



GEO Certified[®]

GEO Certified[®] Report Master Golf

Prepared by Independent Verifier, Sannimaria Sjöblom

Certified by GEO Foundation: October 2021
Valid until October 2024

“Master Golf has continued to work on sustainability in the years between certifications. This has resulted in lower energy consumption through the use of hybrid machinery and more efficient irrigation pumps. Increased grassland meadow and scrub areas from reduced mowing has led to a more natural course. Investments into ground and air source heat pumps and electric vehicle charging stations are set to improve things further.”

Sannimaria Sjöblom

GEO accredited Independent Verifier



Introduction

GEO Foundation is pleased to confirm that Master Golf 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.

Master Golf 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, Master Golf should be awarded GEO Certified® status.

For the certification period stated above, Master Golf 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	Map all habitats and vegetation types on the site; Regularly update landscape / biodiversity surveys	Maps from Google Nature Survey from 2010 by Luontotieto Keiron Oy

			<p>The Field course is built on former agricultural area (1988)</p> <p>Forest course, as named, built within wooded landscape, except two holes that are part of the old fields (1990-1995)</p> <p>Dry pine woodland the predominant habitat</p> <p>CIP Planning a new nature survey</p>
	N1.1.2 Knowledge of legal designations for protected areas, habitats and species	Understand legal responsibilities for protected landscapes and species; Record and monitor protected, endangered, or rare species found on the site	<p>There are two protected habitats on the outskirts of the course.</p> <p>Master Golf has a protected walnut forest adjacent.</p> <p>Protected woodland mean that certain sized trees can't be removed without a license.</p> <p>Clippings can't be stored near to the protected zones.</p>
	N1.1.3 Understanding and respect for cultural heritage	Protect any archaeological, historical or cultural designations on the site	The club is located in an area of cultural importance. The Manor House is protected by Finnish Heritage agency. Finnish Heritage agency is consulted when new buildings are to built in the area.
N1.2 Opportunities to naturalise the course	N1.2.1 Measures taken to identify and minimise the required area of managed turfgrass	Observe, track and / or monitor golfer play	<p>Sprayer has a GPS which is used to follow the sprayed area and the area of active cultivation.</p> <p>An estimate of the area needed for effective cultivation takes place every five years.</p> <p>Area of roughs and unmaintained scrub has been increased over the years.</p>
N1.3 Actively manage habitats for wildlife	N1.3.1 Projects to manage habitats in the best way for wildlife and golf	Regularly review and follow a habitat management plan; Prioritise native species when planting and landscaping	<p>Grassland meadows are cut once per year and clippings are collected to keep the soil fertility low.</p> <p>Forests are covered by forest maintenance plan.</p>

N1.4 Conserve key species	N1.4.1 Practical conservation measures for priority species		All the types of woodlands and their maintenance measures are done according to the forest maintenance plan.
N2 Turfgrass			
N2.1 Maintain optimum turf and soil health	N2.1.1 Appropriate turfgrass varieties adapted to climatic and other geomorphological factors	Select appropriate grass species for climate	The original choices for the turf are done in 1988. Drought resistant, low fertility requirement species were selected for the optimal fertilizing-irrigation-mowing ratio. CIP Ongoing planting to maintain desired sward and reduce turf inputs even further
	N2.1.2 Practices to maintain good soil structure and condition		On greens, fairways and tees regular aeration, sanding (topdressing) and brushing
	N2.1.3 Careful and responsible fertiliser application throughout the year to avoid over-fertilisation	Undertake soil tests and nutrient analysis	Soil tests every year during autumn Manually used moisture meter
N2.2 Prioritise mechanical maintenance	N2.2.1 Non-chemical pest, disease and weed management	Sharpen mowing blades; Remove surface moisture; Hand weeding	Clover is treated chemically, but otherwise summer workers weed manually Sharpening of blades often Surface moisture with a rope or brushing Top cutting (vertical mowing) to encourage consistent leaf growth
N2.3 Use chemicals responsibly	N2.3.1 Application of chemicals only when necessary to prevent or cure defined / identified turf health issues	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	Indication spots are known and monitored (where diseases are most often spotted) Weather conditions followed closely Frequent visual monitoring by staff

