



GEO Certified[®]

GEO Certified[®] Report Golf & Country Club De Palingbeek

Prepared by Independent Verifier, Guido Hamelink

Certified by GEO Foundation: September 2019
Valid until: September 2022

GEO Certified[®]

 **GEO
Foundation**
Sustainability in and through golf

The efforts to make the golf course suitable for biodiversity are remarkable. I have never conducted an audit on a golf course where the effort for creating flowery grassland was so intense. I look forward to seeing this and other developments over the next 3 years.

Guido Hamelink

GEO accredited Independent Verifier



Introduction

GEO Foundation is pleased to confirm that Golf & Country Club De Palingbeek has successfully achieved GEO Certified® status for its outstanding work to foster nature, conserve resources and support the community.

GEO Certified® is the most respected certification for golf, based on a credibly and transparently developed modern sustainability Standard of best practice.

Golf & Country Club De Palingbeek has:

1. Met the required certification criteria for sustainable golf operations
2. Successfully completed the official third-party verification process
3. Successfully passed the final evaluation by GEO Certification Ltd. (autonomous subsidiary of GEO Foundation)

GEO agreed with the conclusions of the official verification report, that, having achieved all mandatory criteria; and with specific Continual Improvement Points set for the future, Golf & Country Club De Palingbeek should be awarded GEO Certified® status.

For the certification period stated above, Golf & Country Club De Palingbeek can therefore claim a position as a leader in advancing sustainability in golf – making important contributions in protecting nature, conserving resources and strengthening communities.

The GEO Certified® Report that follows comments on the actions undertaken against the criteria, as observed by the Independent Verifier during the assurance process.

Certification is nearly always the result of a dedicated team effort resulting in many practical and valuable social and environmental results around the golf course, maintenance facility and clubhouse. These dedication and leadership qualities are an important part of ensuring the resilience of the golf facility and the golf industry into the future and also as part of society's wider effort to pull together for people and planet.

We congratulate all involved.

Jonathan Smith
Founder and Executive Director, GEO Foundation
GEO Certification Ltd. Board Member

Kelli Jerome
Executive Director, GEO Foundation

Richard Allison
Manager, GEO Certified Facilities



Verification and Certification

Verification

The official third-party audit was carried out by an independent verifier, accredited by GEO to undertake verifications of golf facilities applying for certification.

Verification involves reviewing practices and data, using the International Voluntary Standard for Sustainable Golf Operations as the guide to ensure comprehensive and consistent evaluation of performance. A detailed verification report is submitted for evaluation by GEO Certification Ltd, a subsidiary of GEO Foundation.

Certification

GEO Certification Ltd, an autonomous subsidiary of GEO Foundation [both not-for-profit entities], undertook a full review of all content submitted through the OnCourse® online platform and the report submitted by the verifier, ensuring:

- Comprehensiveness – that activities undertaken touched on all elements of the Standard
- Consistency – that the verification approach was balanced, well weighted and with consistent depth of evaluation across each theme
- Accuracy - matching the verification report with evidence submitted by the golf facility to ensure statements and claims were accurate

GEO Foundation is an international not-for-profit founded to advocate, support and reward sustainability in and through golf. Over more than ten years, the group has worked collaboratively with dozens of golf industry associations and government and non-government organisations around the world, to help golf become a sustainability leader, striving for a net positive social and environmental impact. In addition to managing and assuring GEO Certified®, GEO Foundation also provides a suite of credible, practical programmes for golf facility management, new golf developments and golf tournaments called OnCourse®, often delivered in partnership with national golf bodies. Find out more at www.sustainable.golf

Credibility

GEO Certified® is part of the ISEAL Alliance, a group of the world's foremost credible certification systems including Fairtrade, Rainforest Alliance, Forest Stewardship Council, Marine Stewardship Council and many others. GEO Foundation earned and retains full membership of the ISEAL Alliance global association following a rigorous evaluation against the ISEAL Codes of Credibility in Sustainability Standards and Certification. The ISEAL Codes cover standard-setting, assurance, and monitoring and evaluation. Find out more at www.isealalliance.org



Verifier's Report

The Sustainability Agenda for golf covers the following themes and action areas:

THEMES	ACTION AREAS
Nature	<ul style="list-style-type: none"> • Habitats & Biodiversity • Turfgrass management • Pollution prevention
Resources	<ul style="list-style-type: none"> • Water • Energy • Materials
Community	<ul style="list-style-type: none"> • Partnerships & Outreach • Golfing & Employment • Advocacy & Communications

Included below are the observations made by the Independent Verifier against each item in the Standard.

