

Issue 6 | Spring 2011

BY DESIGN



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Early signs are that 2011 will prove to be a more successful year for the golf industry. Sampling opinion at both the Golf Industry Show and the PGA Merchandise Show, golf business leaders seem more positive about the future of the industry than has been the case for several years, and word from across the US and overseas is generally cheery too.

A particular focus, for the domestic US market, is on course renovations, and here ASGCA is doing its best to help clubs and owners find the right solution for their particular circumstance. Investing in your facilities is, as *By Design* has repeatedly said over the past year, important to ensure a strong competitive position, and doing so when times are tough, so long as you can cover the cost without taking on additional debt, is a surefire way to win competitive advantage. ASGCA's, free Request for Proposal form, for example, will help clubs start the renovation process easily, and the Society provides many other free resources to aid in the planning of renovation projects.

Our cover story in this issue looks at alternative golf facilities, from short courses to enhanced practice areas. If your course has a small amount of free space, or space can be made available, such projects are worth looking at. Building a nine hole par three course needn't be expensive, but could make your venue far more attractive to beginner golfers.

Yours sincerely,



Erik Larsen
President
American Society of Golf Course Architects

BY DESIGN

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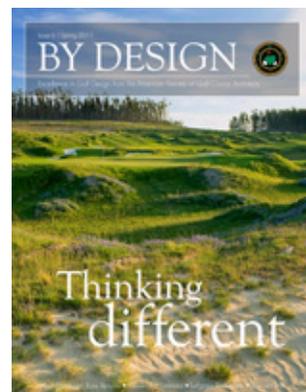
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Monarch Dunes's Challenge Course.
Photo: Aidan Bradley



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Golf Industry Show

Larsen launches 'Value' booklet

The American Society of Golf Course Architects has launched a new booklet to support its 'Value of the Golf Course' initiative.

The campaign, which aims to highlight the positive impact that a golf course can have on local communities, was promoted by ASGCA president Erik Larsen at the Golf Industry Show in Orlando.

"A golf course has value as a beautiful playing field for golf, but has additional value well beyond golf," said Larsen in a key address to the media. "Golf courses benefit communities as revenue and tax sources, green space, wildlife and plant sanctuaries and water filtration, among other uses. There is an inherent goodness to the community that comes from the



Erik Larsen answers questions from the media at GIS

positive environmental, financial and social impact of a golf course."

Larsen went on to tell reporters that he felt that future course developments could make money without the support of associated real estate developments, if planned carefully.

The *Talking Points* booklet incorporates

some interesting figures that bolster the ASGCA's arguments, including the scale of the U.S. golf economy, which raises \$76 billion of goods and services annually, while employing two million people.

The program is being headed by the ASGCA and allied golf associations across the U.S.

Environment

Carbon calculator for courses

Phoenix-based design firm Golf Resource Group, along with Environmental & Turf Services, has launched a carbon footprint calculator for golf courses.

The free, web-based software, released under the name 'CARBONSAVE', only requires a course's basic resource data such as fertilizer and pesticide consumption, energy use and the commute time of employees in order to create a carbon footprint.

The calculator gives total net emissions, in tons, for a golf facility and also identifies the biggest problem areas for carbon emissions and thus potential cost savings.

ETS president Dr Stuart Cohen said: "We've developed this tool to give courses a snapshot of total emissions and an idea

of where to focus attention to reduce footprint. Courses will know right away which parts of their operation emit the most carbon and which sequester the most."

According to research, 60 percent of a course's carbon footprint can be attributed to energy use. "When Dr Cohen first approached us with the idea, I knew right away this was something we needed to be involved with," said Andy Staples, ASGCA Associate and president of GRG. "It's easy to say you want to reduce your footprint, but knowing how to actually do it takes some knowledge and experience."

CARBONSAVE is available from the GRG website: <http://thegolfresourcegroup.com/>

Maintenance costs

During these hard economic times, the ASGCA has published a flyer designed to help reduce annual maintenance costs for golf course managers who need to balance short-term expenses with longer-term expectations. *The Cost Factor* is available free from ASGCA's website, www.asgca.org.

New Toro mowers

Toro previewed its latest greens mowers at the recent Golf Industry Show in Orlando. The Greenmaster Flex and eFlex both showcase some innovative features including a rechargeable lithium battery for the eFlex—a first for the industry.

Ross award

James Dodson, author of books such as *The Dew sweepers* is to receive ASGCA's Donald Ross Award. The longtime golf writer will be handed the accolade, which is named after ASGCA's first honorary president, during the 65th ASGCA Annual Meeting in Denver.

GCBA appointment

The Golf Course Builders Association of America has promoted Justin Apel into the role of executive director. Apel replaces Paul Foley, who recently announced his retirement from the post, which he had held since 2006.

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Golf economy

Industry Expects Brighter Times

This year's Golf Industry Show (GIS), one of the sector's biggest events, was forecasting a far more optimistic year for golf professionals.

Held in Orlando, Florida, the two-day event attracted over 550 exhibitors spread across 180,000 square feet.

"Coupled with what we saw at the PGA Merchandise Show in January, there is definitely a different feeling than what prevailed last year at this time," said GCSAA

CEO, Rhett Evans. "From a qualitative and quantitative perspective, the Golf Industry Show was quite successful."

