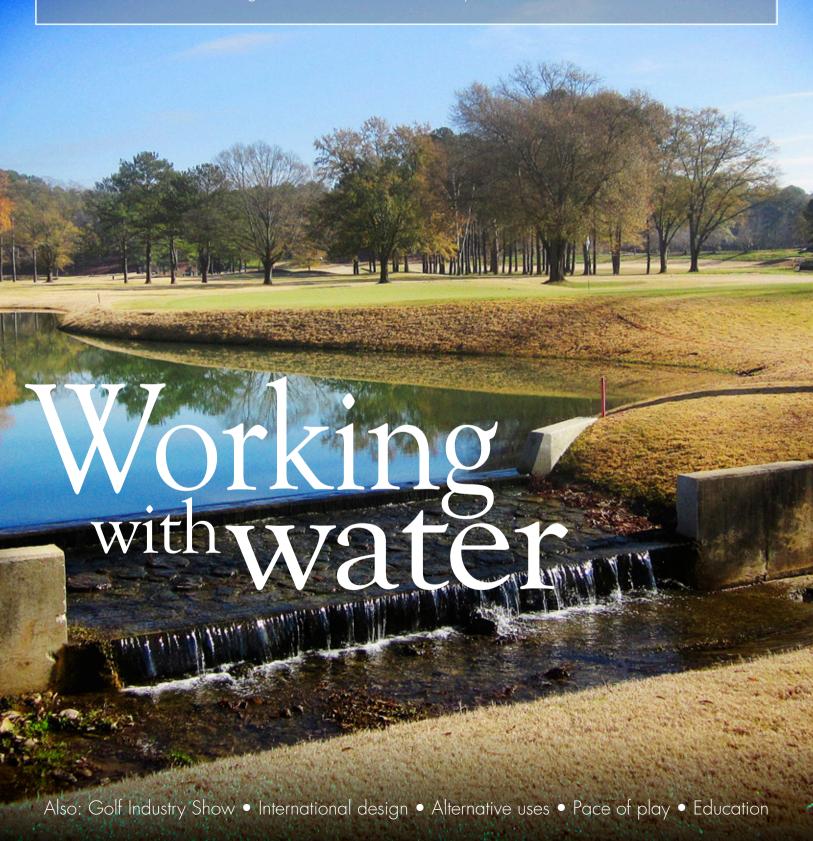
Issue 18 | Spring 2014

BYDESIGN



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





A fundamental relationship

olf's relationship with water will always be fundamental to its success. If managed correctly, this critical pillar of sustainability will help ensure that golf course developments will be enjoyed by future generations. Regulations that dictate how much water a facility can use, and where it comes from, are now commonplace. But golf course architects have long recognized that designing a course that minimizes the demands on local water resources makes sense. Not only does it represent good environmental stewardship but it also brings many practical advantages—from improving the likelihood that permission will be granted in the first place to reducing the ongoing costs of maintaining the course.

In the cover story for this edition of *By Design*, we hear from ASGCA member architects who have overseen projects that have had a positive impact on the local water resources. These include a municipal golf course in New Mexico that has transitioned from groundwater to effluent and found ways to engage the local community in the process, and a new golf course project in Ontario, Canada that sits on one of the largest aquifiers in the area but has been designed to avoid taking a single drop of water from it.



I hope you enjoy the read.

Rick Robbins President American Society of Golf Course Architects

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BY DESIGN

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COVER



Bill Bergin, ASGCA Associate, has recently completed a major water management project at Hoover CC, Birmingham, Ala.

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Golf Industry Show

Golf development activity on the rise



ASGCA President Rick Robbins (left) was joined at GIS by Rick Lohman from Toro

SGCA President Rick Robbins expressed optimism about the outlook for golf's economy when he spoke during a press conference at the 2014 Golf Industry Show, which took place in the Orange County Convention Center in Orlando, Fla., in February.

Robbins and other ASGCA members noted that architects and others are seeing an increase in activity by golf course developers and decision makers, many of whom believe that now is a good time to act on projects or at least begin to plan for them.

"The global recession slowed activity creating new courses and renovating existing ones," Robbins said. "But

rock bottom interest rates and worldwide interest in golf have golf course developers looking at projects all over the globe. ASGCA members are working on projects in both hemispheres, from countries with an expanding middle class to those trying to drive increased tourism."

Robbins also said that in North America, many courses and clubs have strengthened their balance sheets and are playing catch up on capital investments that were put off several years ago. "They're looking at how they can address irrigation, drainage, turf and other issues, and simply adapt to a golfing public that has changed a great deal," he said.

the industry. "Golf courses continue to

development," said Straka. "Those

courses to provide everything from

carbon sequestration to tax revenue."

respond to society's need for sustainable

involved in new golf courses and existing

ones are unlocking the potential of golf

Architects talk business

As part of the Golf Industry Show's Educational Conference, ASGCA members took part in a panel discussion covering topics affecting the industry.

Robert McNeil, ASGCA highlighted growing activity in municipal golf. "Municipal decision-makers are looking to improve cash flow and increase rounds. Many are looking at various forms of renovation," said the Rhode Island-based architect. "They also know that golf courses can be part of the solution as they address issues like stormwater management and other water issues." Jason Straka, ASGCA added that

sustainability is top of mind for all in

Lester George, ASGCA detailed three award-winning projects that illustrate how practice areas are essential to attracting and retaining golfers. "Today's golfers are pressed for time and can't always get on the golf course so more are turning to the practice facility," said George. "But it needs to be for creative

shot-making and not just ball-hitting."