NATURE			
N1 Habitats and Biodiversity			
Objectives	Requirements	Mandatory Practices	Verifier Notes
N1.1 Understand the site and surroundings	N1.1.1 Sound understanding of the nature and landscape value of the site	(Course management) Map all habitats and vegetation types on the site; Regularly update landscape / biodiversity	There are several digital map layers of the golf course available. The mapping is not consistent for the whole terrain. This is work in progress. Flora and fauna surveys are logged in the website

		surveys	https://waarnemingen.be/locations/32178/ There are over 6000 observations registered by the former head greenkeeper.
	N1.1.2 Knowledge of legal designations for protected areas, habitats and species	(Course management) Understand legal responsibilities for protected landscapes and species; Record and monitor protected, endangered, or rare species found on the site	The golf course is adjacent to the Provinciaal domein Palingbeek. Part of the golf course is designated Nature 2000 area: West-Vlaams Heuvelland. A description of valuable species and groups is available and gives a good inside in the sensitivity of the terrain. The maintenance is focused on valuable flora and fauna species like several types of orchids (Epipactis helleborine, Dactylorhiza incarnata and 6 others) and salamander the large crested newt (Triturus cristatus). Greenkeeping is very much aware of the ecological values of the site. Over the last 20+ years a lot of effort has been taken to improve the biodiversity on the golf course. This results in beautiful flowery grassland. For example the sinus mowing and mowing and collecting is business as usual on about 20 hectares (25% of the total surface). For the large crested newt several waterbodies have been dredged and kept fish free. The former head greenkeeper had given several presentations about environmental friendly golf course maintenance at greenkeeper meetings.
	N1.1.3 Understanding and respect for cultural heritage	(Course management) Protect any archaeological, historical or cultural designations on the site	Cultural heritage is of importance for Palingbeek. During WO I there have been intensive battles between the German and British troops on the terrain. The old lines are subtle marked on the golf course and a war cemetery is directly next to the golf course.
N1.2 Opportunities to naturalise the course	N1.2.1 Measures taken to identify and minimise the required area of managed turfgrass	(Course / club management) Observe, track and / or monitor golfer play	The largest challenge is to conserve the areas that are natural grassland at the moment. Golfers appreciate their flowery appearance, but the enjoyment soon wanes when they cannot find their ball. When golfers understand why the rough is so high, one tends to be more positive. Large groups with a handicap between 16 and 36, peaceful, well-maintained. The reactions on high rough became more objective. The reactions on colourful rough are positive.
N1.3 Actively manage habitats for wildlife	N1.3.1 Projects to manage habitats in the best way for wildlife and golf	(Course management) Regularly review and follow a habitat management plan; Prioritise native species when planting and landscaping	The handbook natural maintenance provides an overview of important natural elements and describes how maintenance should be carried out. In addition to measures described earlier, there is focus on maintenance of sufficient dead wood and the presence of host plants for the Thecla betulae (Brown hairstreak), Argynnis paphia (Silver-washed Fritillary) and Anthocharis cardamines (Orange-tip).