The economic depression had a severe impact on golf development, with many courses left unable to make necessary renovations—something ASGCA believes will change in 2011.

"The economy impacted everything in recent years, including the ability of some course owners to obtain credit to make renovations,"

said ASGCA president Erik Larsen. "With the new year, ASGCA expects to see more attention focused on development to improve and sustain courses in infrastructure such as irrigation, greens construction, bunkers and cart paths."

The GIS, held concurrently with educational seminars, is presented by GCSAA and NGCOA, along with participating partners ASGCA, GCBAA, IGCEMA, NGF and USGA.

Design trends

'Trends' panel well-received at GIS

The 2011 Golf Industry Show in Orlando featured an ASGCA-specific "Trends in Contemporary Golf Architecture" panel discussion. President Erik Larsen headed a group which included members Bill Amick, Bobby Weed, Ken Ezell and Steve Smyers. Each presented on a specific aspect of coursework and design in a lively discussion attended by several hundred architects, superintendents, club managers and owners.

Bobby Weed discussed several projects he has worked on in recent years where he adjusted existing layouts to provide new revenue streams. The process included finding 'pockets' of unused spaces which allowed for redesigning existing holes and providing additional parcels of land to be used as course owners see fit.

"The expectation for the quality of the course does not diminish," Weed said. "That is part of the reason why an ASGCA member is so qualified to work on these types of projects."

Bill Amick spoke on the growing interest in shorter and more sustainable courses, noting smaller courses not only cost less to build but are less expensive to maintain,

citing less water usage and lower power costs. While noting the ongoing discussion of 12-hole courses and par three layouts, the ASGCA past president was quick to note that smaller does not have to mean easier or less challenging.

Ken Ezell touched on the role these courses can play in helping grow the game. Anything that brings families together or introduces new players to the game—regardless of their age—is good for everyone, he said, and a par three or shorter course is one path to explore. Ezell also suggested that first small course can be maintained if it is later determined a full course should be constructed, perhaps as a par 3 facility.

Steve Smyers, who also serves on the USGA Executive Committee, looked at the impact technology has had on the game. "Golf technology goes beyond equipment to the course itself and how it is maintained," he said. In some cases, maintenance is a night-and-day difference from when many players first picked up a club. "Most courses now cut fairways and maintain greens and bunkers three-to-four times more often than was commonplace in the 1970s," Smyers said.

Pakistan course

The Pakistan Golf Federation has endorsed a plan to build a new golf course and academy in Islamabad, the country's capital city. The course, and associated academy, are planned to be built on a 150 acre site leased from the Pakistani government's Capital Development Authority.

