

R&A

Golf Around the World.

2019

Edition 3





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Credit: Cynthia Dye McGarey



Credit: Peter Matkovich



Credit: Gary Lisbon



Credit: Jim Mandeville/The Nicklaus Co.



Credit: Lobb & Partners

Front cover image: Michlifan Resort & Golf, Morocco



About this report – a reference manual.

Golf Around the World 2019 explores golf's global reach as seen through the supply of golf courses, both existing and under development. It thereby provides a snap shot of current conditions and a preview of the near future. This third edition presents a more nuanced worldwide golf course census than in previous editions in 2015 and 2017. This version places golf course supply and development trends within a larger context of history, economic development and political decision-making. In paying close attention to the distinctiveness of the six regions into which the world's golf map has been divided, we also seek out trends within those regions, such as the emergence of Vietnam as a major market and the use of golf courses as an engine of local development, as in Argentina, Portugal, Turkey and Saudi Arabia.

This report and the research behind it have been funded by The R&A along with many of the world's leading companies. Collectively, they have supported and helped disseminate the work of the National Golf Foundation, a US based golf business association that has developed and maintains a complete inventory of golf courses in the world.

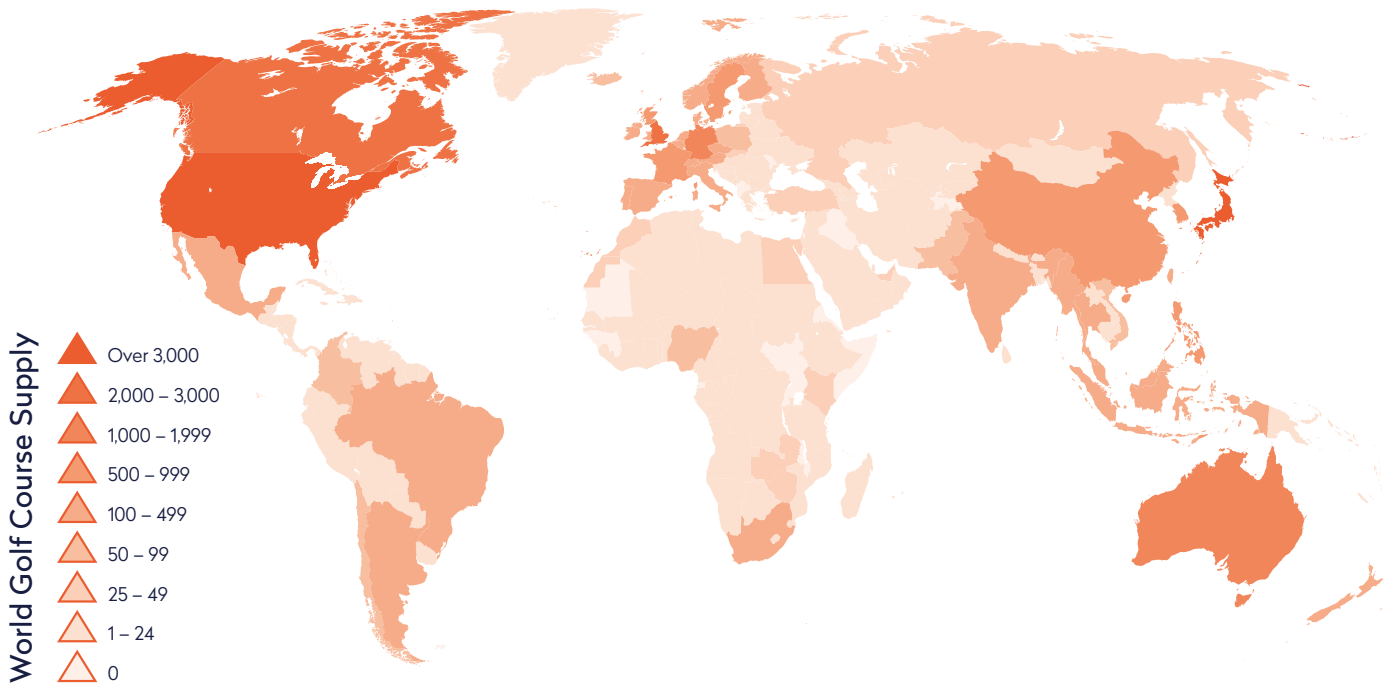
The R&A would like, in turn, to thank the NGF for the research that has made this report possible; Bradley S. Klein, a distinguished US based author and journalist who developed the narrative, and David Kelly of the PPL group for design and production.

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Global golf supply.



Golf is available around the globe. As of year-end 2018, there were 38,864 golf courses in 209 of the world's 249 countries. That's an 84% diffusion rate of the sport globally. Still, the sport is geographically concentrated, with 78% of world supply of courses located in the top ten golfing countries: the United States, Japan, Canada, England, Australia, Germany, France, Republic of Korea, Sweden and Scotland.

Turkmenistan joined the ranks of golfing countries in 2018 with the opening of the Jack Nicklaus-designed Ashgabat Golf Club. The former USSR is now one of 47 countries with only one golf course; 28 of them have only nine holes of golf.

The majority of worldwide golf course supply is located in the western hemisphere. North and South America are home to 53% of world supply; the US alone claims 43% of the world's total. Europe has the second largest regional share with 23% of the world's total, followed by Asia with 16% and Oceania with 5%. Those numbers show a marginal shift from North America to Asia in recent years.

The more mature, larger golf markets have experienced a disproportionately higher number of closures than elsewhere in the world, suggesting a "course correction" from over-development in prior decades. The US, the UK, Japan, Australia and Canada account for 80% of recent closures while combining for 68% of total course supply. This trend is partially offset by a combination of growth and stability in the smaller markets. During 2017-2018, 20% of golfing countries registered growth in course supply and 64% experienced no change.

Though the sport has traditionally been associated with private clubs where play is essentially restricted to members, in fact golf worldwide is overwhelmingly played

Top 20 golfing countries (by no. of courses)

Country	Courses	Holes	Facilities
United States	16,752	248,787	14,640
Japan	3,169	45,684	2,227
Canada	2,633	36,591	2,265
England	2,270	31,620	1,936
Australia	1,616	23,505	1,532
Germany	1,050	14,100	736
France	804	10,971	643
Korea, Republic Of	798	9,183	440
Sweden	662	9,303	471
Scotland	614	8,421	568
China	599	8,850	385
Spain	497	7,071	413
Ireland	494	7,530	438
South Africa	489	6,291	470
New Zealand	418	5,814	401
Argentina	349	4,368	314
Denmark	346	4,461	193
Netherlands	330	3,924	220
Italy	321	4,131	267
Thailand	315	4,095	236

at public facilities, with 75% of courses publicly accessible in some form or another on a "pay per play" basis.

There are

209

golfing countries

The top 20 countries
account for

89%

of global supply

Global golf score card

Land area	147,553,000 km ² /56,970,000 miles ²
Countries	249
Golfing countries	209
Golf courses	38,864
Golf holes	556,176
Golf facilities	32,471
Courses under development	534
Private courses	9,576
Publicly accessible courses	29,288
Population	7,632,819,325
Population per golf hole	13,724

Golf courses compared to population

Region	Population	Golf holes	Golf courses	Population per hole
Africa	1,287,920,518	12,192	932	105,637
Asia (including the Middle East)	4,545,133,094	87,483	6,349	51,954
Europe	742,648,010	125,268	8,940	5,928
North America (plus Central America & Caribbean)	587,615,976	291,807	19,826	2,014
Oceania	41,261,212	30,237	2,109	1,365
South America	428,240,515	9,189	708	46,604
The World	7,632,819,325	556,176	38,864	13,724

Golf courses compared to land area

Continent	Area	% of total land area on earth	Golf courses	% of world golf
Africa	30,065,000 km ² /11,608,000 miles ²	20%	932	2%
Antarctica*	13,209,000 km ² /5,100,000 miles ²	9%	1	0%
Asia (including the Middle East)	44,579,000 km ² /17,212,000 miles ²	31%	6,349	17%
Europe	9,938,000 km ² /3,837,000 miles ²	7%	8,940	23%
North America (plus Central America & Caribbean)	24,256,000 km ² /9,365,000 miles ²	16%	19,826	51%
Oceania*	7,687,000 km ² /2,968,000 miles ²	5%	2,108	5%
South America	17,819,000 km ² /6,880,000 miles ²	12%	708	2%
The World	147,553,000 km²/56,970,000 miles²	100%	38,864	100%

* Antarctica is considered part of Oceania – shown separately due to the quantity of land mass.