			Growth regulators decrease diseases and decrease the need of spraying
	N2.3.2 Application of chemicals with full safety precautions	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; Dilute and dispose of leftover product on untreated areas of turf	3 members of staff have a spraying license Pictures of protective equipment added and viewed Leftovers of mixed fertilizers are diluted and sprayed on the turf cultivation zone. Rinsing water is diluted and sprayed on the course this way.
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	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.	In case of malfunction of a spraying equipment, the guideline is to pump the fertilizer to a spare tank and the sprayer is taken to be maintained. There are safety valves on the piping of the sprayer. There are buffer zones a minimum of 5 m around the sensitive areas. Buffer zones can be identified on maps.
	N3.1.2 Practical measures to ensure pollution risks are minimised from clubhouse operations	Ensure all hazardous materials are safely and securely stored; Ensure compliance with all required standards and systems for hazardous waste and wastewater discharge	L&T is a licenced contractor who collects hazardous waste Wastewater is contracted by HSY which is the municipal operator
	N3.1.3 Practical measures to ensure pollution risks are minimised from maintenance facility operations	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	Pictures viewed Pesticide containers are collected as combustible waste Rinsing of pesticide containers before collection
N3.2 Safely manage hazardous substances	N3.2.1 Legal compliance in the storage, handling, application and safe	Maintain a register of hazardous materials available to authorised staff; Safe storage in secure and ventilated concrete or metal building;	Containers etc inspected by fire department annually following to the rescue plan.

	disposal of all hazardous substances	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	Hazardous materials are stored. In locked, cool storage with impermeable flooring, air conditioned, with required signs. Fuel containers double hulled and with pool (picture viewed) Absorbent materials provided and checked Emergency washings are collected on hazardous waste containments
N3.3 Responsibly manage waste / storm water	N3.3.1 Appropriate wastewater usage and discharge licences	Wastewater discharge licence; Appropriate treatment of machinery wash water (impermeable surface, oil / grease / clipping separation)	Licence confirmed Wash bay viewed Rainwater collected in ponds where irrigation water is taken. Ponds are connected between two lakes that are naturalised. From ponds only surface water flows through pipes to the lake. Solids are collected and withheld CIP Renewing of the washing bay

RESOURCES			
R1 Water			
Objectives	Requirements	Mandatory Practices	Verifier Notes
R1.1 Minimise water demand	R1.1.1 Measures to reduce the need to consume water	Target irrigation to essential playing surfaces only	Selection of drought resistant turf species Measuring the moisture content Moisture meters used Sprinklers renewed Design of the course incorporates natural drainage and rainwater reuse

			CIP Continually updating irrigation system using Soil Scouts will be installed
R1.2 Maximise water efficiency	R1.2.1 Practical measures to use water more efficiently on the golf course	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	Performance checks daily There is one person that is in charge of irrigation system full time Software checked (Rainbird Nimbus) Irrigation is automatically turned off during the rain (Raincatch)
	R1.2.2 Practical measures to use water more efficiently in buildings	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 meters checked regularly at the Manor House and at maintenance hall. Toilets are low flush Showers are low water use
R1.3 Source water responsibly	R1.3.1 Measures towards alternative, lower quality sources of water	Ensure appropriate water abstraction permit and reporting, as required	Surface water / lake water from Lake Bodom Irrigation water flows indirectly back to the lake Licence confirmed
R2 Energy			
R2.1 Reduce energy demand	R2.1.1 Measures to reduce the amount of energy consumed in course maintenance	Minimise areas of managed turf to reduce mowing, irrigation, and turf inputs	Irrigation system pump renewed that are more efficient (kWh reduced) Optimization of irrigation system Increased area of roughs Mowers are renewed and hybrids are used - fuel consumption is 15% less Growth regulators decrease need of mowing (one cut a week less)