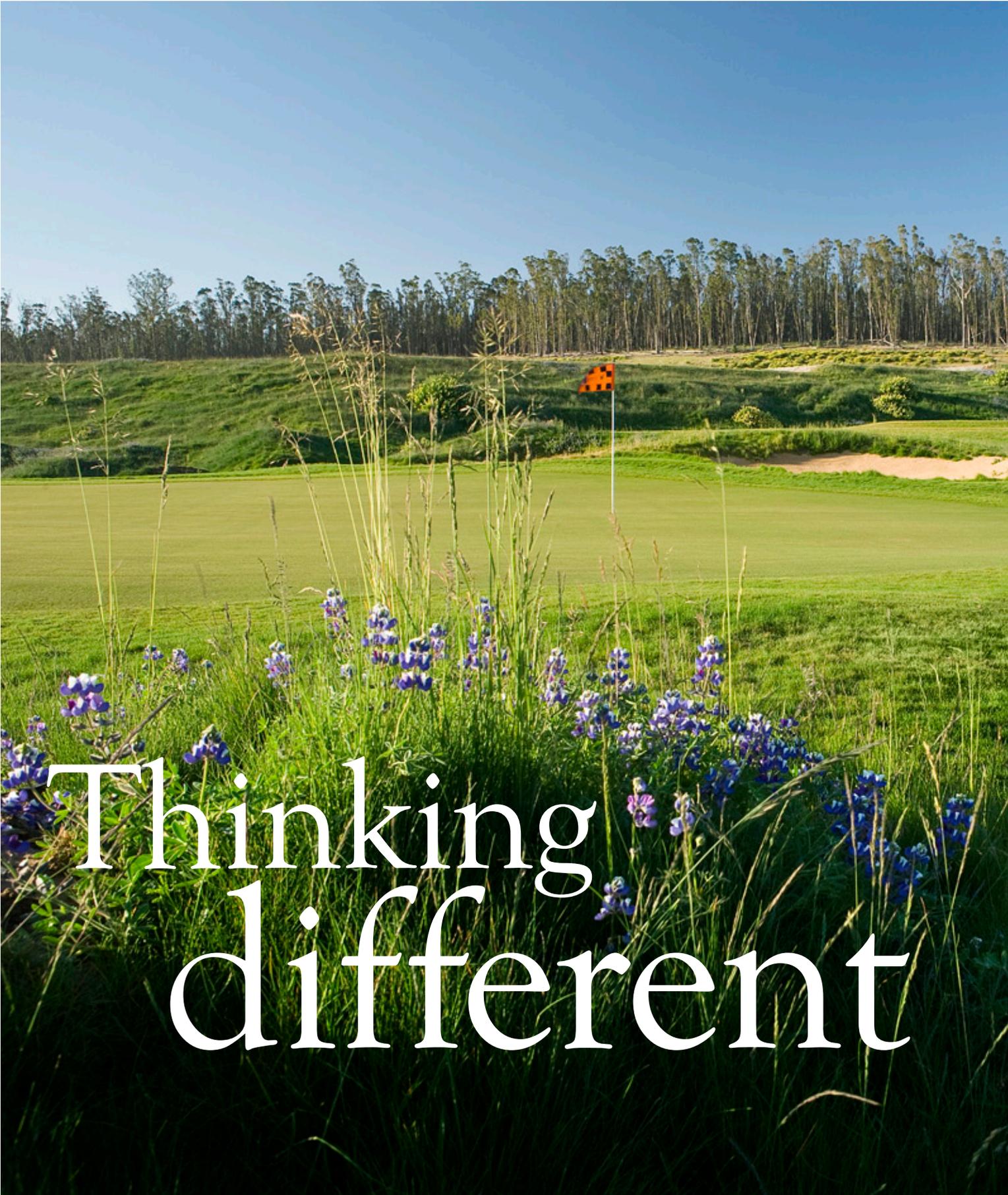
Carbon capture turf

British firms Inturf, Paynes Turf and Rigby Taylor have launched a new slow growing turf that they say can sequester carbon dioxide at a higher rate than other vegetation. The growers say Carbon Capture Turf is able to sequester 13 tonnes of carbon dioxide per hectare each year, within two and a half years of laying, compared with two tonnes for 25 year old deciduous woodland and 11 tonnes for coniferous forest after the same period.

RTJ files to Cornell

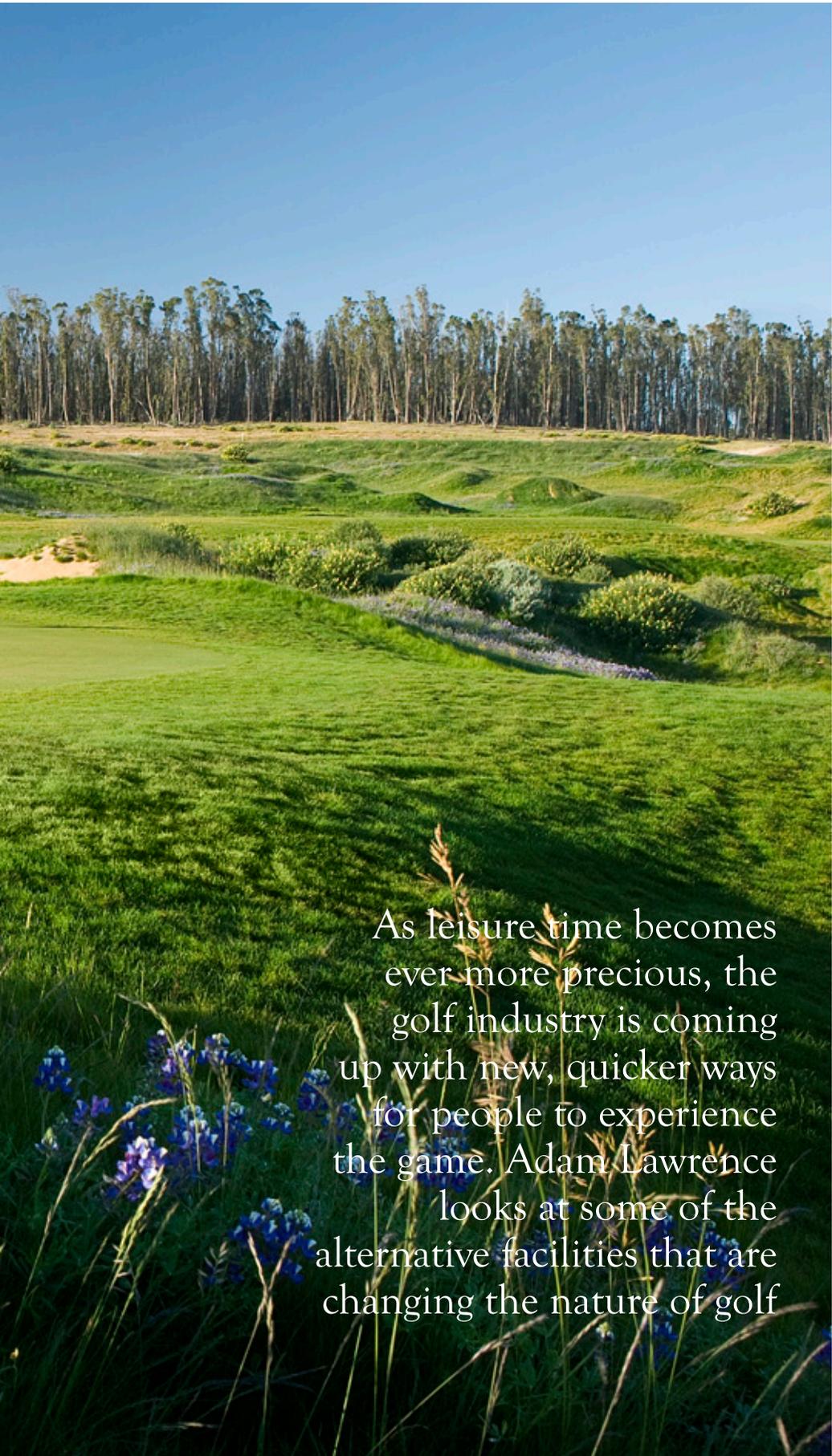
Robert Trent Jones, Jr., ASGCA and Rees Jones, ASGCA, the sons of Robert Trent Jones Sr., have donated their father's plans, records, and correspondence to Cornell University Library, providing the school with a lasting legacy of one of its graduates. The collection covers Jones' entire career, from his Cornell graduation to his death in 2000 at the age of 93.