Worldwide development of the sport.



New golf courses under development

Region	In planning	Under construction	Total courses under development	% new development
Africa	35	21	56	10%
Asia	86	63	149	28%
Europe	103	48	151	28%
North America	84	49	133	25%
Oceania	18	8	26	5%
South America	10	9	19	4%
The World	336	198	534	100%

Golf has its origins in the sandy ground along the GB&I coastline. The naturally draining, moderate climate was ideal for the game to develop along what was called “linksland.” As the sport grew in popularity and a growing middle class could afford to recreate, courses sprang up on less than ideal sites that had to be specially prepared for golf, including open meadow, farmland and tree-lined parkland. Thus was born the craft of golf architecture, and with it, a whole industry of golf course development and management.

Many of the original links courses were on public land and thus technically open to common play. As the game travelled overseas and got established in the US and in Continental Europe, Africa and Asia, it acquired the cachet of private exclusivity. Private clubs dominated, and a century ago publicly accessible courses were only a minor share of the total mix. But

that has been changing and the vast majority of golf courses are now open to the public. This remains the case with the bulk of development projects documented in this report.

Worldwide, there are 534 new golf course projects in various stages of active construction or advanced planning across 101 countries. Of these emerging golf courses, 64% are associated with resort developments, that highlights a functional affinity among golf, tourism and economic development. The fact that there are 198 active construction projects and another 336 on the drawing board (considered “in planning”) is evidence of a continued expansion of the sport.

Africa, which opened 25 courses from 2014-2018, has another 56 underway, involving 18 different countries. European development has moved eastward on the Continent, with such emerging golf countries as

101

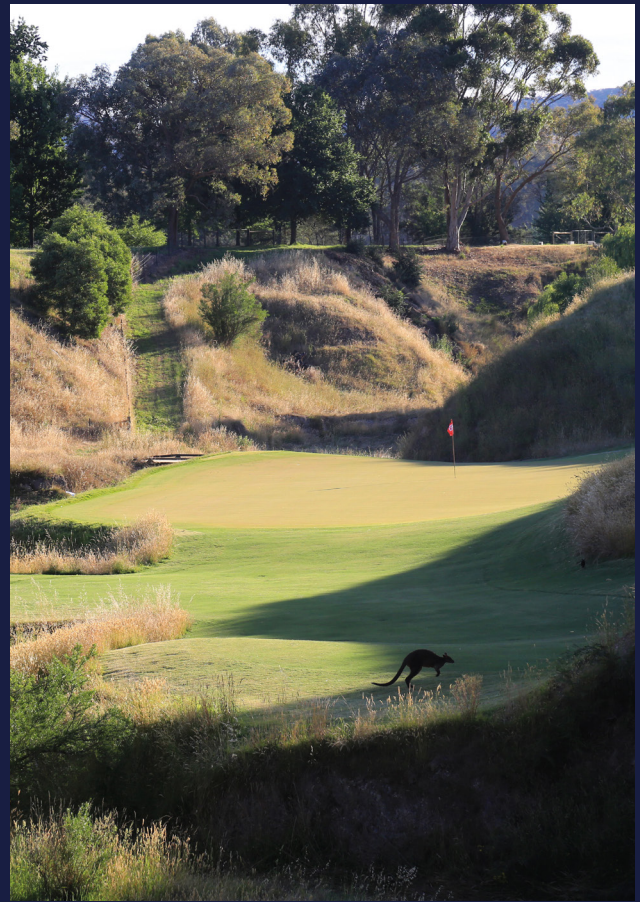
countries have active golf projects

30%

of the world's golf projects are in Asia

64%

of new course projects are tied to resort developments



Credit: Gary Lisbon

New golf courses opened 2014 – 2018¹

Region	2014	2015	2016	2017	2018	Total	%
Africa	4	8	5	4	4	25	6%
Asia	30	25	29	23	19	126	30%
Europe	24	17	21	27	10	99	24%
North America	26	27	31	32	15	131	32%
Oceania	5	6	3	1	0	15	4%
South America	4	4	4	3	3	18	4%
The World	93	87	93	90	51	414	100%

¹ As of 31 October 2018

Hungary, the Czech Republic, Slovakia and Kazakhstan all sporting new projects that are tied to residential and resort development complexes. Asia, with 17% of all golf course supply, is home to 28% of all new development. The shift is noticeably to the south, with Vietnam having 78 courses in place and another 43 in different stages of development. India, with 294 courses operating, is in process of developing 30 more.

Here and throughout the world, golf is being used as an engine not just of sport and recreation but of regional planning and community build out. Economically inventive projects have to be embedded

in local environmental conditions that help shape the distinctive quality of the outcome. It's an approach to golf course architecture these days where developers and designers work with, rather than against, the terrain. They coordinate their efforts with sophisticated land use planning. Given the tight regulatory culture today and the scrutiny of everything from even minor disturbance of the land to turf maintenance programmes utilising pesticides, course managers need to ensure the long-term viability of their projects.

Africa.

Africa is golf's most under-developed continent. With 20% of the earth's land mass and 17% of its population, Africa is home to only 2% of all golf courses. That's a distribution of 105,637 people per golf hole, which is eight times greater than the worldwide distribution of 13,724 people per hole.

Golf initially took hold in major trading centres where large ex-patriate and settler communities sought to reproduce the comforts of homeland Britain, especially in South Africa, but also throughout the continent. The strong local tradition of golf at such classic-era courses as Durban Country Club and Royal Johannesburg in South Africa or Royal Nairobi in Kenya were an important part of leisure life for businessmen but kept the sport isolated from the local middle class and the indigenous population at large.

It took the worldly travels of a few accomplished golfers to start opening up the continent to golf. Future Hall of Famers Bobby Locke and Gary Player were South African sports pioneers back in the post-World War Two era who helped popularise the sport. Player, the third golfer ever to win the coveted professional majors Grand

Slam, was particularly influential, taking a leadership role in developing golf participation in his home country. Later on Ernie Els, two-time US Open champion and two-time winner of The Open, continued this commitment through youth-golf development training.

Development

Africa has 56 golf course projects. That represents a 6% expansion rate over its existing supply of 932 golf courses, making it the most golf-development-prone region in the world. The 18 countries with development projects are led by Nigeria (11), Kenya (9) and Egypt (7). In those countries the emphasis is on real estate communities intended to meet the lifestyle choices of the country's growing middle class. South Africa, the perennial front runner in terms of African golf supply, has an inventory of 489. Recently, Morocco has been the continent's fastest developing golf market, with nearly half of its current inventory of 56 courses having opened in the last decade. The plan there is to take advantage of the country's lucrative tourism trade from Europe.

Featured Project

Mont Choisy Le Golf Mont Choisy, Mauritius

Peter Matkovich

It takes a certain patience to build a golf course these days. Like 20 years in the case of Mont Choisy Le Golf in Mauritius. This new course on the 750-square mile island republic (population 1.3 million) sits out in the Indian Ocean, 1,200 miles east of Africa. It's also the first course on the less populated north of the island, where water is scarce and fertile land at a premium.

Mauritius is already an appealing destination for golf travelers. Two courses in the south trade off hosting duties for the €1 million Afrasia Bank Mauritius Open, now in its fourth year as the only tri-sanctioned event, combining the European Tour, Sunshine Tour and Asian Tour.

