



GEO Certified®

GEO Certified® Report Grönlund Golfklubb

Prepared by Independent Verifier, Mårten Wallberg

Certified by GEO Foundation: July 2021
Valid until: July 2024

GEO Certified®

 **GEO
Foundation**
Sustainability in and through golf

“Grönlund Golfklubb is great club when it comes to hospitality, sustainability and golf in a well-managed natural setting. There are a number of sustainability-focused improvement plans in place, including new efficient irrigation, waste management consultation and further attention to renewable energy transition. I am looking forward to following this work and the positive results it brings.”

Mårten Wallberg

GEO accredited Independent Verifier



Introduction

GEO Foundation is pleased to confirm that Grönlund Golfklubb 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.

Grönlund Golfklubb 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, Grönlund Golfklubb should be awarded GEO Certified® status.

For the certification period stated above, Grönlund Golfklubb 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.isealliance.org



Verifier's Report

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

THEMES	ACTION AREAS
Nature	• Habitats & Biodiversity • Turfgrass management • Pollution prevention
Resources	• Water • Energy • Materials
Community	• 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	Grönlund GK is a rugged park- and forest 18-hole course. It has a fair amount of water, which in a sympathetic manner wiggle through an undulated landscape near the town Uppsala, near the east coast of Sweden called Roslagen. The nature of Roslagen is characterized by a

			varied, small scale landscape, rich in lakes and with a mosaic of forests, groves, arable land, grazing land and outcrop. A survey was conducted in 2015, which has been used when managing the course and its surrounding nature.
	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	The forests surrounding the course is in a major part production wood in which small scale deforestation is conducted, saving, among others, oaks and maple in order to give them the chance to grow big in the future. The amount of nature forest is rather small with some exceptions around some shelves. No rare species has been spotted on the course or its surroundings.
	N1.1.3 Understanding and respect for cultural heritage	Protect any archaeological, historical or cultural designations on the site	Before 1900, some parts of the course were small scale farmland with small fields containing small farmhouses within a forest landscape. You can still see intact small farmhouses near hole 12 14 and 17 with people living in them. During the construction of the course leavings from the stone age were discovered, which affected the line section of the course. A survey of the leavings was conducted by the county board during the construction.
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	The course has a large amount of solitary trees and groves with high biodiversity, which contributes to the characteristic of the course. Pine groves, solitaire oaks, junipers, hazel groves, solitaire fruit-trees and large aspen tree with holes from woodpeckers is specifically interesting. The club has marked out trees that are strictly prohibited to harm or cut down.
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	The club has during the last years conducted weeding of foremost fir, aspen trees and birches in some groves with the result of great positive effect on the spread of light loving plants and flowers. Dead trees are left without being cut down and cut downs of large trees are mainly left on the ground. The course contains approximately 7,500 sqm of water areas containing excavated dams. All dams except two are drained to the Almunge river. The Almunge river runs beside hole 1, 2, and 6 and has its source in the Södersjö lake eastwards. Traces of beaver and wild boar have been spotted along the river. Wild boar fences have been put up along parts of the course. The river is a very important habitat for a large number of plants and both land- and water living animals. Normally, the river dries out during late summer and different species can be spotted during different parts of the year. Deeper parts of the river harbour a rich bird life, which complement the dams on the course. The has plans to take care of the blooming of the clover in the semi rough in order to increase the amount of pollinating species like bumble bees and bees.

N1.4 Conserve key species	N1.4.1 Practical conservation measures for priority species		Small scale biotopes in the old field landscape contains flat rocks and rocks with dry meadows (for example on hole 11, 13 and 14), all which are taken care of by the club. The has been putting up around 75 nesting boxes. The club have plans for: A thorough survey of the dams. Cleaning of the dams concerning the surface species of the plants together with keeping some of the common reed in order to keep habitats for birds in combination with increased aesthetic values. A small excavator has been purchased for this cause. CIP Manage the dams more properly according to the club's plans. An extended nature survey.
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 club has the aim of having creeping bentgrass (<i>Agrostis stolonifera</i>) on the greens. However, <i>Poa pratensis</i> did unfortunately manage to work itself in the greens in 2018 more than the years before due to the heavy drought that year. The club now uses, among other measures, vertical cutting in order to reduce the amount of <i>Poa</i>. The silvergreen bryum moss (<i>Bryum argenteum</i>) is an increasing problem for Swedish golf courses and Grönlund GK is no exception. The main measure by the club to keep the moss short is to keep the greens dry and a "plugger" has been purchased in order to attack the moss.
	N2.1.2 Practices to maintain good soil structure and condition		The greens were constructed according to USGA-standards in the beginning of the 1990s. The year starts with vertical cutting and then once a month the dressing with sand is being conducted with the exception of some parts of the fairway that gets some humus in order to increase the moisture.
	N2.1.3 Careful and responsible fertiliser application throughout the year to avoid over-fertilisation	Undertake soil tests and nutrient analysis	The club is on the verge of using 'lawn sand' as a complement to the inorganic fertilizers. 'Lawn sand' is an organic fertilizer based on alga and is supposed to stimulate the micro life to get rid of the silvergreen bryum moss.