Photo: Aidan Bradley



Thinking different

At Monarch Dunes in California, Damian Pascuzzo and Steve Pate's Challenge course offers a twelve hole loop



As leisure time becomes ever more precious, the golf industry is coming up with new, quicker ways for people to experience the game. Adam Lawrence looks at some of the alternative facilities that are changing the nature of golf

Cost, difficulty and time. Those, everyone tells us, are the three greatest obstacles preventing more people playing more golf. You might think, therefore, that it would make good business sense for the industry to try and make the game cheaper, easier and quicker. That, it must be said, isn't always the case. But a wide range of examples provided by ASGCA members show the kind of 'out of the box' thinking that might just help the game attract the new players it needs to continue prospering into the future.

One of the most perplexing aspects of the golf business is the degree of standardization we have all come to expect. Talk to any golf architect around the world—especially, sadly those at work in developing golf markets—and you'll hear the same story. Somehow, the belief that a 'proper' golf course is par 72, with two par threes and two par fives in each half, and in some cases with a standard order of holes, or at least stipulations as to where the threes and fives should fall in the routing, has taken an iron grip on those who develop golf. Their customers, they tell architects, will see any course that varies from these rigorous definitions as inferior, not a 'proper' course. In vain do the architects point to world-class courses such as the historic Rye club in England, where a back tee length of 6,300 yards is teamed with a par of 68 (and the solitary par five is first up) to provide a test to any golfer. No: 36-36-72, and at least 7,000 yards it must be, irrespective of whether such a routing is suited to the site, or such a length ideal for the proposed clientele.

It would be a brave architect that proposed a course like Rye to a developer nowadays, and indeed a brave developer that chose to build it. Conservatism is perfectly understandably and sensible when millions are at stake. But that doesn't mean every golf facility needs to be eighteen holes, 36-36-72 and 7,000+ yards. A key lesson of recent years is that variety is good, and

Photo: Aidan Bradley



Alternative facilities across the U.S.: at Stanford, Reidy Creek and Bandon Dunes

can be achieved even within a more mainstream facility.

Take the Monarch Dunes course, in San Luis Obispo, California, designed by Damian Pascuzzo, ASGCA, and his partner Steve Pate, a few years ago. As well as the main course at Monarch Dunes, which was listed in *Golf* magazine's 'Best New Courses You Can Play' rankings, Pascuzzo and Pate have recently completed the Challenge course at the development. The Challenge has twelve holes, ranging from 65 to 205 yards, with large and wildly undulating greens—a perfect place for kids and other beginners to get to grips with the skills needed to play golf. "Our goal as designers was to create a golf experience that would compliment the Old Course, a place to get in a little more golf after you have played The Old Course, or when you are short on time and just want a taste," says Pascuzzo. "Our idea from the first day of design was to create very large, very undulating greens that are rarely found on modern courses. Players will encounter ridges and swales running through the green. To

accommodate this type of movement, the greens are about 8000 sq ft (or about 30 percent larger than normal greens). The superintendent has agreed to keep green speeds a more modest so these undulating greens stay fun. Designing that much movement in the greens let us create some areas that are challenging from the back tees."

Because Monarch Dunes is built on a sandy site, Pascuzzo was able to construct the Challenge entirely from native materials, even down to the greens, reducing the cost.

Elsewhere in California, Todd Eckenrode, ASGCA Associate, recently opened the Links at Terranea, a most unusual development. Terranea, which we featured on the cover of a previous edition of *By Design*, is a nine hole par three course with one unusual feature—it is set hard by the Pacific Ocean, offering short course golfers the kind of views that are mostly the preserve of ultra high-end clubs or daily fee venues. Another feature of Terranea is the course's variety: playable by young juniors and absolute beginners from

the front tees, the course offers a championship-level test if played from the tips. "The course gets the widest range of players I've witnessed, from local professionals and scratch players to very young beginners," says Eckenrode. "I've played it with my four and six year olds many times." Of the 35-acre parcel on which Terranea sits, only 21 acres are maintained turfgrass, demonstrating another virtue of such facilities: they need not take up the large areas of land required nowadays for full-scale golf courses. At this kind of size, short courses need not be the preserve solely of new developments: there must be many golf facilities around the world that could find land to build nine good par threes,

California, famed for alternative lifestyles of all kinds, is obviously the place to go for golf facilities that don't match the norm. At Reidy Creek, outside San Diego, Cal Olson, ASGCA Associate, created an executive course with a difference. Reidy Creek's rolling terrain, and a consequent wider variety of holes than is normal for such courses, means the facility stands out

“ There must be many facilities around the world that could find enough land to build nine good par three holes...



among the range of courses available to San Diego golfers-in-a-hurry, and has thus proved to be a big success.