Course designer Peter Matkovich has the golf-tempered patience needed to wait out what became a two-decade development process. He honed that through years of itinerant play on professional golf tours in South Africa and Europe and a stint as Gary Player's caddie in the US. Now he's one of the most prolific course designers in the south of Africa and surrounds, with 20 new courses completed and another 20 renovated.

Mont Choisy is a core layout with no intrusion of housing. It sits on a reclaimed sugar cane farm and incorporates large areas of volcanic rock wasteland. The contrast of white flash bunkers, lush Paspalum turf cover and dark framing rock makes for a stirring presentation of holes. The average rainfall of 31 inches has to be supplemented by recycled irrigation water.

Featured Project

Michlifen Resort & Golf Ifrane, Morocco

Jack Nicklaus

Tourists drawn to Morocco for its historic walled cities – Moorish citadels called “Kasbahs” – might reconsider thanks to the development of an alpine retreat 135

miles inland, east of the capital city, Rabat. There, on the far side of Northwest Africa's Atlas Mountains at an elevation of 5,400 feet, sits an idyllic town called Ifrane that is known as Morocco's Switzerland. It dates back to a fully planned “Garden City” concept from the late 1920s when the area was a French protectorate and intended as a retreat for European vacationers seeking relief from summer heat. Having evolved as a ski resort, it now also turns to golf.

Michlifen Resort & Golf is Jack Nicklaus's eighth project on the continent. Normally, mountain golf is notoriously difficult to execute because of the elevation changes. Luckily for Nicklaus and his longtime senior design associate, Dirk Bouts, the 245-acre site occupies a modest plateau with only 50-feet of fall and a dramatic escarpment overlooking a deep valley. Oak and cedar forests surround the site and line several fairways, with three dramatic holes – Nos. 9, 17 and 18 – draped over the edge looking out over a 3,000-foot drop off. Nicklaus calls the result “spectacular views with enough room to play golf over a sand-capped surface. A big wow factor.”





52%

of Africa's golf supply is located in South Africa

48%

of all current African golf development is in Nigeria (11 courses), Kenya (9) and Egypt (7)

2%

of the world's golf courses

10%

of new golf projects



Africa golf score card	
Land area	30,065,000 km ² / 11,608,000 miles ²
Countries	58
Golfing countries	49
Golf courses	932
Golf holes	12,192
Golf facilities	875
Courses under development	56
Private courses	108
Publicly accessible courses	824
Population	1,287,920,518
Population per golf hole	105,637

Asia.

Traditionally, private clubs have dominated the Asian scene; 45% of golf courses there count themselves as private clubs, compared to 25% defined as membership-only when we look at the golf world as a whole. In Asia, this is the legacy of colonial administration and lifestyles, where local populations were excluded from the rhythms of everyday leisure and golf was reserved for elite tradesmen and members of the modernising, pro-Western ruling groups. Today, that mix is shifting decidedly towards the resort side, with the vast majority of new projects intended to attract tourism, both from city to warm seaside and from more industrialised developed countries to emerging, developing countries.

Development

In the last twenty years there has been phenomenal growth in Asian golf, with Japan (3,169), Republic of Korea (798), China (599) and Thailand (315) now among the top-20 countries in course supply. Resort development has driven much of golf's growth in this region. Thailand's Phuket Island has become a popular golf destination. China's Hainan Island, the smallest and southernmost of China's provinces, has surpassed 35 of that country's courses thanks to a determined effort by provincial and national authorities to develop the island

Featured Project

Regnum Golf & Country Club Bodrum, Turkey

Lobb & Partners

The district and port city of Bodrum in Turkey's southwest corner is a popular resort destination, famous for its medieval architecture that is also a gateway to the Aegean Sea. A big draw here, 440 miles south of Istanbul, is the mountainous, rocky coastline and white sand beaches as well as access to the Dodecanese Islands.

The region is not (yet) a golf destination, but like everything else in this country that is changing. That's certainly the aspiration driving the development of Regnum Golf & Country Club, a design by Tim Lobb of Lobb & Partners. The par 71 layout, 6,579 yards long, occupies an inland site midway between the downtown port and a newly upgraded international airport that handles three million passengers a year.

The course sits on an old olive grove, at an elevation of 1,640 feet, and offers 100 feet of pitch across its rolling terrain – enough for dramatic long views of the surrounding valleys and hills. The site's 1,450 acres offers plenty of room for residential development, with future plans for up to 275 villas. Lobb & Partners, based in Surrey, England, has now completed four courses in Turkey, one of them with the same development team as Regnum in Belek, with another in the works in Ankara.

as a tourist destination. Continent-wide, 149 projects are currently under development in 26 different countries. Vietnam has emerged as the fastest growing Asian golf destination, with 43 projects on line as of 2019, most of them focused on the country's sandy, dune-laden coast along the South China Sea. India, with 30 course developments underway, is more focused on real estate development to serve a growing middle class. The United Arab Emirates has also been a centre of golf development, with nine projects underway. In 2018 the former republic of Turkmenistan joined the fraternity of golf countries with the opening of its first course.

Asia's prominence in the golf world has been aided by its exposure on elite circuits. The Asia-Pacific Amateur Championship, launched in 2009 by The R&A, the Masters Tournament and the Asia-Pacific Golf Confederation, has been held ten times on the continent. The winner of the event secures exemptions into the Masters and The Open. On the professional side, in calendar year 2018 alone, Asia was home to eight LPGA events, another eight on the European Tour, two on the PGA Tour and a co-sanctioned World Golf Championship.

