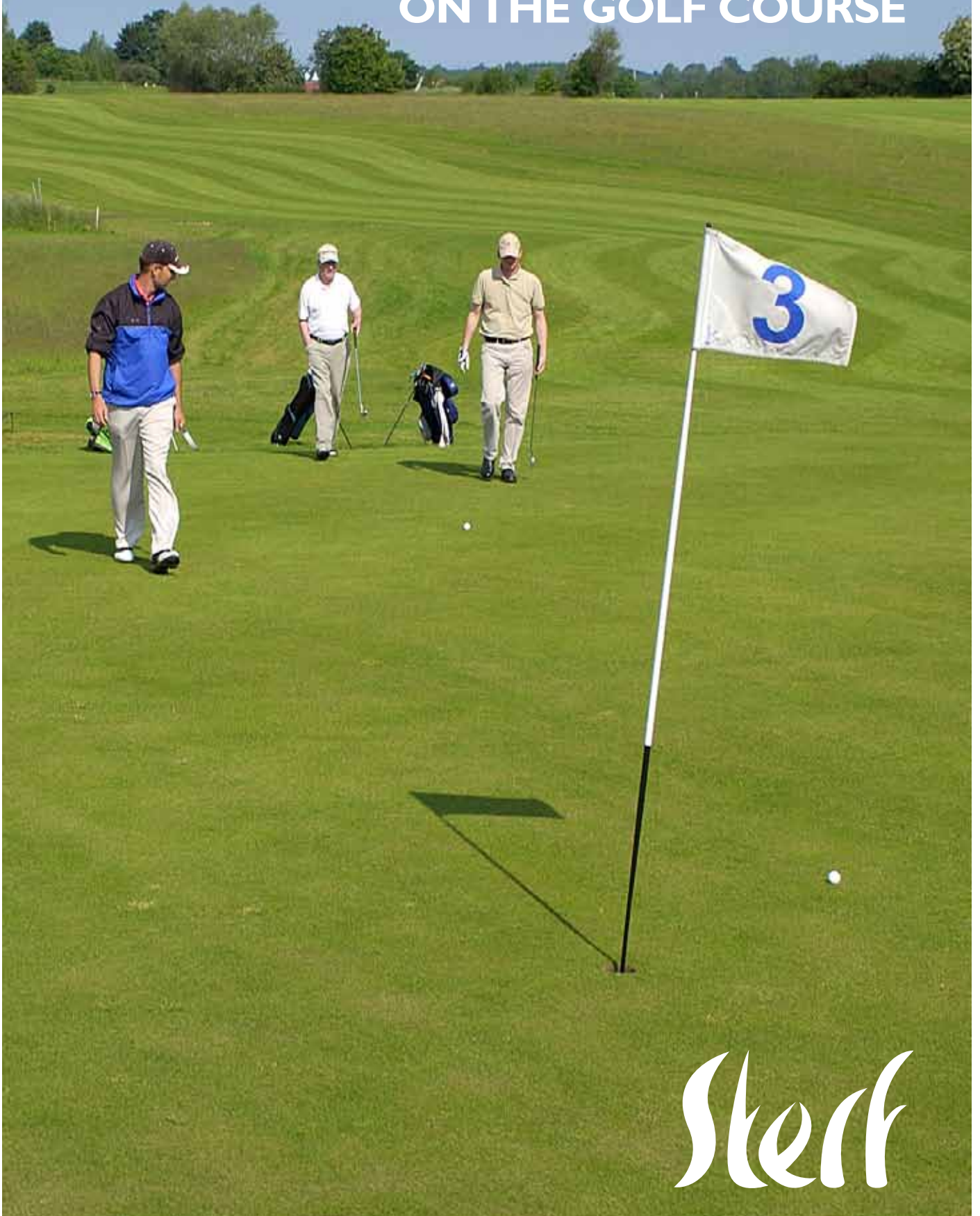


PLAYING QUALITY ON THE GOLF COURSE



Sterk

PLAYING QUALITY

A golf player's definition of playing quality depends on skills and on what the eyes see, and varies according to geography. Each golf player perceives playing quality in a unique way and it is defined by many different factors on the course.

This booklet presents the results from a user survey on playing quality performed among Nordic golf players.

It was part of the project "*Development, evaluation and implementation of playing quality parameters in a continuous golf-course evaluation concept*", which was sponsored by STERF and carried out in collaboration with the Danish Golf Union, which also supported the project financially.

The goal of this project was to get an indication of how golf players with different profiles (handicap, age, club, country etc.) define and understand playing quality and how important they rate a number of elements/parameters on a golf course.

Another important aim was to document some of the things that we already know. We tend to have a fairly good feel for what players want, but we do not know much about the connections to age, handicap, nationality, etc.