R2.2 Maximise energy efficiency	R2.2.1 Measures to use energy and fuels more efficiently in buildings	Audit energy use regularly; Regularly review bills; Categorise and track energy consumption	Energy efficiency of maintenance hall is improved through better air conditioning Bills checked frequently Data is collected for carbon footprinting It is seen that renewing the irrigation pumps has saved energy a lot
R2.3 Source energy responsibly	R2.3.1 Measures to source alternative, renewable forms of energy	Determine potential sources of renewable energy in the area and on-site, through renewable energy providers	Ground source heating on the clubhouse (Manor House) Hybrid vehicles in operation Solar power is not allowed on the clubhouse due to the heritage regulations 7 electric car charging stations at the clubhouse CIP Air heating pumps will also be installed Cutting down consumption through the whole production chain
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	Undertake a review of materials consumed	In course management it is strictly controlled that there is no waste Sand silos (photos viewed) Local chip company collects wood clippings Glass, metal, plastic bottles, cardboard, biowaste separated at clubhouse Clubhouse restaurant managed by external entrepreneur CIP Building of compost to produce own earth for constructions

R3.2 Purchase responsibly	R3.2.1 Practical use of an ethical / environmental purchasing policy	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	<p>Restaurant has own purchasing policies</p> <p>Centralized subcontractors</p> <p>Local suppliers favoured, eg soil and sand</p> <p>Berner company supplies fertilizers</p> <p>CIP</p> <p>Consider sharing knowledge and resources with restaurant for improved supply chain (more effective purchasing policies and ethical / environmental results)</p>
R3.3 Reuse and recycle	R3.3.1 Waste stream separation for maximum recycling and re-use opportunity	Demonstrate waste separation, reuse and recycling; Track how much waste goes to landfill, or is reused / recycled	<p>Photos viewed</p> <p>Records viewed</p> <p>Tracking of waste is done by the contractor</p>
R3.4 Demonstrate legal compliance	R3.4.1 Compliance with all local and regional waste management regulations	Use authorised waste and recycling contractor for general, hazardous, industrial and green waste	Confirmed

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		<p>Master Golf is a traditional member's golf course</p> <p>Walking allowed</p> <p>Clubhouse offers local restaurant and catering services</p> <p>Weddings, meetings are hosted</p>

C1.2 Provide for volunteering and charity	C1.2.1 Opportunities available for volunteering and support of charities and good causes		Some charity events are held Co-operation with nature protection societies Teaching professionals have held "get to know golf" for schools
C1.3 Establish active community partnerships	C1.3.1 Positive and constructive engagement with neighbours, the local community and other groups	Create a 'sustainability working group'	Many local people are shareholders Sometimes there are special "evenings" for local people
C2 Golfers & Employees			
C2.1 Improve health and wellbeing	C2.1.1 Benefits to human physical and mental health from golf and facility activities		One professional is doing his thesis on this subject Majority of the members are elderly Large social and physical benefits observed Staff has free gym membership
C2.2 Be open and inclusive	C2.2.1 Inclusivity and diversity in membership and visitor policies	Demonstrate inclusive policies for members and visitors	Basic golf rules anyone can join Competitions are held at the club for people with disabilities
C2.3 Employ fairly and safely, and provide career opportunities	C2.3.1 Ethical and legal employment, working conditions and professional development	Follow all relevant national legislation and best practice for employment, health & safety etc	Apprenticeships available Youth come as seasonal workers with the possibility for career development
C3 Communications			
C3.1 Engage golfers and members	C3.1.1 Communications activities that raise awareness and understanding amongst members and visitors	Provide information on the facility's sustainability commitments, actions, or achievements	For members Website Twitter Facebook Newsletter monthly Online club magazine External media used

C3.2 Celebrate and promote sustainability	C3.2.1 Activities that raise awareness and engage people in the wider community	Provide evidence of external communications and community engagement	Use of local suppliers is favoured. Open to co-operate with locals

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