Renovation work continues to surge

ASGCA members continue to see a strong interest in renovation and redesign work, with projects underway throughout the United States and beyond, including:

Emerald Bay Golf Club, Florida Bob Cupp, ASGCA Fellow Major renovation due for completion in summer

The Experience at Koele, Hawaii Jack Nicklaus, ASGCA Fellow Redesign due to be completed in 2014

Palo Alto Municipal Golf Course, California

Forrest Richardson, ASGCA Construction work begins in May

Fort Myers Country Club, Florida Steve Smyers, ASGCA Total rebuild will break ground in April

University of New Mexico

Andy Staples, ASGCA Associate Scheduled to reopen in mid-April, following irrigation and design work

Engineers Country Club, New York
Tripp Davis, ASGCA
Master plan for renovations
completed

Atlantic Beach Country Club, Florida Erik Larsen, ASGCA Ground broken on complete redesign project

Dennis Pines and Dennis Highlands, Massachusetts Robert McNeil, ASGCA Work on comprehensive enhancement to begin in autumn

Playa Grande Golf Club, Dominican Republic Rees Jones, ASGCA Fellow and Bryce Swanson, ASGCA

Major renovation in progress



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F Lawrence Packard

Industry pays tribute to pioneering architect

arry Packard, a Past President and Fellow of the ASGCA, died on January 28, 2014. He was 101 years old. Packard began his golf architecture career in Illinois in the 1940s with Robert Bruce Harris, one of the founders of ASGCA. Packard then started his own firm in 1954 with Brent Wadsworth, who went on to forge a successful career as a golf course builder and received the ASGCA Donald Ross Award in 1993.

Packard's work included Innisbrook Golf and Country Club in Palm Harbor, Fla., where he designed three 18-hole courses in addition to a nine-hole layout; Turnberry Country Club, Crystal Lake, Ill.; Lake Barrington Shores, Barrington, Ill.; and Countryside Country Club, Clearwater, Fla.

Since his passing, golf industry leaders and ASGCA members having taken note of both Packard's design work and his legacy of service to ASGCA and the profession of golf course architecture.

"Larry Packard was a pioneer in the game of golf," said ASGCA President Rick Robbins. "Those who influenced his work date back to



the 1800s, and the courses Larry designed still stand today and will for decades. Those who play the game will be positively impacted by Larry Packard for generations to come."

Ron Whitten wrote on GolfDigest.com of Packard's specialty, the double dogleg par-5 shaped like the letter S, highlighting the famous 14th at Innisbrook Copperhead as well as an "unheralded Packard gem," saying: "I defy anyone to play the mammoth live oak-lined par-5 11th at Cypress Run without feeling outside one's comfort zone".

Whitten adds: "if I were developing a low-budget public golf course today, I'd be smart to incorporate some of Larry's principles into the design. Make it pretty but not lush. Shape it to be mowed mechanically, not by hand. Provide some easy holes and a few strenuous ones to keep things interesting. Larry Packard is gone now, but his architecture remains."

For more on the work of Larry Packard, review the article 'A century of service' that appeared in Issue 14 of By Design

ESPN launches Falling for Golf

ESPN is giving some of world's top golfers a chance to say how they fell in love with the game in a new feature on its site. "Every golf fan has a story, and so does every golfer," ESPN says on its site. "That's why we posed the question to many of the world's best players." So far, ESPN has profiles on 12 players including Justin Rose, Stacy Lewis and Kevin Streelman.

Toro unveils zeroturn bunker rake

Toro has launched a new zero-turn mechanical rake that aims to assist golf course professionals by significantly cutting daily bunker grooming time and labor. The Sand Pro 2040Z features a new flex tooth rake with a patent-pending Lift in Turn system that lifts the inside rake during a tight turn, leaving no unraked teardrops or tire marks behind.

Albanese & Lutzke turns 10

Albanese & Lutzke, the construction management firm of Paul Albanese, ASGCA and Chris Lutzke, is celebrating its 10th anniversary. "Over the past decade, our firm has garnered many awards and recognition of which we are very proud," said the firm. "We have many notable accomplishments and developed valued, long standing relationships with our clients and colleagues."