Part of enticing people to play courses with fewer than eighteen holes is convincing them they aren't being short-changed by a golf experience that is somehow 'not proper'. At the Thornberry Creek golf centre in Green Bay, Wisconsin, architect Rick Jacobson, ASGCA came up with an innovative solution: a nine hole course with two sets of tees and a double green on each hole, thus enabling each hole to have a different feel. Thornberry Creek's Iroquois nine is a designated PGA Family Course, and has proved a great success with all levels of golfers.

Short courses aren't the only kind of alternative facility that the industry is considering. We talked in the last issue of *By Design* about the kind of enhanced practice facility that has become popular, and such super-ranges are springing up around the world. In developing countries, ranges are often the easiest way to access the game, and there is no reason that the idea can't be replicated in any country. If done well, such facilities need not be seen simply as places to go and prepare for playing 'real' golf on a 'real' course.

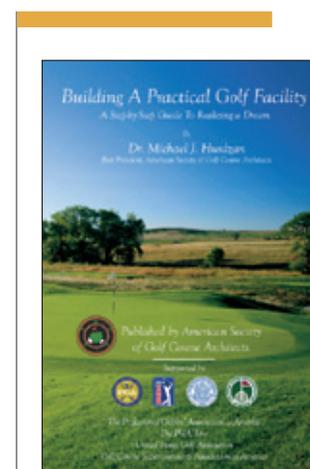
Outside Jacksonville, Florida, Jeff Lucovsky, ASGCA, of McCumber Golf has built a facility called GolfPlex on the grounds of the University of North

Florida. GolfPlex was designed as an practice facility for the school's team as well as a public range. "The design includes a range, team practice area, putting and chipping greens as well as a three-hole loop that includes a flex hole with two greens and can be played as a par four or five," says Lucovsky.

Another university project is the practice facility at Stanford University in California, recently completed by Bruce Charlton and Robert Trent Jones Jr, both ASGCA past presidents. At Stanford, the range has been designed to mimic the conditions the golf team will meet on its travels, with greens grassed with different species of turf to enable specific practice. And at the historic Merion Golf Club in Pennsylvania, which will, of course, host the US Open again in 2013, another ASGCA past president, Tom Marzolf of Fazio Golf Course Designers has completed a reconstruction of the practice facilities, including an enhanced short game area. The new-look facility will open this spring.

Still not completely convinced? Then consider this: the wildly-successful Bandon Dunes golf resort on the Oregon coast is currently building its fifth golf course, led, once again, by Bill Coore, ASGCA, and his team. And what sort of course is Coore building for Bandon, where, let's not forget, the four existing courses have all been

ranked among the greatest of modern designs by magazines the world over? Why, a thirteen hole par three course, titled the 'Bandon Preserve', of course! So, if even Bandon, whose golf-obsessed guests often race the sunset in a quest to finish their second, perhaps even third eighteen hole round of the day, has figured that sometimes you need to offer golfers something a little out of the ordinary, then maybe you too should be reaching the same conclusion ●



Building a Practical Golf Facility

This book by Past President Dr Michael Hurdzan, ASGCA makes the case for alternative golf facilities and describes eight 'levels' of golf—from small practice ranges to resort-style championship courses.

Renovation | Adam Lawrence

Ross's Return

Pinehurst: a living case study for sustainable golf

Pinehurst, described by author Richard Mandell, as the 'home of American golf,' is also the spiritual home of ASGCA. The Society was officially constituted and held its first meeting at the famous North Carolina resort in 1947, and Donald Ross, the man behind Pinehurst's first four golf courses, is also regarded as one of the founding fathers of ASGCA.

And now, one of ASGCA's leading present-day members is overseeing a project that will have the famous No. 2 course looking more like the venue that Ross knew than the one that hosted the US Open in 1999 and 2005. What's more, the new (or should that be old?) look course is set for a fortnight in the global golf spotlight in three years time: No. 2 has been named the host of both men's and women's US Open Championships for 2014.

Through the decades, the Pinehurst resort has remained one of America's most prestigious golf venues. That 1999 Open, when Payne Stewart won his second major, was one of golf's most emotional triumphs, all the more so in the light of his tragic death only a few weeks later. So the boldness of the course's owners and managers, led by owner Bob Dedman Jr, president Don Padgett II, and director of golf course management Bob Farren, in authorising such a radical transformation is remarkable. They are truly showing the way that golf, in the US and elsewhere, needs to go in the future.

The restoration of No. 2 is being led by longtime ASGCA member Bill Coore, his design partner Ben Crenshaw, and their talented team of shapers, plus Farren's own crew,

whose dedication to the job is obvious from a quick talk. Coore's vision—to remove the Bermuda rough entirely, replacing it with exposed, unmaintained, hardpan sand, studded with clumps of wiregrass, while simultaneously removing a large proportion of the course's irrigation heads—will see No. 2, which reopened in March, transformed into a case study for sustainable golf.