N1.4 Conserve key species	N1.4.1 Practical conservation measures for priority species		
N2 Turfgrass			
N2.1 Maintain optimum turf and soil health	N2.1.1 Appropriate turfgrass varieties adapted to climatic and other geomorphological factors	(Course management) Select appropriate grass species for climate	The focus on the USGA greens is on festuca and agrostis sp. In order to keep meadow grass out of the playing areas, moisture content and fertilisation is controlled.
	N2.1.2 Practices to maintain good soil structure and condition		
	N2.1.3 Careful and responsible fertiliser application throughout the year to avoid over-fertilisation	(Course management) Soil tests and nutrient analysis	Palingbeek has a soil analysis done every three years. This is then used to further develop the fertilisation plan. The head greenkeeper showed me an overview of the fertilisation figures that have been collected/decimated over the last 20 years. Unfortunately, this resulted in a major infestation of e.g. dollarspot. In the future, a better balance must be found. In any case, the focus is on minimum use and spoon-feeding.
N2.2 Prioritise cultural management	N2.2.1 Non-chemical pest, disease and weed management	(Course management) Sharpen mowing blades; Remove surface moisture; Hand weeding	Keeping the grass dry, minimal fertilisation and removing weeds manually often. Per spot treatment, dandelions and white clover are combatted with herbicides. Dollarspot is prevented as much as possible by e.g. better maintenance regarding dew removal. A healthy balance in the soil and on the leaves is the most important.
N2.3 Use chemicals responsibly	N2.3.1 Application of chemicals only when necessary to prevent or cure defined / identified turf health issues	(Course management) Establish patterns and levels of risk for pests and diseases; Scout the course daily for early signs of pests and disease; Accurate pest and disease identification; Map and track pest and disease hotspots; Establish pest and disease thresholds	There is no written policy/protocol for the use of pesticides. This will be developed in the coming period. From the golf course and methods one can see that the practice is focused on IPM.
	N2.3.2 Application of chemicals with full safety precautions	(Course management) Use only legally registered and approved products; Ensure staff are fully qualified and licenced to use pesticides; Regularly calibrate and test applicators; Use appropriate protective equipment;	Only P2 certified greenkeepers handle pesticides. There are still products in the cupboard that should be disposed of. The Toro field spray (with anti-drift) is checked every 3 years and also the backpack spray. Weed control on the fairways is used a few times a year field-wide. Greens and tees are spot-treated. Or removed manually.

		Dilute and dispose of leftover product on untreated areas of turf	
N3 Pollution Prevention			
N3.1 Prevent pollution across the entire site	N3.1.1 Practical measures to ensure pollution risks are minimised from golf course operations	(Course management) Document procedures for emergency spill responses; Maintain mowing buffer zones around water and all ecologically sensitive areas; Maintain spraying and spreading buffer zones around water and all ecologically sensitive areas; Create a map / aerial visual reproduction, drawing etc of the course showing buffer zones and no-spray, no-spread areas.	An emergency spill response plan has not been put down in writing. The head greenkeeper indicates that the policy is to choose hybrid machines in the event of replacement, without hydraulic oil or with bio-degradable oil.
	N3.1.2 Practical measures to ensure pollution risks are minimised from clubhouse operations	(Club management) Ensure all hazardous materials are safely and securely stored; Ensure compliance with all required standards and systems for hazardous waste and waste water discharge	The catering is outsourced. Making agreements during a contract period is difficult. In addition, there is no feeling of ownership with the current catering exploitation whereby there is no careful use of energy and water. In the coming contract negotiations, this will be an important point of attention. There is no connection to the public mains. Water purification of used water is carried out on the golf course. Recently, the installation was amended by e.g. renewing and enlarging of a helofyte filter.
	N3.1.3 Practical measures to ensure pollution risks are minimised from maintenance facility operations	(Course management) Ensure wash areas are on impermeable, leak-free surfaces; Mixing and loading of pesticides and fertilisers over an impermeable surface; Triple rinse pesticide containers and applicators	The floors of the wash place and machine workshop are in good condition and are checked annually for ruptures etc.
N3.2 Safely manage hazardous substances	N3.2.1 Legal compliance in the storage, handling, application and safe disposal of all hazardous substances	(Course management) Maintain a register of hazardous materials available to authorised staff; Safe storage in secure and ventilated concrete or metal building; Sufficient storage capacity; Impermeable flooring; Spill containment kits present; Emergency wash area; Fire extinguisher in the immediate area; Secondary containment for fuel, either externally constructed, or integrally manufactured; Regular inspection of storage tanks	The storage of oils, fat, pesticides meets the legal requirements: Paint and petrol in a fire-safe cabinet, oil barrels stand on grills, fire extinguishers are checked.