2016 Olympic Games

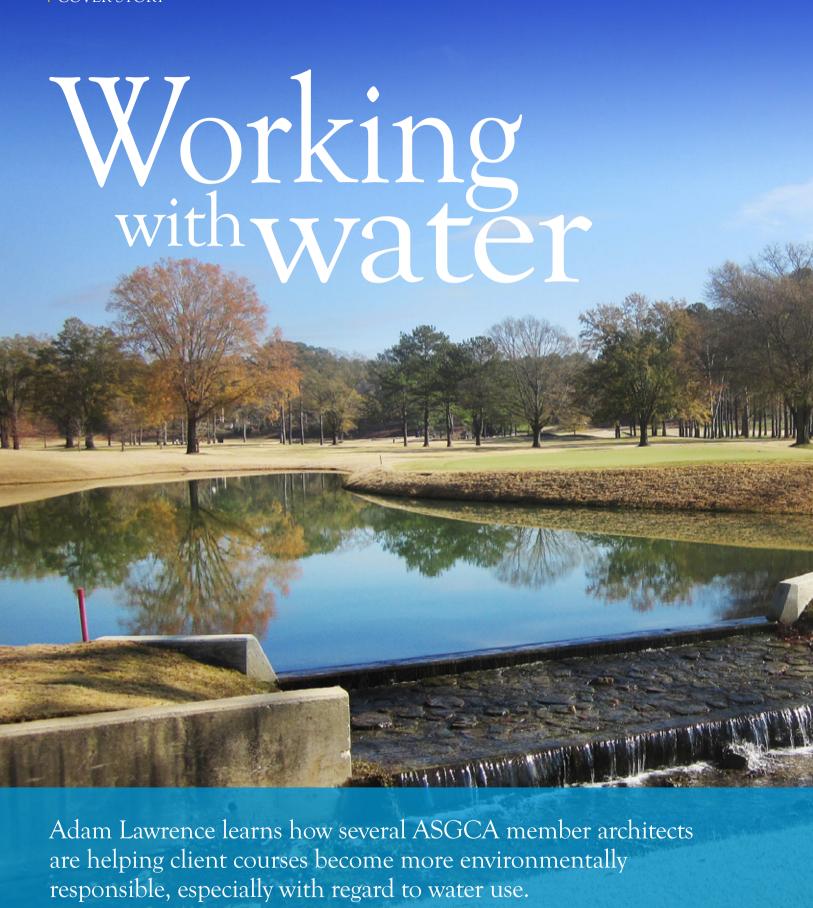
Golf Channel profiles Hanse

The Golf Channel TV network has given viewers an exclusive glimpse into the preparation of the 2016 Summer Olympic Games golf course in Rio de Janeiro, Brazil through multiple interviews with the course's designer Gil Hanse, ASGCA.

An hour-long episode of *In Play with Jimmy Roberts*, which first aired on February 24, profiled Hanse and his work on the Olympic golf course. For the past two years, Golf Channel cameras have captured the development process of the course, including Hanse's initial visit to the proposed site in 2011, his winning bid to be architect and course designer in 2012 and the current shaping of the course.

"I don't know that we will ever get to build a more significant golf course," said Hanse in the program. "It is the opportunity of a lifetime." In interviews, Hanse also opened up about family stresses during the construction process—his family moved to Rio in January 2013—his frustrations with the delays of the course development and how he, his family and his management team have overcome these struggles and are moving forward with a scheduled completion of the course in 2014.

Search for 'Gil Hanse' on www.golfchannel.com to view the program



08 | By Design





round the world, this winter has been one of extremes.
Severe drought in California and other parts of the western US; record low temperatures across much of the rest of the country; and near Biblical levels of rainfall in Britain and parts of Europe.

There is no need for those in the golf business to debate the causes of these extreme weather events. Really, all that matters to golf clubs, course owners and managers is their consequences. The key consequence, without a doubt, is a business outlook in which the golf sector needs, once again, to look closely at its relationship with the surrounding environment, and its use of resources, most importantly water.

We have, of course, been here before. The golf business has come a long way in terms of environmental stewardship, and, though not everyone in the 'green' movement has noticed, that fact has started to get through to authority. Nevertheless, this isn't a time to pat ourselves on the backs and lose focus. Restrictions on chemicals and water use are only going to get tighter—look, for example, at the golf business in the Netherlands, which is facing a total ban on all pesticides and fungicides within the next five years. More to the point, it is massively in golf's interest to be seen as a pioneer, rather than a laggard, in this respect. It may be true that other sectors could learn lessons from golf's record, but that isn't the point.

Fortunately, golf course designers and managers across the US and elsewhere are showing no signs of letting up. Wherever you go in the golf world, look closely and you will see inspiring stories of courses taking radical steps to reduce water use, to cut reliance on chemicals, and to be better stewards of the natural landscape. And a number of ASGCA members are leading the way.

In the small town of Hobbs, N.M., close to the border with Texas, Andy Staples, ASGCA Associate, is getting started on a project that amply demonstrates how golf's

sustainability has developed. The city, which is experiencing an economic boom as a result of the oil industry's growth in the area, has hired Staples to rebuild its municipal golf course, and the project will transform the course's sustainability record, in both environmental and social terms.

The golf course, renamed the **Rock Wind Community Links**, will play a key role in changing how the city views itself. "Because of its dependence on the oil business, Hobbs has a pretty transient population," Staples explains. "So it is investing in facilities—trying to increase liveability for new and existing residents. The area has been known in the past for having significant youth drug and alcohol problems."

Naturally, in a dry area like New Mexico, the city also has to manage its water resources carefully. "The golf course has three of the highest quality groundwater wells in the area on its property," says Staples. "In the past, those wells have been the key source of irrigation for the course. But now, Hobbs is expanding its effluent water program, and so we are going to transition the golf course away from those wells and onto effluent—and store effluent on site."

The course will retain access to the groundwater for occasional use, when soils require flushing with fresh water. But the centerpiece of the changes is the construction of a 5.3 acre lake, storing 13.5 million gallons of effluent water, at the heart of the property. And it's this lake that is going to give Staples' 'Community Links' idea real meat.

"The key is to make the facility suitable for other activities beyond golf," he says. "So, the area next to the lake will become a focal point for the whole local community. Trail users will be able to come there to walk, to use the clubhouse and just hang out by the water, and we're talking about having small sailboats, maybe paddle boats and even remote control boats for people to use."

"When we heard the vision that Andy had for how our golf course could be transformed into something other







The Lebovic golf project near Toronto, Canada will only use stormwater and effluent

than your regular ol' local municipal golf course, we immediately became intrigued," City Manager JJ Murphy says. "Now that we've had a chance to see the vision begin to come to life, there's an excitement for this course I have not seen before. I love how this golf course will begin to bring our community together around golf."

The other aspect of the Hobbs project is its approach to the design and maintenance of the golf course itself. Staples is working with irrigation designer Don Mahaffey on a radical approach to watering and the treatment of the edges of the maintained area.

"The playable areas will all be dwarf bluegrass," says Staples. "But between those areas and the native grasses, we have a 10-25 foot buffer zone of buffalograss/bluegrass mix. These areas will not consciously get irrigation throw, but in a windy area like this, inevitably some water will fall on them. Que sera, sera. If an area gets water, the bluegrass will thrive. In another, the buffalograss will dominate. It will help us create a natural looking edge to the golf course, but also to reduce the amount of maintained turf. Don gives me the ability to look at irrigation specifically in the context of

how the golf course is designed. He doesn't design to lines on paper, he designs to the field. He lets things evolve and go where they need to."