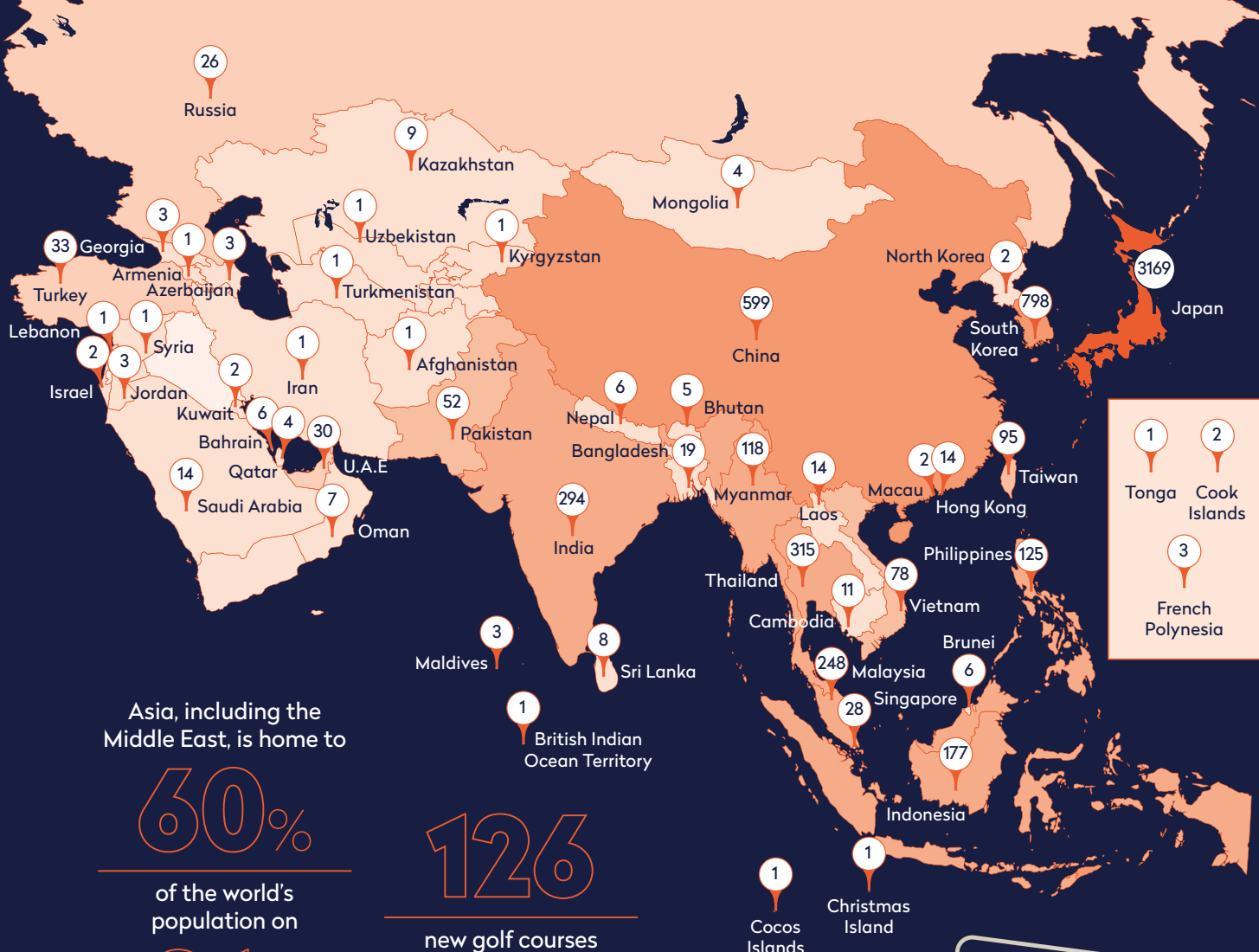
Featured Project

FLC Quong Binh Dong Hoi, Vietnam

Brian Curley

Twenty years ago the newly formed design team of Lee Schmidt and Brian Curley took a look at the golf development market and figured the future lay in Asia, not in their native US. "We didn't just dip our toe in," says Curley. "We jumped in head first." They started with the design/build of ten of the twelve courses at the massive Mission Hills project in Shenzhen, China with various "signature designers." Then they did another ten courses under their own moniker for the same development group on Hainan Island, China. They've also done an additional 20 courses in China, half a dozen courses in Thailand, three in Vietnam and just opened one in Myanmar.

Their current work at FLC Quong Binh, 330 miles south of Hanoi, entails 5,000 acres (eight square miles) of dramatic dunes along a three-mile stretch of the South China Sea. Plans call for ten courses, with the first one, currently named "A," just opened, and the second, "B" grassed. A third is set to start soon. The combination of pure white sand, 120-foot high dunes, marshland and lightly treed copses makes for an ideal, natural setting. The first courses sport irregular turf lines, random "mini fairway" tee complexes, low-mow connections across fairways and between greens and tees, no formally defined bunkers and no catch basins or artificial drainage. The result is arguably the most natural course in Asia today. ▶



Asia, including the Middle East, is home to

60%

of the world's population on

31%

of the earth's land mass

Since 2014 the continent has been home to

30%

of all golf development

126

new golf courses have opened in Asia since 2014

Asia has

17%

of the world's golf facilities

28%

of new golf projects

TOP 5 GOLFING COUNTRIES (COURSES) IN ASIA	
JAPAN	3,169
SOUTH KOREA	798
CHINA	599
THAILAND	315
INDIA	294

Even with a formal routing plan on hand, Curley and the Flagstick Construction team are ad-libbing in the field when it comes to adapting to the site. The biggest surprise, says Curley, is the abundance of fresh water underfoot – to the point where to ensure dry, firm fairway conditions, the fairways were all slightly raised to avoid the highest water table.

The development team from FLC is well-experienced in Vietnam when it comes to resort build out, large scale residential communities and golf course construction. What's new at FLC Quong Binh is the scale and the possibilities of the setting and the freedom of the Schmidt-Curley design team to create variety.

Asia golf score card	
Land area	44,579,000 km ² / 17,212,000 miles ²
Countries	57
Golfing countries	52
Golf courses	6,349
Golf holes	87,483
Golf facilities	4,517
Golf courses under development	149
Private courses	2,876
Publicly accessible courses	3,473
Population	4,545,133,094
Population per golf hole	51,954

Europe.

The naturally occurring British “links” were ideal golf ground in terms of drainage, capacity to sustain native grasses and the suitability of the playing surface to the ground game. Architects for the last 100-150 years have worked hard to emulate an acceptable version of those natural conditions on inland sites with heavier soils. The arts and crafts of golf course design as a formal aspect of both landscape architecture and agronomy arose out of the need to manipulate these lands through feature shaping, draining and turfgrass cultivation.

The growth of golf throughout Great Britain and Ireland was helped dramatically by a rising middle class of citizens and by a vast network of railways that linked city to country and that brought distant resort outposts within easy reach of vacationers. British Railway posters, today a valuable collector’s item, attest to the appeal of golf destinations like St Andrews, Turnberry and Cruden Bay in Scotland and Royal Birkdale and Westward Ho! (Royal North Devon) in England to those living in London and Manchester.

The sport’s spread to the European Continent was uneven. It took naturally to the dune-like formations of coastal lowlands in the Netherlands and Belgium but was more sporadic in establishing itself in major capital cities and along the French Riviera. The post-World War Two advent of popular middle class vacation destinations in such readily accessible regions as Portugal’s Algarve and Spain’s Andalusia helped establish golf’s reputation as a cornerstone of European tourism.

Development

Today golf is well established throughout the north and west of Europe and is making steady progress into the central and southeastern regions. Europe claims half of the top-20 countries in terms of golf courses: No. 4, England (2,270); No. 6, Germany (1,050); No. 7, France (804); No.9, Sweden (662); No. 10, Scotland (614); No. 12, Spain (497); No. 13, Ireland (494); No. 17, Denmark (346); No. 18, Netherlands (330); and No. 19, Italy (321). Anyone who questions the European temperament for golf need only recall the football stadium excitement conveyed by the massive home crowds at Le Golf National outside Paris for the 2018 Ryder Cup.

Europe is the busiest continent in terms of golf development, with 151 golf developments in 28 countries. GB&I is home to 33 of those course projects in planning or under construction, followed by France with 23 and the Czech Republic with 12. Exactly half of those new golf courses under development are tied to a resort and 48% are stand-alone golf courses.

In one respect Europe is curiously traditional with its golf offerings. In GB&I and France, fully 25% of all golf courses are 9-hole stand-alone layouts. Across Europe as a whole, there are 1,953 stand-alone 9-hole courses and 112 stand-alone 6-hole courses.

Featured Project

West Cliffs Golf Course Óbidos, Portugal

Cynthia Dye McGarey

The appeal of the coastline is an enduring part of golf. While regulatory provisions on the Continent require setbacks now, it’s still possible to expose golfers to the raw elements of seaside vistas and winds.

That’s what makes West Cliffs Golf Course in Óbidos Portugal, 60 miles due north of Lisbon, so appealing. Here on a windswept cliff along Portugal’s Silver Coast, course architect Cynthia Dye McGarey, niece of Hall of Fame designer Pete Dye, has carved a dramatic layout. The par-72 course, with tees ranging from 4,856 up to 7,003 yards, allows for links-style play thanks to its wide berth on fescue and open approaches into bentgrass greens.

The course occupies ground just below the Severiano Ballesteros–designed Royal Óbidos Golf Course. Coastal protection laws mandated a 1,000-foot setback from the Atlantic Ocean. Thanks to 160-high limestone bluffs and a routing that terraces the holes without intrusion of real estate, West Cliffs offers clear views of the ocean everywhere.