N3.3 Responsibly manage waste / storm water	N3.3.1 Appropriate waste water usage and discharge licences	(Course management) Waste water discharge licence; Appropriate treatment of machinery wash water (impermeable surface, oil / grease / clipping separation)	Waste water from the wash place runs through a petrol oil fat separator and is discharged in surface water.
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<h2 style="margin: 0;">RESOURCES</h2>			
<h3 style="margin: 0;">R1 Water</h3>			
Objectives	Requirements	Mandatory Practices	Verifier Notes
R1.1 Minimise water demand	R1.1.1 Measures to reduce the need to consume water	(Course management) Target irrigation to essential playing surfaces only	Selected grasses have a limited water need. Because of the USGA construction of the greens, they retain minimum moisture and there is therefore a need to irrigate regularly.
R1.2 Maximise water efficiency	R1.2.1 Practical measures to use water more efficiently on the golf course	(Course management) Conduct regular irrigation performance checks; Provide staff training on efficient irrigation practices; Ensure effective application of water to target areas; Ensure irrigation schedules are informed by weather patterns and soil moisture analysis	The focus is on manual irrigation. Supplemented with the sprinkler system. The use is not much higher than 10,000 m3 a year. A TDR soil moisture sensor is used.
	R1.2.2 Practical measures to use water more efficiently in buildings	(Club management) Audit water use regularly; Review bills frequently and look for irregularities; Encourage water-saving practices amongst staff and visitors; Categorise and track water consumption	Water-saving measures are limited to taps with a sensor. Only press-button taps in toilets. Systematic improvements together with renovations. At the moment, there are no agreements regarding the use of the catering. The contract is being reviewed. Catering partners. Cancellable annually, so there is a possibility for adjustment.
R1.3 Source water responsibly	R1.3.1 Measures towards alternative, lower quality sources of water	(Course / club management) Ensure appropriate water abstraction permit and reporting, as required	

R2 Energy			
R2.1 Reduce energy demand	R2.1.1 Measures to reduce the amount of energy consumed in course maintenance	(Course management) Minimise areas of managed turf to reduce mowing, irrigation, and turf inputs	17,484 litres of diesel fuel in 2018 shows an average to high usage in relation to the total surface of intensively-mowed grassland.
R2.2 Maximise energy efficiency	R2.2.1 Measures to use energy and fuels more efficiently in buildings	(Club management) Audit energy use regularly; Regularly review bills; Categorise and track energy consumption	89% use of electricity by the catering.
R2.3 Source energy responsibly	R2.3.1 Measures to source alternative, renewable forms of energy	(Club management) Determine potential sources of renewable energy in the area and on-site, through renewable energy providers	An investigation into the use of solar panels is being carried out. Solar panels will be installed on the new building of the driving range.
R3 Materials			
R3.1 Reduce materials demand	R3.1.1 Products and materials selection based on necessity, including opportunities for recycled, reused and locally sourced alternatives	(Club management) Undertake a review of materials consumed	Purchase policy: many members are suppliers. This is often not cheap, but ensures many connections.
R3.2 Purchase responsibly	R3.2.1 Practical use of an ethical / environmental purchasing policy	(Club management) Adopt a sustainable, or ethical / environmental purchasing policy to maximise the use of locally sourced goods and goods made from recycled, recyclable and certified materials	New purchasing policy has been drafted.
R3.3 Reuse and recycle	R3.3.1 Waste stream separation for maximum recycling and re-use opportunity	(Club management) Demonstrate waste separation, reuse and recycling; Track how much waste goes to landfill, or is reused / recycled	Much attention is paid to waste products. Glass is separated. Rest waste. There is an own compostation facility. Green cuttings, water edges and rough cuttings are converted in this manner. There is a recepticle for leachate water. This water is distributed over the fairways as fertiliser. Catering refuse is disposed as residual waste.