In Birmingham, Ala., Bill Bergin, ASGCA Associate, has recently completed a major water management project at the Hoover Country Club, the home of the LPGA Tour's Birmingham Centennial Golf Classic from 1972-82.

"Formerly, the club watered the course directly from a well, pumping straight into the irrigation system," says Bergin. "The superintendent kept a close record of the well's capacity, and found it to be diminishing. So, to gain some water independence for the club, we have created three ponds, totaling 2.77 acres, all of which are tied together through equalization pipes. They give us almost five million gallons of water storage. The well continues to feed the ponds, but we have also created a flow through system from a tributary to the creek. We installed a trench drain across the bottom of a concrete flume and water gravity fed our main irrigation pond before exiting over a concrete weir.

"In the past, the course, which is in a floodplain and rather flat, drained

very poorly," Bergin says. "Every time there was rain, the course became waterlogged, but it didn't do anything for the irrigation well. So we added 150 drainage inlets, feeding into ponds, and reducing the pressure on the well. Permitting was very challenging, given we were in a floodplain, but the result has been extremely positive."

Meanwhile, up in Canada, ASGCA Past President Doug Carrick, along with his associate Steve Vanderploeg, is constructing a new eighteen-hole course, designed from the start to be irrigated only with stormwater captured on the property and effluent water. Located in Stouffville, Ontario, not far from Toronto, the **Lebovic Golf Club** project has been a remarkable 18 years in the making.

Although the economic situation played a part in the project's lengthy genesis, it was planning disputes that caused the greatest headaches. In order to finally win permits, the developers donated land to the Toronto Regional Conservation Agency, and also made some fairly stringent agreements on water usage. "The course actually sits on one of the largest aquifers in the region," says Vanderploeg. "But, as a condition of the permit, it is not allowed to pull from the aquifer at all."

The developers are building 75 houses as part of the project, and have built a dedicated sewage treatment plant. But 75 homes do not produce enough effluent water to irrigate a golf course, so Carrick and his team

I love how this golf course will begin to bring our community together around golf

J Murphy, City Manager, Hobbs, New Mexcio



At Laurel Hill, the management of the course is based on the premise that playing surfaces can be of high quality while arier than usual





A 5.3 acre lake at Rock Wind Community Links in New Mexico will store 13.5 million gallons of effluent and provide alternative uses to attract a wider community

have had to come up with another solution. "Six ponds, all of which are connected, detain all the water that falls on paved areas," the architect says. "At each end of the site, there is a pond at the lowest level. Each has a transfer pump that shifts water back to the main irrigation lake, allowing us to control water levels in each pond. The main irrigation pond is very large and very deep at 33 feet. We have put the irrigation pump station intake right at the bottom of the deep pond to maximize the availability of water if there is a dry year."

Located just outside of Washington D.C., Laurel Hill Golf Club was designed by another ASGCA Past President, Bill Love and his partner Brian Kington. Laurel Hill is a championship golf course developed by the Fairfax County Park Authority on property formerly occupied by

Lorton Prison, a facility of the DC Department of Corrections. Love said, "We were given ample land by the Park Authority to design the golf course for best management practices. It was a great opportunity to provide resource conservation while preserving the environmentally sensitive areas that existed throughout the site."

With resource conservation directing all components of the design, the cumulative result is an efficiently managed course inherent with the site's character that offers an engaging test of golf for all players. Highly maintained areas of turf grass are utilized as necessary for proper play and minimized elsewhere. Large areas of low maintenance rough area and non-maintained conservation areas are incorporated throughout the holes. Turf grass selection was based

on disease and drought resistance, as well as quality playing conditions.

Irrigation system controls allow water to be applied sparingly when and where necessary. Rainwater draining from a good portion of the site is collected into the irrigation pond. To supplement rainwater, effluent is pumped from a nearby sewerage treatment plant. The management of the course is based on the premise that playing surfaces can be of high quality while drier than usual, and that it is acceptable for turf grass, like native grass, to go slightly off color. This premise was clearly evident in July 2013 when mild drought conditions and consecutive days of temperatures over 100 degrees did not prevent Laurel Hill from presenting exceptional playing conditions while hosting the United States Amateur Public Links Championship.



Since its founding in 1947, ASGCA members have been sharing their expertise and experience on golf course projects throughout the world. On average, ASGCA members have designed golf courses in more than a half-dozen countries, and current members have designed in more than 90 countries around the globe. By Design asked four members about how they came to be working internationally, and the challenges that brings.



Rick Robbins, ASGCA President, is principal of Robbins & Associates International



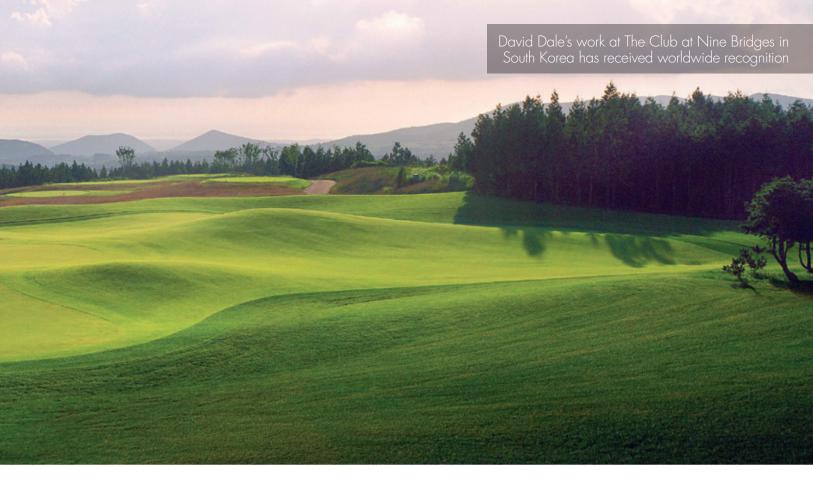
Jim Engh, ASGCA, is chairman of Jim Engh Design



David Dale, ASGCA, is a principal of Golfplan – Dale & Ramsey Golf Course Architecture



Rick Baril, ASGCA, is a senior partner of von Hagge, Smelek & Baril



What prompted you to pursue international opportunities?