Consider the figures: 35 acres of turf, mostly has been removed. Only 450 of the 1150 irrigation heads on the golf course before the work now remain, straight down the middle of the fairways. In place of the turf, the natural sand areas have been revealed, in what Farren calls 'sandscapes' (he doesn't like the term waste areas); these sandscapes, which will be left totally unprepared, will have been sprinkled with over 100,000 wiregrass plants by the time the course reopened in early March.

There will be no rough on the golf course; the fairway grass will transition, at the furthest reaches of the centreline irrigation system (reinstalled with larger heads from Toro at a cost of US\$500,000, significantly less than a normal irrigation system on a high-end US course), into the sandscapes. "We want the grassing lines to be defined by the limit of the irrigation system," said Farren. Golfers who miss the new, wider fairways, will see their balls bound through the sand. They might find a good lie; or they might find their ball in the middle of a clump of wiregrass. If on sand, good ballstrikers will have a chance to recover; if in wiregrass, good luck!



Nor will the course be overseeded in future winters; the commitment of Pinehurst's management to see No. 2 play truly fast and firm is absolute (although it will be sprayed with a light green paint, to reduce the shock of seeing wholly dormant Bermuda).

Pinehurst's famous crowned greens have not been touched during the restoration project. But the sandscapes, which in many cases extend very close to greens, will present entirely new short game challenges to players. Good luck, for example, trying to hit a flop shot from the hard sand to the right of the second green; with a bunker in the way and the green sloping away, a golfer who misses on that side will have to take his punishment. Course management, long a priority at Pinehurst, will become even more important.

Coore and his team have ensured that the playability that has made No.

“ The boldness of the course’s
OWNERS is remarkable...”



This kind of look has not been seen at Pinehurst for decades!

2 the championship course anyone could tackle remains. Take the new-look seventh, a medium length par four (though a new tee will make it more of a challenge for the Open) that doglegs to the right around the drive zone. Sandscapes and bunkers narrow the fairway to 31 yards at the corner of the dogleg, where a professional would be looking to put his drive. But, short of the apex, there is a full 48 yards of fairway grass from sand to sand, allowing the tentative golfer to take an easier route to the green. At the eighth, by contrast, a new sandscape area on the right of the fairway is in play from the regular tees for resort golfers and members, who play the hole as a par five; the pros, for whom the hole is a par four, will have to challenge the sand if they want a good view of the green.

As is typical of Coore & Crenshaw’s work, the bunker shaping is exquisite. That bunker complex at

the corner of the seventh hole merges beautifully into the surrounding sandscapes; shaper Kyle Franz’s bunker to the front of the par three ninth has to be seen to be believed. But aesthetics, though important, are not what makes this project so truly astonishing. No; the real value of the No. 2 works are to be seen in their potential impact on the golf industry as a whole. This is, let me remind you, a staple in most rankings of America’s top ten courses, a multiple major championship venue that will host two more in three years time, and part of one of the country’s greatest (and most expensive!) golf resorts. For a course of this stature to be embracing the fast, firm, open mantra so totally, with its consequent impact on environmental and economic sustainability, is the best news golf has received in many a year. Now it’s time for the rest of the industry to follow Pinehurst’s lead ●



Adam Lawrence

Adam Lawrence is editor of *Golf Course Architecture* and a contributor to *Golf Monthly* and *Golf World* in the UK. Educated at Oxford University, he has been a journalist throughout his professional life.

Environment | ASGCA

Green renovations

ASGCA members make a positive environmental impact each year through their thoughtful, dedicated designs that not only work with nature, but enhance it. Below are two case studies which highlight the extensive work done by ASGCA members in order to preserve the natural habitat in some of world's most beautiful locations.

RENOVATING LEGENDS AT PARRIS ISLAND GOLF COURSE, SOUTH CAROLINA

Renovation for Legends at Parris Island golf course started in fall 1999, with the course opening for play in November 2000. The brief for work came from the Parris Island Marine Corps Recruit Depot, who wanted to rebuild the base's 1947 Fred Findley-designed golf course.

More than half a century of play, maintenance and natural processes had caused the typical problems found on golf courses: an outdated irrigation system with a limited water source, soil compaction, shade and root encroachment from maturing trees and poor drainage. Renovating the site however, meant addressing environmental and historically significant conditions surrounding the site.

The course is bordered by salt marsh wetlands and deepwater creeks on the southern, eastern and western boundaries; freshwater wetlands are located throughout the site's interior and the area is rich in wildlife, fish and shellfish habitats as well having one of the largest concentrations of

live oak trees per acre in South Carolina.

Three holes of the original golf course, the practice range and the clubhouse were all located within an archaeology site from the 1500s, which had been under careful study for many years. When planning for the new golf course began, archaeological study efforts were expanded and expedited to determine the total extent of historical resources on the site.

After thoroughly evaluating all of the sensitive environmental and archaeological resources, the primary design objectives of the golf course architect became routing 18 holes of golf and a practice facility that:

- Avoided all known archaeological and environmental impacts
- Provided a continuous flow to the golf course
- Utilized as many existing golf corridors as possible

The final plan incorporated 12 of the existing 18 golf-hole corridors, but few of the

original tee and greens sites. Paramount to the success of the golf course was drainage improvements. Due to the low-lying nature of the site, and proximity to tidal wetlands, small rain events would inundate the golf course for extended periods of time. To counter this, 11 lakes were strategically located throughout the golf course in conjunction with a sophisticated storm water conveyance system. The dredged lakes would provide the fill required to achieve positive drainage on the golf course while providing detention basins to slow storm water discharges from the site. The added benefit of this drainage system is that all fertilizer and chemical applications are controlled within the site and recycled to the course with the irrigation system.