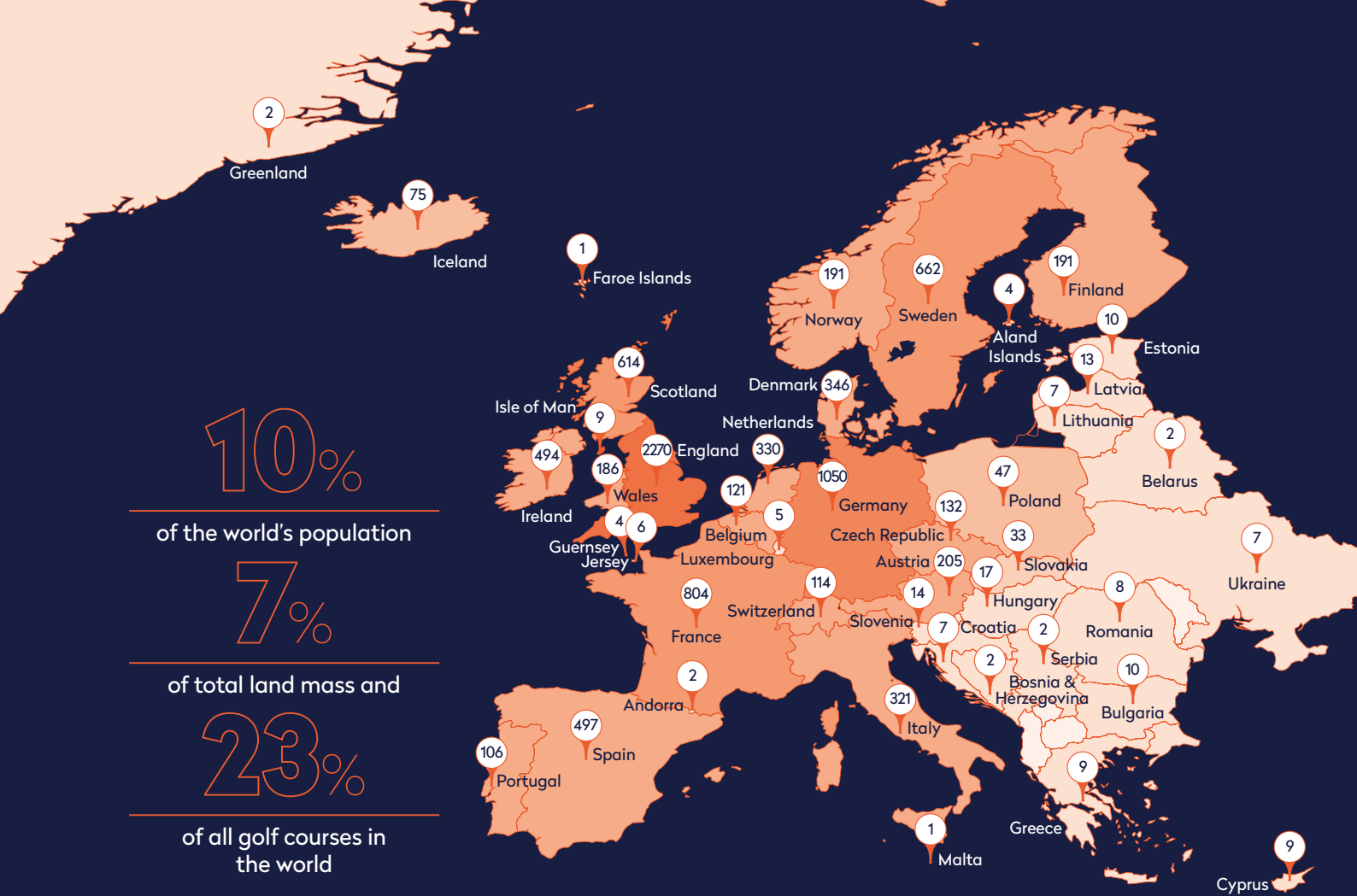
The region is well known for its world-class surfing. Five miles to the east sits the medieval walled town of Óbidos, a UNESCO world heritage site. The north side of the golf course overlooks Óbidos Lagoon, a vast saltwater body that is a popular tourism stop and a thriving nature preserve. Now, thanks to an investment coordinated by OxyFund and management by Praia D’el Ray, the area has a dramatic new golf course, 5-star resort and residential community.



Credit: Cynthia Dye McGarey

28

European countries are home to golf course development, representing a total of 151 projects and 28% of world development



99

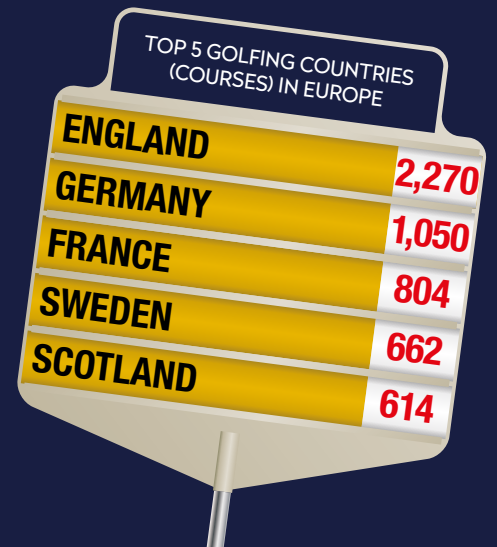
new golf courses have opened in Europe since 2014

24%

of world development over that period

25%

of golf courses in GB&I are 9-hole stand-alone layouts



Europe golf score card	
Land area	9,938,000 km ² / 3,837,000 miles ²
Countries	54
Golfing countries	44
Golf courses	8,940
Golf holes	125,268
Golf facilities	7,132
Courses under development	151
Private courses	1,263
Publicly accessible courses	7,677
Population	742,648,010
Population per golf hole	5,928

North America, Central America and the Caribbean.

Golf in North America is primarily a public affair, to the tune of 76% of all golf facilities open to fee-paying golfers on a round-by-round basis. A century ago, by contrast, the game was dominated by the private membership clubs. While many of them have held on to their reputations, particularly as the scene of majors and prestigious championships, the sport has now been handed over to the daily-fee, resort and municipally-owned side of the ledger.

One revealing fact illustrating this trend is the recent commitment of the USGA to staging its US Open on public courses. From 1895 to 1971, the US Open was played entirely at private clubs. Over the next 27 years the US Open took place on a public course only three times, all at Pebble Beach Golf Links in California (1972, 1982, 1992). Then things changed. From 1999 through 2019, the USGA will have staged 11 out of 21 US Opens at publicly accessible venues.

Featured Project

Royal Blue Golf Club at Baha Mar Nassau, Bahamas

Jack Nicklaus

It's only 200 miles from Jack Nicklaus' design office in North Palm Beach, Florida to this island nation. But even with 423 course projects in 45 countries and six continents (only Antarctica remains beyond his imprint), this is the Golden Bear's first foray in the Bahamas.



Royal Blue Golf Club at Baha Mar is part of a \$4.2 billion redevelopment project involving three hotels, a casino, retail space and a residential community on the site of the old Cable Beach Golf Course. The 7,189-yard, par-72 layout is a mile inland of the region's famous beaches, though with 50-foot of elevation change, the Atlantic Ocean is within view on five holes. The site comprises organic limestone, a coral rock that had to be washed and capped. The back nine is especially dramatic due to what Nicklaus describes as a "moonscape" of the exposed rock.

Director of agronomy and general manager Sean Cracraft worked closely with Nicklaus and his on-site senior designer Chris Cochrane in cultivating a dense sward of Paspalum. The course was grown in with fresh water and will be irrigated with a blend of potable and brackish water. Given the volatility of on-shore winds, course set up will vary dramatically day-to-day. Flexibility will be eased by yardages that can vary as much as 100 yards per hole for normal play thanks to more elongated teeing platforms than are standard for a Nicklaus course.

Credit: Jim Mandeville/The Nicklaus Co.

Development

The total number of golf courses in the US and Canada has been slowly declining in recent years, following an explosive boom in new course construction in the 1990s and early 2000s. While closings have steadily outpaced openings, there is still development in the regional market, with 133 projects underway, including the US (39), Canada (19) and Mexico (13).

In an effort to retain golfers and bolster the appeal of the sport, many course operators are innovating with design features that entail less of a time commitment and more of an immediate reward. These facility adjustments include short-game practice areas, expanded ranges, par-3 courses of nine holes or less; family putting courses (ala the "Himalayas" course in St Andrews); and sophisticated tee-sheet management that allows for 3-hole or 6-hole loops on under-utilised stretches of the golf course. At the same time, countries in the Caribbean and Central America are relying on luxury golf resorts as an engine of economic development to boost local employment through international tourism.