Rick Robbins: My first introduction to working overseas was when Jack Nicklaus asked me to work in his newly established Hong Kong office in 1990. My time there introduced me to several Asian countries as we were doing work in Thailand, Japan, Malaysia, Indonesia, China and the Philippines, as well as Australia. When I left the Nicklaus organization and established Robbins & Associates, I felt that I knew the region and that there were good opportunities for future work there.

Jim Engh: I was offered a lead designer position in Europe, living in England, working for three companies at the same time. Due to the structure of the organization I was designing for Cotton Pennink, Langer Buckley and IMG Developments. I traveled mostly between Europe and Asia from 1987 to 1991. Then in 1991 I formed my own firm in the United States but with my first projects in Thailand and China. When things slowed in the US in 2009, we found a familiar transition in pursuing projects in Asia.

David Dale: Starting in 1988 with Ronald Fream I was involved in opportunities that very few US-based firms pursued. While many architects have looked overseas more recently due to slower activity in the US, the span of my career at Golfplan has been focused on the international market since its beginning. I am fortunate to have traveled to more than 40 countries and have been involved with golf course projects in over 70. We have been extremely active in the South Korean golf market of which two projects have achieved tremendous global exposure. Purchasing Golfplan from Fream in 2006, my partner Kevin Ramsey and I continue the globetrotting mantra established in 1972, nurturing the mature and emerging golf markets of the world.

Rick Baril: The story of our firm working overseas is convoluted, one of coincidence and connections! It started in Australia where Bruce Devlin, at the time Australia's most successful golf professional was entrusted to identify the best architect to design The Lakes Golf Club near Sydney. While on

tour, Devlin had been impressed with courses designed by Robert von Hagge and recommended him for the job. This led to opportunities in Japan and subsequently Europe, which began with what von Hagge described as a mysterious phone call informing him that a first-class ticket to France had been arranged. This turned out to be a meeting with Baron Marcel Bich and the genesis of the design of Les Bordes.

What are the primary challenges in establishing an overseas presence?

JE: The challenge is to have a good portfolio and to make friends. A good network is essential for identifying business opportunities and is not something that can be switched on overnight.

RR: Without a doubt, to establish credibility as someone who can work within the local system and finding the right contacts to make introductions to clients is the biggest challenge. Accomplishing that brings other, equally difficult challenges like having the financial ability to stay in the market long enough to be considered to be a part of the local

scene and the stamina to make long trips to remote places.

RB: At first, your ability to design a golf course in the locality will be questioned. For example, a client might be considering you to design a course in Spain because you've designed a course he likes in France. But if you haven't designed a course in Spain he may have some reservations, even though you have designed courses in 20 countries! Once you have delivered a successful project in a market, you become a more legitimate contender for future projects in that region.

DD: You need to invest a tremendous amount of time in developing local relationships. It is critical to the business model and is necessary to get the best quality work from builders and local experts. A US or European approach cannot be pushed but over time and with patience and perseverance locals are realizing a quality of work we can all be very proud of.

To what extent do you rely on, and are able to develop, local expertise?

DD: Construction management companies for the last ten-plus years have been extremely successful working with local builders to achieve excellent results. We have relationships that date back to the mid-90s that are still going strong—they are now grey-haired experts in golf development business models! Constant communication on a near-daily basis keeps the business plan stable.

JE: A local network of expertise is essential. We have worked hard to establish a network of trusted partners in the years we have been creating golf courses overseas. And they become the foundation for obtaining new contacts for today.

RR: I have always relied very heavily on my contacts within the various countries to help me with the client relations in respect to how to conduct business in that country. I also try to work as closely as possible with the local contractors to gain their trust because they have such a huge influence on how any job turns out. It is hard to put enough emphasis on the importance of developing local



expertise and long-term relationships in Asian countries. Business is more relationship-driven than it is on price and clients want to know and feel comfortable with the people who will handle their design.

RB: We always rely on local expertise. A local engineer or architect is critical to project entitlements and regulatory concerns. In the 1980s, we were more inclined to include the same contractors, supervisors and shapers from one job to the next. After teaching and learning from a group of workers, it was beneficial to try to keep the team together and take advantage of—and continue developing—the skills and expertise.

In more recent years it has become easier to find local talent, experienced and skilled in all aspects of golf construction and maintenance. Still, we have an affinity for people we've worked with before, and have been tested 'in battle,' so to speak. I have debated many times about the value and necessity of an experienced golf course shaper. Without this expertise, we spend much more valuable time training and teaching workers. We spend more time reworking, rather than refining, the design.

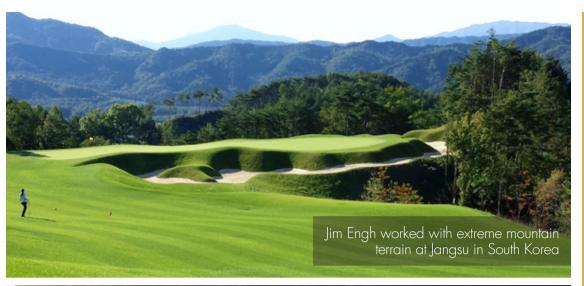
Are there any particularly notable differences you need to take in your approach to projects?

RB: You need to be very clear with communication and work to maintain flexibility in the construction process.