			Despite having separate waste bins, sorting the waste of members is difficult. From greenkeeping, there is more attention for awareness for separating waste.
R3.4 Demonstrate legal compliance	R3.4.1 Compliance with all local and regional waste management regulations	(Club management) Use authorised waste and recycling contractor for general, hazardous, industrial and green waste;	Delivery notes are collected. The information is also available online from the waste collector's website.

COMMUNITY			
C1 Outreach			
Objectives	Requirements	Mandatory Practices	Verifier Notes
C1.1 Diversify access and provide multi-functionality	C1.1.1 Social and recreational activities at the facility		There is a public footpath, a cycle/footpath and a specific connection with provincial terrain.
C1.2 Provide for volunteering and charity	C1.2.1 Opportunities available for volunteering and support of charities and good causes		
C1.3 Establish active community partnerships	C1.3.1 Positive and constructive engagement with neighbours, the local community and other groups	(Club management) Create a 'sustainability working group'	2x a year meeting of board member, club secretary and head greenkeeper.
C2 Golfers & Employees			
C2.1 Improve health and wellbeing	C2.1.1 Benefits to human physical and mental health from golf and facility activities		Staff prevention advisor for safety.

C2.2 Be open and inclusive	C2.2.1 Inclusivity and diversity in membership and visitor policies	(Club management) Demonstrate inclusive policies for members and visitors	There is attention for the specific target groups, specifically seniors, children and the under-40's. 8 initiation Sundays per year of 2 hours are organised as introduction to the golf sport. Currently, there are approx. 850 members, of which 750 are playing members. It is the intention to have approx. 100 additional members. There is a separate bridge club with 20 external people who are not members of the golf club.
C2.3 Employ fairly and safely, and provide career opportunities	C2.3.1 Ethical and legal employment, working conditions and professional development	(Club management) Follow all relevant national legislation and best practice for employment, health & safety etc	The staff team is solid and has been trained as greenkeepers in the past years. In 2018, there was a visit to the workplace to check working conditions. The report has been verified by me and there are several recommendations that need to be followed up.
C3 Communications			
C3.1 Engage golfers and members	C3.1.1 Communications activities that raise awareness and understanding amongst members and visitors	(Club management) Provide information on the facility's sustainability commitments, actions, or achievements	There is an active communication policy in which both sporting and maintenance-related subjects are dealt with. Website, facebook group and newsletter are used. Ben Hooper, head greenkeeper, wants to inform members and players through vlogging, for instance on the importance of pitch mark repair.
C3.2 Celebrate and promote sustainability	C3.2.1 Activities that raise awareness and engage people in the wider community	(Club management) Provide evidence of external communications and community engagement	From leper municipality, there is a sports council of which GC Palingbeek is a member. Various charity events are organised. There was the golf beats cancer event in 2018 which yielded approx. 3,500 euros. Annually, there are various guided tours on the course, organised by greenkeeping. These are walks in which both golfers and non-golfers participate.

Golf and Sustainability

Among all sports, golf has a particularly close relationship with the environment and communities, golf facilities can bring many benefits to people and nature - from the protection of greenspace and conservation of biodiversity; healthy recreation for all ages; local supply chains; and jobs, tourism and other forms of economic value.

Adopting a more sustainable approach is also good for golf. It's about presenting a high-quality golf course and providing a memorable experience in natural surroundings. It's about being as efficient as possible. And it's about supporting the community in a range of ways that bring increased recognition, respect and contact.

At a broader level, it's important that golf credibly demonstrates its commitment, and its social and environmental value – strengthening the sport's image and reputation for the long term.

Golf facilities that participate in OnCourse®, an international sustainability initiative assured by the non-profit GEO Foundation, are taking a comprehensive approach and striving to be leaders in the community.

Find out more at www.sustainable.golf