Featured Project

The Nest Golf Club, Friday Harbour Resort Innisfil, Ontario, Canada

Doug Carrick

Course designers know that when it comes to real estate golf, the best outcomes entail close coordination with land planners. That's why Canadian golf architect

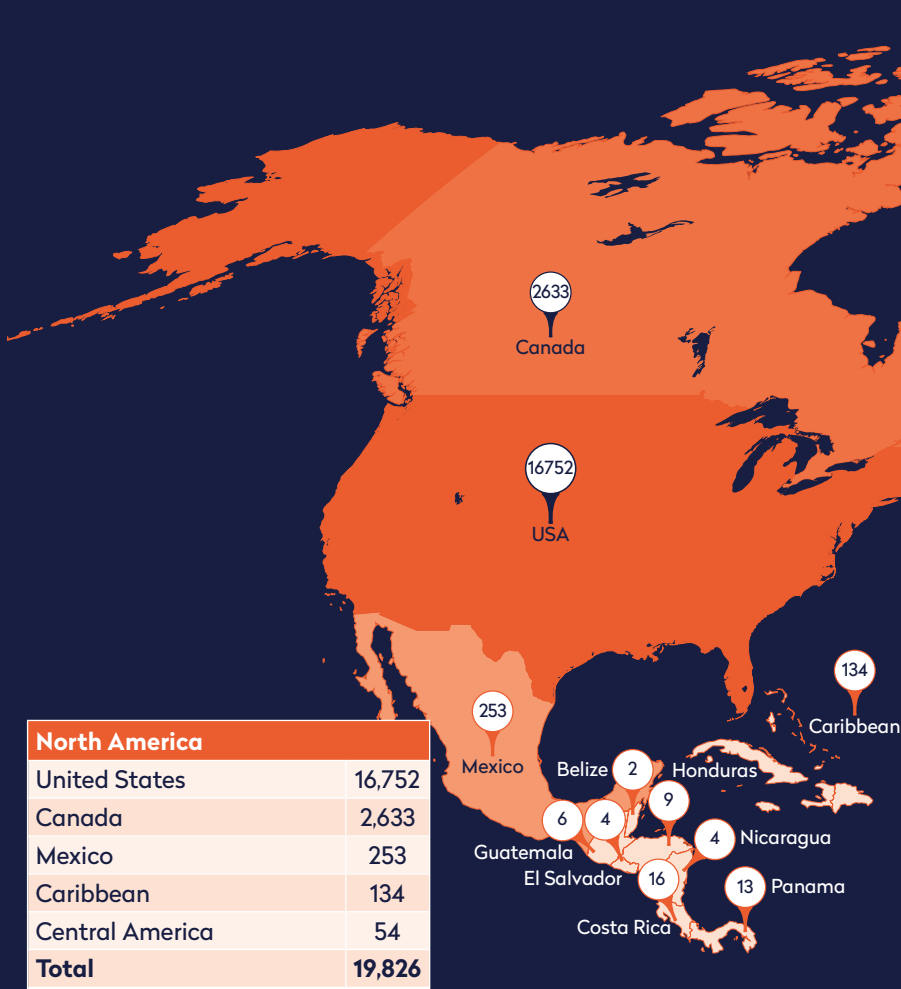


Doug Carrick's work on Friday Harbour Resort sixteen years ago started with extended design charrettes with famed structural architect Andres Duany and his team from Duany Platter Zyberk & Company. The firm's commitment to New Urbanism and walkable communities is now paying off 60 miles north of downtown Toronto along Lake Simcoe, at the leading edge of what's known as Ontario's Cottage Country.

Today, The Nest Golf Club, opened in August 2018, comprises a core routing, par 72, with tees from 4,938 yards to 7,101. The layout stands self-contained, its holes neatly connected and walkable, without intrusion of housing. Yet it's woven into an ambitious community that will include 3,000 home sites and a 1,000-slip marina occupying an enlarged basin with island-like moorings that had to be excavated and carved into place.

The fill from the basin was used to create undulating landforms on the golf course site. Carrick calls the 2.6 million cubic yards (2 million cubic metres) "the biggest earthmoving job I've ever had on a golf course."

Credit: Doug Carrick



North America	
United States	16,752
Canada	2,633
Mexico	253
Caribbean	134
Central America	54
Total	19,826

Caribbean	
Anguilla	1
Antigua and Barbuda	2
Aruba	2
Bahamas	12
Barbados	7
Bermuda	6
Bonaire, Eustatius, Saba	1
Cayman Islands	2
Cuba	3
Curacao	3
Dominican Republic	35
Grenada	1
Guadeloupe	1
Haiti	1
Jamaica	11
Martinique	1
Puerto Rico	23
Saint Kitts and Nevis	6
Saint Lucia	2
Sint Maarten (Dutch)	1
St Vincent and Grenadines	1
Trinidad and Tobago	8
Turks and Caicos Islands	1
Virgin Islands, US	3
Total	134

76%

of golf courses in North America are publicly accessible

North America accounts for

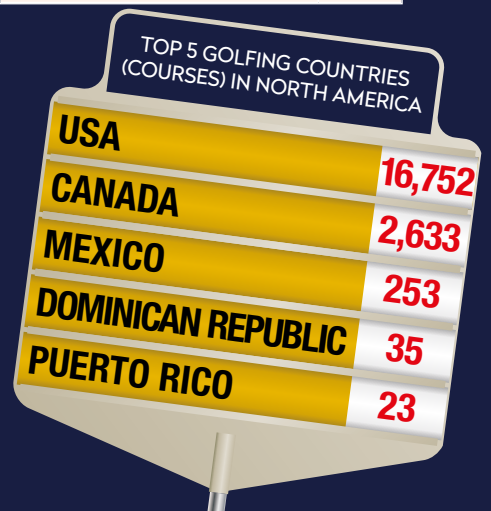
51%

of the world's golf supply

The US is home to

43%

of the world's golf supply



North America golf score card	
Land area	24,256,000 km ² / 9,365,000 miles ²
Countries	41
Golfing countries	34
Golf courses	19,826
Golf holes	291,807
Golf facilities	17,298
Golf courses under development	133
Private courses	4,778
Publicly accessible courses	15,048
Population	587,615,976
Population per golf hole	2,014

Oceania.

Oceania shows the British influence on golf's worldwide diffusion. Australia and New Zealand, whose settlement by British people dates back to 1789, are among the world's leading countries in terms of golf courses. Australia, with 1,616, ranks No. 5; New Zealand, with 418, ranks No. 15. Together, they contain 96% of the region's courses. Well behind them on the list are Fiji with 17 and both Guam and Papua New Guinea with 15. Overall, the vast Pacific region covered by Oceania comprises 5% of the world's land mass, 0.5% of the population, and 5% of its golf course supply.

The rough and tumble character of the early settlers in Australia and New Zealand eventually contributed to a populist golf culture that saw the game take hold throughout society and virtually in every small town. The region remained largely isolated from the early growth of golf course architecture, until a famous journey there by course designer Alister MacKenzie in 1926 that saw him redesign a dozen major courses along the coastline from Sydney through Melbourne and on to Adelaide.

The majority of golf courses in Australia are located along the coast. That's no surprise for a country with 85% of its population living within 30 miles of the shore. Australia's most populous state, New South Wales, centred in Sydney, forms 14% of the country's land mass but is home to 27% of its golf courses. Victoria, built up around Melbourne, has only 4% of the country's land mass but is home to 25% of all its golf courses. By contrast, Western Australia, the country's biggest state, has 43% of the land mass but only 14% of the country's golf.

It helped the cause of golf in Australia and New Zealand that the sport was taken seriously by competitive sportsmen, some of whom achieved World Golf Hall of Fame status: Sir Bob Charles, David Graham, Kel Nagle, Greg Norman, Peter Thomson, Jan Stephenson, Walter Travis and Karrie Webb. In 2006 they were joined by an inaugural representative from the rest of Oceanian golf, Vijay Singh of Fiji.