In order to capitalize on a site's natural attributes, you must be able to adapt your design during the construction process. This concept is not always easily understood or accepted. If you provide very specific plans, you might not be given any opportunity to modify the design. This problem can be exacerbated when, for example, a contractor attempts to demonstrate their skill at building golf courses, showing you how well they can follow the plans and how quickly they can complete the work. As with all projects, it is best if you can build mutual trust and a sense of teamwork. The sooner you get everyone working toward a common goal, the more success you will experience.

JE: It is particularly important to have the ability to be flexible. Rather than go in to a project with a pre-





How does having 'ASGCA' after your name impact business outside North America?

"I can say without a doubt that having the ability to put ASGCA after my name is a huge asset in the China market and has a very positive connotation in every market I have worked in so far," says Rick Robbins. "It seems to be understood in many places that if the designer has an ASGCA affiliation, then that person has developed a degree of credibility. Many new design opportunities in China will require ASGCA membership to be considered in the selection of the designer. I believe this is the result of the fact that ASGCA has been historically so well represented by Jack Nicklaus, Bobby Jones, Jr., Lee Schmidt, Brian Curley and many other ASGCA member architects."

conceived idea of how it should be done, we should listen and learn from other cultures.

RR: There are several differences, beginning with understanding local culture and customs. In China, the concept of feng shui is very important among many owners. This will affect the location and orientation of all key buildings such as the clubhouse, hotels and real estate products. There are also cultural differences in golf course design and construction methods. For example, Chinese golf course owners all want very long, challenging and tournament ready courses regardless of the site, market demands or other factors. Chinese contractors have their ways of building courses that are not up to the same standards we use in the US but we have to find a way to blend

all these things together to make projects become successful.

What does the future hold?

RR: For those in the golf course design profession, the future will almost *require* us to work internationally if we want to be able to design new courses. There will be exceptions of course, but for those unwilling or unable to conduct some foreign business, by far most of their work will be renovations and remodeling projects. Those who wish to be successful will have to stay well educated, be very nimble in reacting to current conditions and be prepared to expand the scope of services they offer.

DD: What is lacking at this time is a disposable middle income. That has been all but lost by the majority of golfers that want to play but can't afford

to play like they once enjoyed prior to the bubble. I watched a booming economy with private memberships sales on a high suddenly crash to a halt. Now what is interesting is the emerging market for public golf that has followed the private golf development boom.

RB: As golf stakeholders, we can seem more preoccupied with the declining number of players than major issues on golf's horizon. The increasing cost and declining reserves of water and oil are going to significantly impact golf. If we don't attend to these issues now, we can only expect golf will be subjected to further declines. So what does the future hold? We—the golf stakeholders—will finally recognize that golf is not a business. We will have to fashion a style of golf that is sustainable, and that means golf will become a game again.

Alternative uses | Erik Larsen

Consider the alternatives

Many golf facilities could improve their fortunes by introducing other activities on their property, says ASGCA Past President Erik Larsen

olf is a great game and golf courses are beautiful things. I love both. Golf courses provide friendly competition and beautiful playing environments for so many people—it would be difficult to find better places for healthy social interaction.

But there is an elephant in the room. Some golf courses are struggling to survive economically. The industry has suffered from the real estate crunch and declining rounds played. Real estate will likely rebound, albeit slowly.

Problems with real estate and a reduction in play shouldn't take the entire blame for a golf facility's failure though. Another issue may be the club's inability to drive social interaction, the fundamental aspect of successful golf communities. Golf course owners may not have realized their property is a green space capable of hosting many activities other than golf, tennis and swimming to provide the required social interaction. Alternative uses of golf courses are worth consideration.

The most common alternative use is the identification of land within the golf

course area that can be developed into real estate, converting a 'stand-alone' golf course to a golf community. The land sale provides capital to the club for upgrades, maintenance, etc. And if home buyers are required to become members of the golf club, their dues would add further ongoing revenue.

At Iguassu Resort in Foz do Iguassu, Brazil, my firm has completed a project that saw 150 private cottage lots added to the facility, generating \$25 million in capital. And the newly-named Atlantic Beach CC in Florida has been converted from stand-alone country club to golf community by adding 178 single family homes to its property. One-hundred and thirty-eight lots had been sold within two months of becoming available. As a result, the club now also enjoys more than 350 new fee-paying members. Both projects show promise of financial success due to money generated from the additional real estate.

However, an inability to obtain zoning, funding or extra developable space may prohibit adding a new real estate component to an existing club. If so, other methods to increase interest from non-golfers can be considered. After all, there are many more non-golfers than golfers.

Most golf courses already have two features that could entice non-golfers.

The first is the cart path network. Used as a trail system, these can provide an amenity considered a necessity and included in most contemporary developments. It connects people from their homes to neighbors and other places within the community without a need to get in the car. Further, it provides nice views and a perspective of green space previously enjoyed only by golfers. Walkers, joggers, bikers and skaters could use the path in the mornings and evenings or during low golf play times. It is a simple operation coordination issue, with no design or construction needed. The path users could pay a trail fee at the pro shop before use, and may choose to have drinks and more in the grill after. Maybe they would even be inspired to take up golf!

Secondly, practice ranges are roughly the same size as an amphitheater, with the teeing area as a stage. Certainly it is a large scale, relatively flat, green space capable of handling outdoor events. Infrastructure is in place with parking, bathrooms, food and beverage, lighting and water in the clubhouse area. Events during non-golf play times could provide revenue while increasing use of the facility, especially dining. Both these non-golf activities create additional social interaction to the

From a business perspective alternative uses can reduce expenses, lower taxes and increase revenue



club, contributing to what golf has so successfully provided in the past but is struggling to sustain at present.

