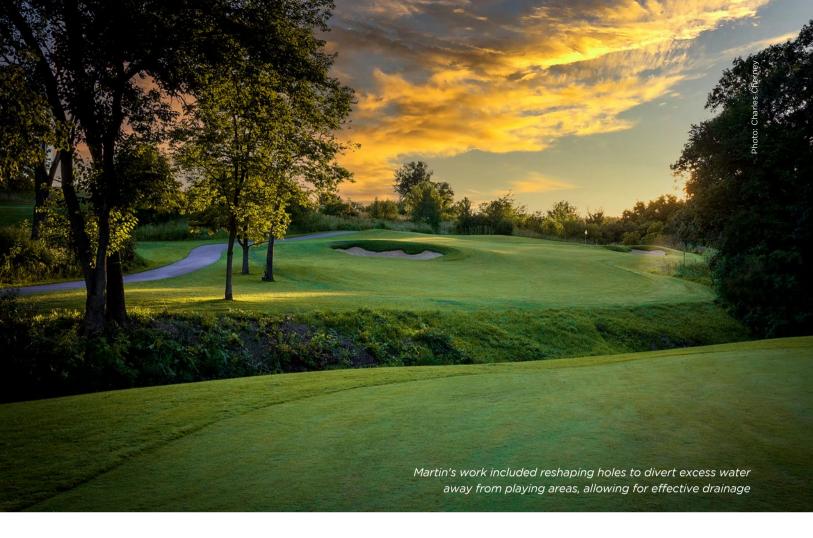
capturing and treating stormwater.

"The drainage plan is intended to collect smaller watersheds and slow downhill drainage," says

Martin. "Downstream water quality has improved through the use of

results show stabilization of the landfill with proper and corrected drainage strategies and more efficient irrigation application. Stabilizing the site was the primary goal, however, we have





also managed to improve the golf course's design."

Martin has widened fairways and approaches, reduced the number of bunkers, increased tee surface area, and created larger greens that have more pinnable areas. The two new par threes have made for better green-to-tee connections and taken advantage of some of the property's natural features. The architect has also added a practice range, expanded the putting green and incorporated a four-hole junior course.

Settlers Hill has now also adopted a comprehensive vegetative plan for native restoration and management of turf in playable areas.

"Most great golf experiences offer a thoughtful routing that systematically exposes a landscape in measured and evocative ways," says Martin. "Weaving a golf course into a man-made landform and its surrounding diverse landscape that offers a gentle reveal of this robust environment was our first objective. The second, and more important, objective was to enhance and protect the natural features so they can be enjoyed and sustained while playing golf. We wanted to create a positive encounter that is both environmentally rewarding and recreationally engaging.

"This landscape offers expansive views and landscape interactions that are rare in central Kane County. Importantly, this renovation now offers a golf course that interacts with the natural and man-made landscape deliberately and intentionally. The result is an

engaging and beautiful golf course that coexists with a landfill."

This project can be a shining light for other facilities that were built on landfill sites and are looking at ways to resolve issues relating to settling and drainage, says Martin, while noting clubs should also be conscious of the extent of approvals needed and the technical challenges these sites pose.

"Settlers Hill golf course is a positive reuse of this landscape and is rewarding for golfers of central Kane County. The ownership at the Forest Preserve thoroughly understands its valuable recreational and environmental benefit."

Settlers Hill received an ASGCA Environmental Excellence Award in 2023. You can read more about the awards in the Winter 2022 issue of By Design

# Phoenix in photos

Scenes from the 2024 GCSAA Conference & Trade Show, where ASGCA was a Presenting Partner.

he annual GCSAA
Conference & Trade Show
is the foremost event in the golf
course development industry, with
architects, superintendents, builders
and vendors from across the world
meeting to learn about the latest
in golf design, construction and

maintenance, and network with their peers.

This year the event took place in Phoenix, Arizona, the first time it has been held there since 1987. Around 11,000 people attended, and more than 6,600 seminar seats were filled, which is the highest total since 2008.