Additionally, a heavy-duty silt fence was installed which, along with the natural buffers, aided in protecting the sensitive areas from erosion control.

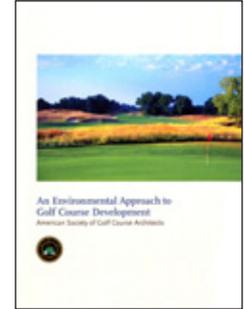
The project was successful in protecting, and enhancing, the sensitive environmental areas during construction. After the course grasses were established and regular play recommenced, it was apparent the preservation and protective measures used avoided any impacts to both environmental and archaeological assets. The new ponds have provided additional wildlife and fish habitat, which have in turn increased in numbers. The ponds also provide much needed storm water management for the golf course.

Clyde Johnston, ASGCA



Environment Book from ASGCA

'An Environmental Approach to Golf Course Development' provides a number of case studies, illustrating the depth and breadth of knowledge provided by ASGCA members in numerous environmental areas, including water, land use, topography, wetlands, floodplains, soil, archaeological sites, adjacent land use and more. To obtain a copy, please visit www.asgca.org or call +1262 786-5960



HABITAT ENHANCEMENT AT HUNTING HAWK GOLF CLUB, VIRGINIA



The Hunting Hawk golf club was planned as amenity for the expansion of a planned community in Glen Allen, Virginia, on the western side of Richmond. The developer, HHHunt Corporation, recognized due to the adjacent Chickohominy River, environmental sensitivity needed to be exercised. Historically, the property had formerly been used for timber production, and was left with surface drainage and large monostands of pine trees.

An extensive study of routing alternatives was made by environmental experts to study which areas, residential and on course, would be affected. The final routing of the golf course incorporated most of the wetlands as features with less than half an acre of impact.

Site analysis determined groundwater resources were minimal and would not provide an irrigation water source for the golf course. However, the natural slope created a drainage pattern that directed

practically all existing surface runoff in-land as well as to the lower portions of the property near the river. The average annual rainfall on the property could provide enough water for irrigation and a series of ponds were designed to capture the runoff after each rainfall.

The topography of individual golf holes was enhanced with a modest amount of earthwork to direct water to adjacent swales or a system of drainpipes. Two man made streams, and an existing drainage channel, collect all the runoff from the holes which then flow to the ponds for course irrigation.

The maintained areas for tees, fairways, greens and primary rough were limited to the areas necessary to provide a reasonable challenge and pace for public play. A minor amount of secondary rough was employed in areas of high traffic, while all other open; out of play areas were established as conservation areas

consisting of native and adapted grasses that require little or no maintenance.

Over 15 acres of conservation area were integrated into the golf course to provide both a physical and visual transition to the tree corridors, as well as create meadow and edge conditions for the enhancement of habitat. Conservation areas were also used as vegetative buffers to the streams and ponds designed into the golf course. These areas were designed into the golf holes as features that also facilitate drainage, as well as benefiting the environment through water quality and diversity of habitat.

As part of site preparation, golf course builder Ryan Central Incorporated confirmed, and further delineated, all environmentally sensitive areas to establish clear limits for construction activities and prevent any inadvertent impacts. Soil erosion, control devices and storm water management facilities were carefully installed and diligently maintained for the protection of water quality during construction.

Efficiency and economy of management practices were achieved through environmental considerations in the design of Hunting Hawk Golf Club, including the incorporation of naturalized areas, reduction in the amount of high maintenance turf, irrigation conservation and a decrease in chemical applications through the use of an Integrated Pest Management Program.

Bill Love, ASGCA

Sustainability | ASGCA

Turfgrass reduction

Many golf clubs are reducing the amount of regularly maintained turfgrass on a golf course. The golf course superintendent and a golf course architect should agree on a plan for keeping the strategic intent of the course intact and ensuring appropriate installation of replacement materials. A survey of members of the American Society of Golf Course Architects (ASGCA) revealed 93 percent of respondents are helping their clients reduce the acreage of maintained turfgrass while preserving the course’s strategic intent. Here are some examples:

Lowering Maintenance Costs
Reducing the amount of turfgrass can bring a reduction in labor,

equipment, fertilizer and water costs. Energy budgets can also be reduced as less water use results in lower electrical costs.

Using Less Water
Reducing regularly maintained turfgrass and replacing it with native grasses or native plants requiring less irrigation can realize significant reduction in water usage.

Greater Sustainability
Replacing turfgrass in out-of-play areas with native grasses or plants can be a good way to improve sustainability. Some out-of-play areas can even be non-irrigated and covered with wood mulch or pine straw from low-cost reclaimed tree materials ●



ASGCA

For more information on turfgrass reduction, contact GCSAA or an ASGCA golf course architect through the ASGCA website (www.asgca.org) or by calling +1 262 786 5960

THE PLANNING PROCESS: HOW A GOLF COURSE ARCHITECT CAN HELP

While it may seem as simple as eliminating existing turfgrass and replanting with other species, turfgrass reduction must be implemented in very different ways depending on climate and many other factors. The following process is a simplified description of the steps which may be taken by a golf course architect. To download the brochure from which these steps are taken, please visit www.asgca.org/publications.