A more radical approach to space limitations would be to eliminate some of the golf course altogether, likely nine holes, and finding a financially successful means to keep the eliminated area as green space and/or to add real estate. If the previous facility was just 18 holes, this would leave a nine-hole course, which may be a more viable golf model for that facility. There is an abundance of successful nine-hole courses throughout the country. From a business perspective this approach can reduce expenses, lower taxes and increase revenue.

Most golf course superintendents agree that reducing the course from 27 holes to 18 or 18 to nine reduces maintenance costs almost equivalent to the scale of the reduction. The typical \$500,000-\$1,000,000 per year maintenance for 18 holes of golf is a significant cost. Typically, savings of at least one third of the golf course maintenance budget can be achieved by closing half of the course. And closing half of the course allows perhaps 75 acres of an 18-hole course to be used for something else.

Environmental regulation provides financial benefits by showing respect for the land. Placing the unused golf area into a conservation easement can provide tax benefits based on the difference in value of the area developed into its 'highest and best use' versus leaving it undeveloped. Wetland mitigation banking and the recently developed daily nutrient load runoff regulation allow the owner to sell credits of their created wetlands and runoff catchment basins to other developers for land they have impacted.

Municipalities make revenue by renting ball fields to soccer, softball, baseball and lacrosse leagues throughout their community. Huge potential exists by farming golf holes. A recent article by Ed McMullen of the Urban Land Institute describes how agricultural plots within developments increase property values. Plus, revenue is possible from land leases to local farmers or home owners providing the intriguing prospect of locally grown vegetables. Fruit trees, timber and nurseries may also work. Talk about coming full circle, in many cases the land was a farm before it was a golf course.

Many golf courses need help for survival. Providing new real estate, allowing non-golf use and/or reducing the amount of golf by converting to alternative uses hopefully provides solutions for the sustainability of the facility. Conversions are practical, because the complete infrastructure system is in place with power, water, irrigation, sewer, circulation, clubhouse, parking and maintenance equipment. Also, the facility is already entitled, has identity, marketing and some degree of interest.

Each situation is different, and the identification of alternative uses should be based on the needs of the local community. But the fact that variety creates interest is universal. Alternative uses provide variety. It is proven over the years that people love golf and golf courses, but at its core, the golf course is a green space capable of many uses. The alternatives are worthy of consideration.



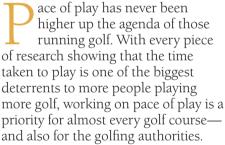
Erik Larsen

Erik Larsen, ASGCA is principal of LarsenGolf and a past president of the ASGCA. He formerly ran Arnold Palmer's golf design business and has 30 years' experience in the golf development industry having personally designed almost 100 golf courses in communities in 23 states and 24 countries. He is a nationally certified Landscape Architect (CLARB) and a member of the American Society of Landscape Architects. Erik can be contacted by emailing eriklarsen@larsengolf.net.

Pace of Play | ASGCA

Smooth flow

ASGCA is playing a leading role in efforts to make golf quicker. By Design spoke to members of the ASGCA Pace of Play committee to see how design can influence pace.

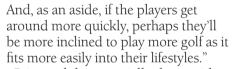


ASGCA is a key participant in the USGA's pace of play initiatives. This makes perfect sense: course design has a huge impact of pace, for good or ill. And, even if rebuilding a course to make it easier to play more quickly isn't on the agenda, there are tweaks an architect could make to most to speed golfers on their way.

But pure speed isn't the only issue. Research by specialists such as Bill Yates of California-based Pace Manager Systems shows clearly that the absolute pace of a round is not necessarily golfers' biggest concern. Rather, the amount of time spent waiting to play shots is what causes people to complain about slowness on the course. "Bill tells a great story about his work at Pebble Beach," says Forrest Richardson, ASGCA, one of

the three members of the ASGCA Pace of Play committee. "One of the biggest issues there was the waiting on the seventh tee. So the solution was to slow down play on holes three through six, to smooth out the flow of groups arriving on the seventh."

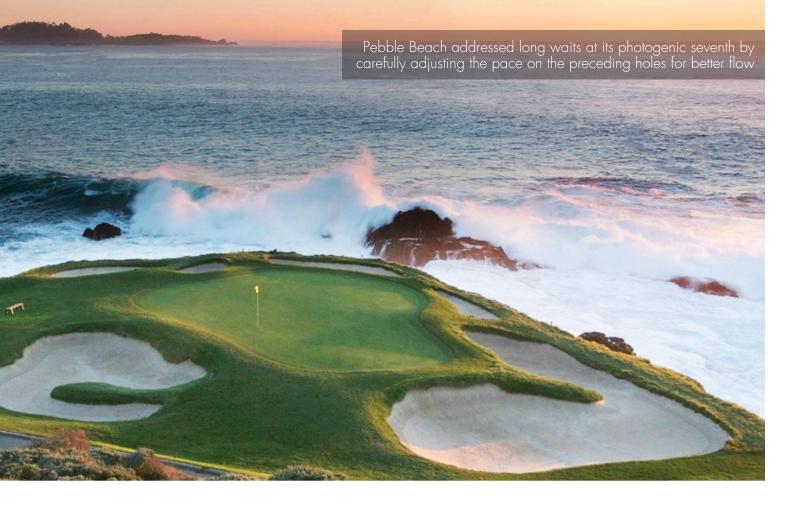
But what is good practice at Pebble Beach, a course that for many players will be a once in a lifetime experience, and for which they pay one of the highest greens fees in golf, does not work for every course. "There are different types of courses with different priorities," says Tripp Davis, ASGCA, chair of the Pace of Play committee. "At high end resorts—Pebble Beach is a great example—golfers are most concerned about the experience. They aren't worried about hurrying round, but they don't want to feel as though they are having to wait all the time. So flow is most important at such places. But, at the other extreme, at low-cost public courses, the financial viability of the operation is dependent on volume. Knocking a half hour off the average time of a round at such places means you can get more players out on the golf course and earn more money.