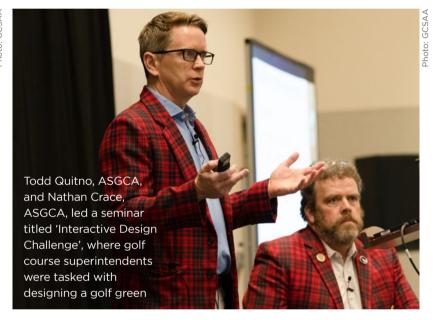






The Golf Sustainability Showcase highlighted research, innovation, technology and best practices





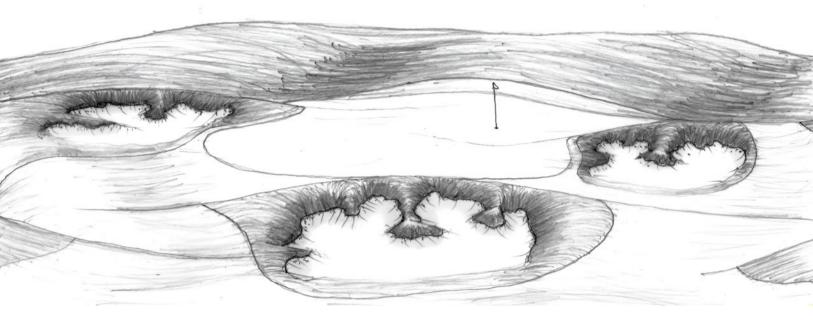




The ASGCA Networking Breakfast was a well-attended event and a great chance for members and partners to catch up with one another

### **SKETCHBOOK**

### Jeff Danner, ASGCA



### A proposal for Portugal

his green complex for the proposed sixth hole of a project in Portugal has been sketched by Jeff Danner, ASGCA, who has recently formed Pangaea Golf Architecture alongside Scottish architect Stuart Rennie.

"A stream meanders from the tees along the left side of the hole, separating the fairway from a natural hillside, before giving way to a ridge that forms the natural cape where the green is situated," says Danner.

"With little interest in the land right of the hole and the steep hillside to the left, I tried to integrate the stream as much as possible while also protecting the natural hillside," said Danner. "The terrain gets quite severe at the far end of the stream, where it crosses back to the right, so locating the green was a challenge.

"To maximize the land use and optimize the routing flow, the hole is best suited as a long par four. "The hole's length and green site offer little forgiveness, with the greenside bunkers situated to catch errant shots and prevent a worse fate."

fairway bunkering before facing a demanding second shot with a longer club into a green perched up along the ridge."

Danner admits perspective sketching wasn't a strength for him at first. "While at Golfplan,

# "The hole's length and green site offer little forgiveness, with the greenside bunkers situated to catch errant shots and prevent a worse fate"

"The bunkers surrounding the green define the large target area. Their steeper faces allow more space for the green to be receptive to longer irons and hybrid clubs rather than falling off on all sides. An accurate tee shot is required to stay out of the stream and

I learned from one of the best, Terry Storm," he said. "Terry emphasized that every pencil stroke meant something and sometimes less is better. He also encouraged me to master a single tool. Still, I like using a medium wash 4b lead on double-sided matte mylar."



### Rain Bird Corporation

Since 1933, Rain Bird has built a reputation on delivering irrigation systems that combine performance with efficiency. Rain Bird leverages state-of-the-art technologies to innovate and develop products that apply water in the most effective and efficient manner possible.

From highly-efficient sprinkler nozzles to cutting-edge control systems and pump stations, Rain Bird is widely recognized as the leader in golf course irrigation control system technology. We take the challenge of using water responsibly very seriously. That's why our over-arching philosophy, The Intelligent Use of Water™, guides everything we do. The revolutionary Integrated Control System™ provides innovation at a lower overall cost to golf courses enabling the user to maximize system efficiency and conserve water with a smaller environmental footprint.

For more information, please contact 1-800-RAINBIRD or visit: www.rainbird.com



### 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 coolseason grasses. A tight, dense turf generally mowed as low as to -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.

www.tahoma31.com



### **ASGCA Leadership Partners**

### Supporting Education in the Golf Course Industry

ASGCA thanks the following companies for their continued support of golf course development and renovation - helping ASGCA members do their jobs better, for the good of the game.

### // MAJOR LEVEL PARTNERS











### // MERIT LEVEL PARTNERS











### // SPONSORS