Development

As well established as golf courses have been over the last century in Australia and New Zealand, there have been some dramatic breakthrough projects lately that have drawn worldwide attention. It's part of a bold worldwide uptick in the quality of golf course design – equivalent to a Second Golden Age as a follow-on to the first one, primarily in North America in the period 1919-1939. Among those breaking through into the ranks of the "Golf Digest" World's 100 Greatest Golf Courses are three courses on the coast of New Zealand's North Island: Tara Iti by Tom Doak (No. 6); Cape Kidnappers, also by Doak (No. 17); and Kauri Cliffs, designed by David Harman (No. 37). On the coast of New Zealand's South Island, Jack's Point Golf Course by James Watt (No. 77) also broke through.

In Australia, all the recent openings to make the prestigious world top-100 sit in the country's southeast:

Tasmania has been developing its tourism trade through modestly-priced daily fee golf, most notably through links-style courses at Barnbogle Dunes Course, by Doak & Michael Clayton (No. 11) and Barnbogle Lost Farm by Bill Coore & Ben Crenshaw (No. 26). Over on Tasmania's remote King Island, the wildly windblown Cape Wickham Links by Mike DeVries (No. 24) has started attracting trade via charter flights from Melbourne. Two newcomers from Victoria also made the list: St. Andrews Beach by Doak and Clayton (No. 86) and National Golf Club – Moonah Course by Greg Norman (No. 98). The one strictly inland newcomer to the list from all of Oceania is Ellerston, in New South Wales, also by Norman (No. 31).

Development beyond these traditional centres of golf in the rest of Oceania has slowed of late because of environmental concerns, especially the threat posed to rising sea levels to endangered low lying areas.

Featured Project

Cathedral Lodge Golf Course Victoria, Australia

Greg Norman

There's no one model for golf development. That's one of the lessons of the past few decades, where facilities of many different types have proven suitable to specific markets.



In Australia's Rubicon Valley, 80 miles north of Melbourne, Greg Norman has designed Cathedral Lodge Golf Club for investment banker David Evans that will serve an exclusive membership, likely capped at 200.

This is Norman's fourteenth course in his native land and his 100th overall, spanning 34 countries on six continents. His projects have run the gamut, from daily-fee municipal layouts in the US to 5-star resorts and real estate developments.

The club occupies the western foothills of Australia's Great Dividing Range, with the Cathedral Range, at an elevation of 4,100 feet, presiding to the south. Cathedral Lodge was not easy ground to route because of 300-feet of elevation change on a site formed by a major ridge dividing the 300-acre property. Norman walked the course a dozen times before settling on a sequence of holes that was intimately connected and strategically engaging.

Norman, asked to create a course that was enjoyable to play, not simply hard, responded in kind. The par-72 layout provides plenty of room off the tee, with central and offset bunkering intruding on the lines of play, along with the occasional creek, for those who opt to brave the risky lines.



Oceania	
American Samoa	1
Antarctica	1
Australia	1,616
Fiji	17
Guam	15
Kiribati	1
Marshall Islands	1
New Caledonia	4
New Zealand	418
Niue	1
Norfolk Island	1
Northern Mariana Islands	8
Papua New Guinea	15
Samoa	4
Solomon Islands	1
Vanuatu	5
Total	2,109



77%

of golf courses in Oceania

26

new golf courses under development
in Oceania

Oceania golf score card	
Land area	7,687,000 km ² / 2,968,000 miles ²
Countries	22
Golfing countries	16
Golf courses	2,109
Golf holes	30,237
Golf facilities	1,998
Golf courses under development	26
Private courses	157
Publicly accessible courses	1,952
Population	41,261,212
Population per golf hole	1,365

South America.

Recent developments in South America have raised hopes for the development of golf across the continent. The 2016 Olympic Games featured golf for the first time since 1904 – and at the first Olympiad held in South America.

It was impressive enough that the Gil Hanse-designed Olympic Golf Course and the rest of the Olympic facilities were finished on time and ready for the Games. It also helped that the golf course, measuring 7,128 yards for the men and 6,245 yards for the women, held up so well and provided such a compelling stage for players from throughout the world. The layout's environmental sensitivity in terms of its light footprint on the ground is intended as a model for future golf development.

Equally substantial was regional participation. Though no South American medalled, the continent was well represented, with six men from five countries (Argentina, Brazil, Chile, Paraguay and Venezuela) and four women from three countries (Brazil, Colombia and Paraguay) in the fields. That's 10 out of 120 competitors, or 8%, which is much higher than the continent's share of the world's golf courses (2%).

Development

The region's amateur golf scene received a major boost starting in 2015 with the advent of the Latin America Amateur Championship, organised by the Masters Tournament, The R&A and the USGA. In one bold move, the region's finest amateurs have a much-accelerated path into world class competitive circles.

Chile's Joaquin Niemann, who was the No. 1 ranked men's player in the World Amateur Golf Rankings when he won in 2018 in his home country, parlayed his five-shot victory into a professional career on the PGA Tour, where he won over \$1.45 million in his first year.

Traditionally, the South American golf scene has been dominated by private clubs – 56% of all courses, more than double the rate for the world. Recently, the balance in South America has been tipping, thanks to the recent infusion of resort and public access facilities. The continent has added 18 courses since 2014.

Though Argentina embodies 16% of the South American land mass, it sports 49% of its golf courses. There is evidence of an impending shift, however, with the leading South American countries for golf development indicated as Brazil (10), Ecuador (3) and Chile and Colombia (2 each).

38

new golf courses have opened in
South America since 2010

Featured Project

Termas de Rio Hondo Golf Club Termas de Rio Hondo, Argentina

Robert Trent Jones Jr.

The high desert plain of South America known as the Gran Chaco can be a forbidding stretch of land. The arid soil and scorching temperatures – often reaching 115°F (46°C) in summertime – combine to stifle settlement and development. But among those oases of growth is the spa resort city of Termas de Rio Hondo in the province of Santiago del Estero. And it's here, 700 miles northwest of Buenos Aires, that globe-trotting course architect Robert Trent Jones Jr. is set to debut his second course in South America and his first in Argentina – the 39th country in which he has worked.

Termas de Rio Hondo Golf Club is part of an ambitious regional development plan by the province's governor, Gerardo Zamora (in office 2005–2013) to draw upon the appeal of the city's thermal baths and promote trade and tourism. That programme has brought a new airport, several luxury hotels and a world-class Formula One racetrack to this town of 35,000 inhabitants. The 235-acre golf course sits just west of town, straddling the Dulce River and just behind a dam that forms the Rio Hondo Reservoir. A walkway from the golf course brings city residents to a recently restored estuarial nature reserve.

The golf course has been turfed in Paspalum – a turf type easily adaptive in the high desert conditions. Since the goal of the golf course is to attract play from a wide range of golfers, both skilled and unskilled, the fairways are wide and generous and the tees sport a ribbony look suited to varied set up. "We could easily have over-designed what was really a blank canvas," says Bruce Charlton, a veteran of the Jones design operation who oversaw site work on the project. By preserving and in some cases transplanting native mesquite and chiapi trees, the course was given a look befitting the Gran Chaco.

Featured Project

Urubo Golf Country Club Santa Cruz, Bolivia

Blake Stirling & Marco Martin

Golf came to this landlocked South American country through the British owned Bolivian Railroad Co., whose employees created courses along the lines they built and serviced. The game largely eluded native Bolivians, and even today, the country has only a dozen golf courses, only three of them in its largest city of Santa Cruz, with a population of 1.5 million.

In late 2017, course architects Blake Stirling & Marco Martin unveiled Uburo Golf Country Club, on the west side of the Piral River, an area drawing the city's rising middle class. The veteran Madrid-based design team has nearly 20 courses in Spain to their credit; this is ►



49%

of the region's golf courses are in Argentina

44%

of golf courses in South America are publicly accessible

2%

of the world's golf courses

4%

of new golf projects



their sixth project in South America and their first entirely new course on the continent.