- Identify areas where regularly maintained turfgrass might be removed. The areas can be classified on a sliding scale from “definitely remove—no effect

on playing area” to “carefully consider removal—could dramatically affect play.”

- Identify areas where regularly maintained turfgrass can be “transitioned.” Existing grasses may be able to just grow taller in out-of-play areas, or appropriate varieties may be allowed to go dormant during periods of little or no rain.
- Consult your course’s “Master Plan for Improvements” to ensure consistency with the plan’s long-term vision.
- Calculate the economic feasibility and impact of a potential conversion on

water and labor budgets to determine optimal scope of the project. Check with local water agencies for rebates or incentives for reduced water usage.

- Consider whether replacement can be handled in-house or whether a golf course builder should be hired.
- The irrigation system will likely be affected by a regularly maintained turf reduction plan. The superintendent and a golf course architect should carefully consider when irrigation system changes need expert oversight.

“93 percent of ASGCA members are currently engaged in turfgrass reduction projects...”



Photos: Andy Staples

Naturalizing a golf course by reducing maintained turf not only makes the course more sustainable, but more attractive too

“ A round of golf reveals character but it also reveals characters...

Golf's value | James Dodson

The most social game on earth

Whenever I'm asked to speak to a group of golf-minded folks, particularly newcomers to the game, I like to point out why golf is demonstrably the most social game on earth.

If an average golf swing takes roughly two seconds of time to occur, and the average player shoots 90, that amounts to roughly only 180 seconds—or three minutes—of actual physical playing time during an average four-hour round of golf. The rest of that three hours and fifty-seven minutes of a golf round is spent walking, talking, observing nature, revising your grocery list, dreaming up a novel, getting to know someone you just met on the first tee, telling jokes, cursing your luck, meditating—in short, doing a variety of things you could never do in any other sport.

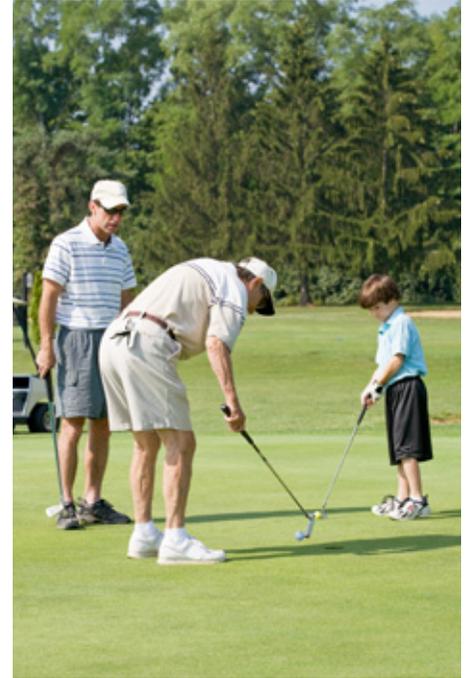
I've long maintained there is no game better suited for making a friend or acquaintance that lasts anywhere from a few hours to a lifetime. Moreover, the friendships you make in golf often endure for decades, and there is no greater connective social tissue between the generations—fathers and sons, sons and mothers, fathers and daughters,

even husbands and wives—than time spent chasing Old Man Par in another family member's company.

A round of golf, as the cliché goes, reveals character—but it also reveals characters. As a general rule, owing to golf's cruel Darwinist nature, golfers of all levels tend to be folks equipped with a striking sense of humor. We learn to laugh at ourselves and the foibles of others as we fumble after life's most difficult and frustrating game. The great Ted Williams once told Sam Snead golf was far easier than baseball because a golfer at least got to hit the ball off a stationary peg rather than try and hit a ball moving 90 mph. “That may be,” Sam told him without missing a beat, “but a golfer has to play his foul balls.”

In that context, it's no surprise that no other game provides as many funny stories, jokes, and painful laughs and self-revelations as the game of golf—not even close.

That's because golf remains the most human of games, as difficult as it is poetic, forever new, able to reveal both our best qualities and our strongest weaknesses in the span of a single swing of the club or an afternoon's



outing with friends or strangers.

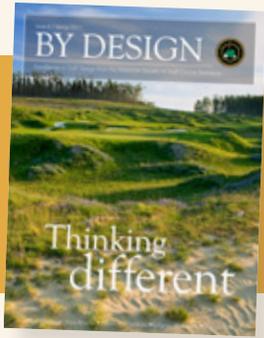
And finally, in what other game do dogged victims of inexorable fate—that is, opponents—remove their caps and shake hands at the end, and maybe even go off together for a beer? I can't think of any, frankly.

That's what makes golf the most wonderful social game on earth ●



James Dodson

James Dodson is a golf writer, and author of many golf books including *The DewswEEPERS*, *Final Rounds* and biographies of Ben Hogan and Arnold Palmer. He will receive the 2011 Donald Ross Award at the ASGCA Annual Meeting in Denver in May. He has won more than a dozen awards from the Golf Writers Association of America.



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