	N2.2 Prioritise mechanical maintenance	N2.2.1 Non-chemical pest, disease and weed management	Sharpen mowing blades; Remove surface moisture; Hand weeding	The club has not tried biological pesticides yet and the reason is that it's not sure it works.
	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	The club doesn't spread pesticides in a preventive way during the fall. The club sees no reason to spread pesticides if only small patches of pest occur. But, if the pest is spreading on more greens the club put pesticides on all of the greens. This is a rather expensive way of managing the greens so the club really do this as a last measure. CIP The club should do a trial with biological pesticides and more of the biological fertilizers.
		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	All filling of chemicals is made on a wash pad and over all the club has thorough routines for handling chemicals and also has a permit from the authorities.
	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.	There are spray-free zones on the course and Absol (a versatile sanitation agent which sucks up and neutralizes hazardous chemicals) is at hand in the maintenance building.
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	There is no using chemicals on greens near the well which is used for drinking water.	
N3.1.3 Practical measures to ensure pollution risks are		Ensure wash areas are on impermeable, leak-free surfaces;	The mixing of pesticides is done on the wash-pad. A couple of years ago the municipality made a visit and gave the club some remarks which were fixed shortly after.	

	minimised from maintenance facility operations	Mixing and loading of pesticides and fertilisers over an impermeable surface; Triple rinse pesticide containers and applicators	
N3.2 Safely manage hazardous substances	N3.2.1 Legal compliance in the storage, handling, application and safe disposal of all hazardous substances	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 club follows the thorough Swedish environmental laws concerning hazardous substances and all hazardous substances are well locked in while not used.
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)	Treatment of machinery is done in an appropriate manner on the wash-pad. The wastewater is also taken care of in an appropriate way. But, there is water coming in from a nearby nature area where hunting is performed and the club wants to investigate if that water is ok. The club has a plan for drainage dams with phosphorous traps. It also is preparing to submit an application to the county for the making of new dams in order to increase the diversity of animal species.

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	Water for irrigation is brought from their own dams and from the Almunge river, for which they have a legal permit. However, the club don't have devices for precise measurement of water use, devices that should be purchased in the future. The club uses its

			own well for drinking water and the quality of that water is tested continually according to a plan put together with the authorities.
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	New sprinklers are now being installed and the club is about to invest in a new irrigation system, both things in order to reduce the water used for irrigation. These two investments and with more to come is done according to a report done by an expert from the Swedish Golf Federation.
	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	Showers with modern and effective water use is installed.
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	If the new drainage dams is being realised, this water could be used in a versatile way. CIP The club should invest in a new irrigation system. The club should invest in devices for precise measurement of water use. The club should invest in the planned drainage dams with phosphorous traps with financial help from the county.
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	In January 2020 132 solar panels were installed in the clubhouse area. A comparison between 2019 and 2020 shows a decrease in bought grid energy. In 2018 the grid energy use was 160,000 kwh compared to 110,000 kwh in 2020. This solar energy can be used both in clubhouse and for the electrical machines used for the course maintenance.
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	Investments have been done concerning motion detectors for lamps in some parts of the buildings. CIP

			The club should invest in more motion detectors for lamps.
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	The club uses renewable grid energy since 2019. The solar panels has a display in the maintenance hall where you can watch the energy produced in real-time and during 2020 that amount was around 40,000 kwh. The panels cost around €35,000 but the club were funded both by the state (around €8,000) and the National federation for Sports (around €17,000). From the energy produced by the solar panels around 5,000 kwh were sold. All in all this means that the refund of the investment will be complete in about 4 years. The club wants to put up more solar cells but there are some challenges coming with that.
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	The club doesn't reuse material in any major extent, instead waste streams are handled by specialist contractors.
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	The club don't have a formal purchase policy taken by the board but instead an informal one which says that the club should always look for sustainable purchases. Also, the club use a lot of local producers.
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	The club's waste stream separation is ok but it separates mainly glass and cardboard. The club is on its way to hire an entrepreneur in order to take care and separate all the waste in a more optimal way.
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	The waste treatment is compliant with all waste regulations. CIP The club should adopt a formal purchase policy and show how it uses it. The club should consider doing a formal energy survey. The club must take a holistic approach concerning waste.

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		The local skiing club makes and takes care of the tracks for skiing (Nordic skiing) when its snow and the local orienteering club will start using the forests on the course for its tournaments.
C1.2 Provide for volunteering and charity	C1.2.1 Opportunities available for volunteering and support of charities and good causes		The club arranges one tournament a year for charity where the benefit goes to the Swedish Cancer Fund. This tournament is arranged by the haulage contractor used by the club. The restaurant also contributes its benefits the day of the tournament.
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'	The club has today a very good and productive relation with the municipality and no disagreements with neighbours.

C2 Golfers & Employees

C2.1 Improve health and wellbeing	C2.1.1 Benefits to human physical and mental health from golf and facility activities		
C2.2 Be open and inclusive	C2.2.1 Inclusivity and diversity in membership and visitor policies	Demonstrate inclusive policies for members and visitors	The club arranges courses for beginners many times a year and encourages youngsters in starting to play golf on its course.
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	The club follow all the relevant national legislation and best practice for all employees.

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	The club uses Facebook and newsletters in order to spread the word of its sustainability work and all the other good things coming out from the club. The magazine Svensk Golf (Swedish Golf) a couple of years ago wrote: "It's always fun to play a course that follows the nature offering difficulties created in God's nature. You don't always have to blast the reality". A quote that says it all.
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	A new employee in the shop has started new activity on Facebook and a lot of advertisement is coming with the small cottages for rent at the club. Last year the local newspaper Almungenytt had a two-page all positive article about the club. CIP The club should inform about the nice nature in its course guide.

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