Urubo, sitting at 1,360 feet above sea level, is a full service residential community and sports complex with a starkly modernist, glass and metal look to its 80,000 square foot clubhouse. The property includes racquet sports, a swimming basin, football field, seven miles of bicycle trails and a 27-acre lagoon, along with a spa, shopping and luxury restaurants. The par-72, playing 4,837 yards up to 7,222, has a front nine that incorporates native jungle flora and envelops real estate, while the back nine, on modestly lower ground, wraps around the man-made lagoon.

There's obviously a market for such a multi-use golf facility. Urubo Golf CC entered its second year of operation with 1,000 members.

South America golf score card	
Land area	17,819,000 km ² / 6,880,000 miles ²
Countries	14
Golfing countries	14
Golf courses	708
Golf holes	9,189
Golf facilities	651
Golf courses under development	19
Private courses	394
Publicly accessible courses	314
Population	428,240,515
Population per golf hole	46,604

Appendix/Definitions.

Golf course

A tract of land designed to play golf which contains between 6 and 18 holes inclusive. Golf courses are defined by the architect's layout and hole configuration depicted on the score card. For example: a golf facility with 27 holes could be configured as three 9-hole courses or one 18-hole course and one 9-hole course.

Golf facility

A location at which golf can be played on one or more golf courses.

Publicly accessible golf course

A golf course that allows public access and may also offer memberships.

Private golf course

A golf course at which play is largely restricted to members and their guests.

Real estate-related course

A golf course that is located in, and considered an integral part of, a real estate development.

Resort course

A golf course that is affiliated with a hotel or other lodging and is usually located in a setting that includes additional amenities such as tennis, swimming, gym facilities, restaurants, etc.

Golf course development project

A new golf course that is currently in one of the following stages of development:

- **In-planning**
A designer/architect has been selected, specifications are being written, key decisions are being made, funding is being secured and permitting applications are being filed.
- **Under construction**
Ground has been broken and work is underway.
- **Completed/Open**
A golf course that is now open for play.

ISO list of countries

All country information is based on the ISO list of countries published by the International Organisation for Standardisation (ISO), and defines the names of countries, dependent territories, and special areas of geographical interest.

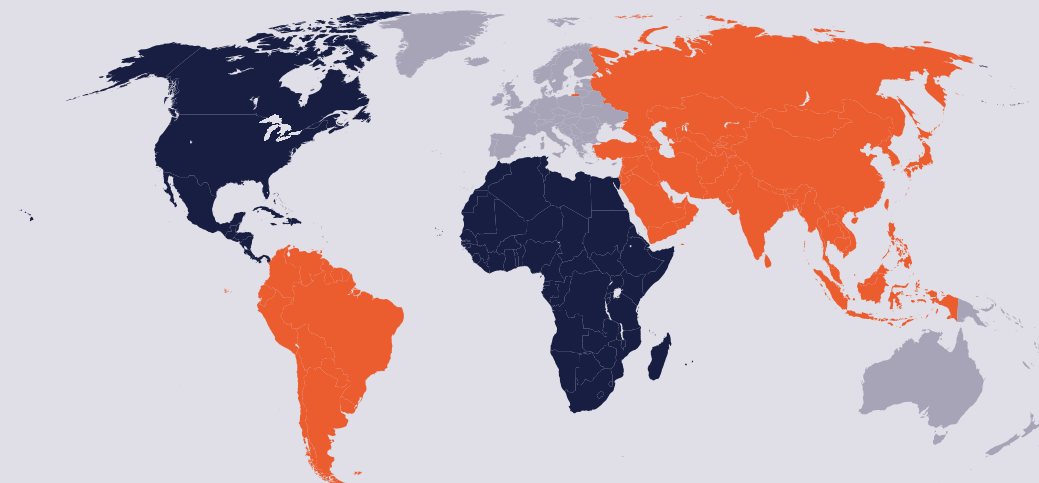
Population

United Nations Development of Economic and Social Affairs/Population Division World Population Prospects: The 2017 Revision.

Land area

www.worldatlas.com

Regions.



◦ AFRICA

Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Congo, The Democratic Republic of the Congo, Cote d'Ivoire, Djibouti, Egypt, Equatorial Guinea, Ethiopia, Gabon, Gambia, Ghana, Kenya, Lesotho, Liberia, Libya, Madagascar, Malawi, Mali, Mauritius, Mayotte, Morocco, Mozambique, Namibia, Niger, Nigeria, Reunion, Rwanda, Saint Helena, Senegal, Seychelles, Sierra Leone, South Africa, Sudan, Swaziland, United Republic of Tanzania, Togo, Tunisia, Uganda, Zambia, Zimbabwe.

◦ ASIA

Afghanistan, Armenia, Azerbaijan, Bahrain, Bangladesh, Bhutan, British Indian Ocean Terr, Brunei Darussalam, Cambodia, China, Christmas Island, Cocos (Keeling) Islands, Cook Islands, French Polynesia, Georgia, Hong Kong, India, Indonesia, Islamic Republic of Iran, Israel, Japan, Jordan, Kazakhstan, Democratic People's Republic of Korea, Republic of Korea, Kuwait, Kyrgyzstan, Lao People's Dem Republic, Lebanon, Macao, Malaysia, Maldives, Mongolia, Myanmar, Nepal, Oman, Pakistan, Philippines, Qatar, Russian Federation, Saudi Arabia, Singapore, Sri Lanka, Syrian Arab Republic, Taiwan, Republic of China, Thailand, Tonga, Turkey, Turkmenistan, United Arab Emirates, Uzbekistan, Vietnam.

◦ EUROPE

Aland Islands, Andorra, Austria, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, England, Estonia, Faroe Islands, Finland, France, Germany, Greece, Greenland, Guernsey, Hungary, Iceland, Ireland, Isle of Man, Italy, Jersey, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Scotland, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, Wales.

◦ NORTH AMERICA

Canada, Mexico, United States, Central America. *Caribbean:* Anguilla, Antigua and Barbuda, Aruba, Bahamas, Barbados, Bermuda, Bonaire, Cayman Islands, Cuba, Curacao, Dominican Republic, Grenada, Guadeloupe, Haiti, Jamaica, Martinique, Puerto Rico, Saint Kitts and Nevis, Saint Lucia, Sint Maarten (Dutch), St Vincent and the Grenadines, Trinidad and Tobago, Turks and Caicos Islands, Virgin Islands. *Central America:* Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama.

◦ OCEANIA

American Samoa, Antarctica, Australia, Fiji, Guam, Kiribati, Marshall Islands, New Caledonia, New Zealand, Niue, Norfolk Island, Northern Mariana Islands, Papua New Guinea, Samoa, Solomon Islands, Vanuatu.

◦ SOUTH AMERICA

Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Falkland Islands, French Guiana, Guyana, Paraguay, Peru, Suriname, Uruguay, Venezuela.



The R&A group of companies was formed in 2004 to take on The Royal and Ancient Golf Club of St Andrews' responsibilities for governing the Rules of Golf, staging The Open, golf's original championship, and developing the sport. The British Golf Museum in St Andrews is part of the R&A group.

Together The R&A and the USGA govern the sport of golf worldwide, operating in separate jurisdictions with a commitment to a single code for the Rules of Golf, Rules of Amateur Status and Equipment Standards. The R&A, through R&A Rules Ltd, governs the sport worldwide, outside of the United States and Mexico, on behalf of over 36 million golfers in 143 countries and with the consent of 156 organisations from amateur and professional golf.

The R&A merged with the Ladies' Golf Union in 2017 and now has responsibility for running a series of world class amateur events and international matches in women's and girls' as well as men's and boy's golf. The R&A works with IMG to stage the Women's British Open and with the European Tour to stage the Senior Open.

The R&A is committed to investing £200 million in developing golf over the next decade and supports the growth of the sport internationally, including the development and management of sustainable golf facilities. For more information, visit www.randa.org.



RandA.org