Private clubs, especially those with small memberships and relatively light play, are most likely to have a strong culture of speed. Many people have heard of the British clubs where all play is in two-balls, either as singles or in alternate shot (foursomes) format, and taking more than three hours to play is likely to result in a rebuke from the secretary or from other members. But such places are outliers, even in the UK, and at most clubs, encouraging quicker and smoother play is important, both to improve the experience of golf and to fit the game more closely with today's busy lifestyles—and, ultimately, to attract more members who use the club more regularly.

"Because of where we are positioned in the industry, when a project comes up, golf architects are usually the first ones in—before the pro, before the superintendent," says Jeff Blume, ASGCA, the third member of the committee. "So we





have—on new build projects—the chance to 'design in' pace of play up front. If it's a renovation, we end up being the point man to solve whatever problems the club is having. My old boss, Robert von Hagge, used to say 'In a round of golf, you have a foursome out there, but there's only one person hitting the ball at once. Everyone else is looking around, watching the world go by.' Who typically plays slow? Less accomplished players, those who are learning the game and maybe don't yet know the etiquette. But we're also trying to grow the game. We don't want to make them feel unwelcome and drive them away from golf. So finding the right balance is absolutely crucial."

"There is a balance between speed and interest, and you have to find the right balance for every facility," says Richardson. "The USGA's Tee it Forward initiative has been very important in putting pace of play at the top of everyone's agenda. But there is a danger in dumbing down the game too much in the search for faster play. The fundamental tenets of golf course

design have to be upheld—that's the source of the fun of the game. Hazards are the soul of the game."

But there are conflicting issues at work here. Many courses have added native grass areas in place of maintained turf in order to reduce their demand for water and be more environmentally conscious—clearly desirable objectives. But tall native grasses, unless very sparse and open, are ball-swallowers—and searching for lost balls is one of the key drivers of slow play.

"The challenge from a designer's perspective is to create character without making it slow to play," says Davis. "You can take a flat piece of property, put in 20 acres of lakes and 60 acres of native grasses and suddenly it becomes a slow course to play. Members should get with the professional and the superintendent—the people who set the course up on a day-to-day basis—and ensure the course is set up in a way that tallies with the design intent."

"Simple issues like grassing lines have a massive impact on pace of play," says Richardson. "A greenside bunker is typically a fairly simple club selection process—you grab your sand wedge and you go hit the shot. Yes, it's a hazard, but it doesn't slow play in the way that multiple cuts of grass around the green, which means you could hit five or six different clubs, would do." Blume agrees. "Alister MacKenzie said the ideal course should not force golfers to waste time searching for balls," he says. "But that is much harder to do nowadays. People hitting further translates to them hitting it further offline, and we cannot just go on increasing the amount of turf we maintain. You have to get creative and provide width where it is most needed, while removing turfgrass elsewhere."

"For every business, consistency of delivery is hugely important. When you don't deliver a consistent experience, bad things happen—you get a bad reputation," concludes Richardson. "In golf, we've had the idea that, if you're really busy, it's OK to deliver a bad experience. 'Saturday mornings are a complete disaster. Come back on a Wednesday, you'll have fun then'. This is not a good message to give to your customers!"

Education | Ian Andrew, ASGCA

The complexity of our canvas

The journey to becoming a master of golf design takes years of learning, practice and experience, as Ian Andrew explains



Like all artists, these masters begin their journey with the immediate desire to express their vision, but in golf design they must accumulate the necessary skill set to be successful. This initial golf course work sets the table for what is to come in the future. They obtain clarity and artistic flair through exploration, experimentation and experience. They work, learn, experiment, seek new ideas, create, assess, refine, and recreate. Most golf architects accomplish this while apprenticing under other architects, often for a decade or more, until they find the opportunity to build a

project based on their own ideas and their own artistic expression.

Golf architecture is a complex art form. Architects have to meet more than just aesthetic standards. Having a design vision isn't enough if the skills to express that vision on the ground don't exist. It takes a great deal of time, effort and experience to learn even the basic essentials such as drainage, soil composition and agronomy. More complicated issues such as sustainability or managing approvals require a different kind of skill set outside of the artistic realm. Add to that the qualities required to successfully run a business, or supervise a construction site. Before a golf architect can express himself artistically, there are numerous skills that must be acquired and perfected.

That is why the ASGCA formed an Education Committee. There are some masters among us who have enjoyed long and storied careers. These masters have honed their skills over numerous projects, providing them the knowledge and experience they needed for future projects. But times have changed and opportunities to learn 'in the field' are fewer than they once were. As a result, ASGCA is drawing on the knowledge and experience of our masters, and of other skilled professionals in the golf business.



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Many ASGCA members are in a position where continuing education is essential to prepare them for their next opportunity.

In recent decades, the canvas upon which golf architects express themselves has become a far more complex place to work. Golf architects have to address new complexities and additional responsibilities (such as brown field sites and treated effluent) that impact the ability to work and create. Expectations of clients—and even of society—have risen. The role once defined for us by Trent Jones no longer adequately reflects our reality.

At the upcoming ASGCA Annual Meeting in Tulsa, Okla., the Education Committee will lead members through a series of discussions and learning opportunities. Some are designed to provided enhanced education in established areas of golf course design; others to broaden the scope of our knowledge base. Finally we've mixed in a few philosophical questions to engage the membership in discussion and debate.

In today's economy, an architect needs a little luck to find that next new design project. But as the Roman philosopher Seneca famously said: "Luck is what happens when preparation meets opportunity."



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