The full report can be downloaded from the STERF website, sterf.golf.se



Each golf player perceives playing quality in a unique way and it is defined by many different factors on the course.
Photo: Jens Peter Nielsen



Cover photo: Vallø golf course, Denmark. Photo: John Laursen

CONTACT

For more information, please contact
Anne Mette Dahl Jensen, Forest & Landscape,
University of Copenhagen, e-mail amdj@life.ku.dk



Tee shot at Kristianstad golf course, Sweden. Photo: Anne Mette Dahl Jensen

INTRODUCTION

A golf course is a business unit that serves thousands of customers. No other sport occupies and manages such large areas of green space and no other sport facility undergoes as many daily inspections as a golf course.

A STRICT PLAN FOR PLAYING QUALITY

The board of a golf club, the course committee and the green keepers have a budget to serve the customers and to keep the course in shape. In order to run a successful business, it is necessary to have a plan for defining the quality of the golf course so as to meet customer demands.

PLAYING QUALITY GOES FROM TEE TO GREEN

Most golf is played from tee to green, so any focus on playing quality must include fairways and tee areas as well as greens. In addition, the appearance of roughs and semi-roughs is an important aspect of the whole golf experience and is also part of the playing quality.



Driving range at Hornbæk golf course, Denmark. Photo: Jens Peter Nielsen

USER SURVEY RESPONSES

A total of 1 949 Nordic golf players provided responses regarding playing quality and playing experience and these form the basis for the conclusions outlined in this booklet. These players represent 310 different golf clubs.

The age and handicap profile resemble that found in the average Nordic golf club. The majority of the players have a handicap of around 20 and only a small proportion are young players.

KEY FIGURES	
Danish players	1 417
Swedish players	221
Finnish players	106
Norwegian players	40
Other players	165
Male	83%
Female	17%

PLAYING QUALITY DEFINITION



The survey asked Nordic players to evaluate a number of factors and to determine if they effect their golf experience. Mølleåen golf course, Denmark. Photo: Jens Peter Nielsen

Playing quality on a golf course is defined as elements that influence the golf experience. These include:

- Playing pressure on the course
- Safety
- Number of days when golf can be played
- The design of the course
- The necessity for course management when playing
- Clubhouse facilities
- How the course complies with the surrounding nature

Grass and soil are important factors and a number of parameters can be used to define playing quality on the course. These include:

- The amount of bare soil or dry spots on fairways and tee areas
- The degree of fungal attack
- How well the grass on fairways stays in the ground (rooting depth)
- Uniformity of playing quality
- Homogeneity
- Golf ball bounce on greens
- Earthworm casts
- The presence of weeds on fairway, rough or semi-rough areas

All these parameters interact to determine the playability of the turf grass and can also be used as indicators of playing quality.

In this survey, players were asked to evaluate how many of these factors along with others influence their play and whether this has an effect on their golf experience. Only elements related to the course were included, so this survey did not cover clubhouse facilities, service level, etc.



The most important green playing quality factor among the golf players surveyed is green evenness/trueness in combination with uniformity. Only players with a low handicap seem to focus more on speed than trueness. Skepparslöv golf course , Sweden. Photo:Anne Mette Dahl Jensen

GREEN SPEED IS NOT IMPORTANT

Traditionally the green has been paid the most attention and golf players like to talk about green speed.

The general impression is that golf players consider ball roll distance (stimpmeter value) as the foremost criterion for playing quality on golf greens. Therefore, the focus of many golf clubs and green keepers has been to produce high stimpmeter values on greens. Some clubs even advertise “speed weeks”.

But is this an indication of what the average golf player wants or is it the elite players who shout the loudest and set the agenda?

On asking the players, it emerged that speed is not the number one priority for most of them. The most important green playing quality factor among the golf players surveyed is green evenness/trueness in combination with uniformity. Only players with a low handicap seem to focus more on speed than trueness.

Golf clubs and green keepers therefore need to pay more attention to these two quality elements.



Young and low handicap players want the ball to be close to the ground, whereas old players and high handicap players want the grass to carry the ball. Fåborg golf course, Denmark. Photo: Jens Peter Nielsen

THE GRASS NEEDS TO CARRY THE BALL ON THE FAIRWAY

The fairway occupies a large amount of the densely cut area on golf courses. However, it is an area that is not intensely managed like greens. The main or sole management strategy in many clubs is cutting the grass.

But what is important for golf players when it comes to quality of the fairway? The quality elements that have the largest influence on the play are the grass carrying capacity and posted turfs on the fairway.

When Nordic golf players were asked whether they prefer the ball to be carried by the grass or to be close to the ground, 87% wanted the ball to be carried by the grass and only 13% wanted the ball to be close to the ground.

There was a clear connection between age/handicap and the player's response. Young and low handicap players want the ball to be close to the ground, whereas old players and high handicap players want the grass to carry the ball.

Therefore the golf clubs must make a decision on whether they will create fairways for the low handicap player or the average player.



Pests on a golf course include fungi, insects and weeds. Golf players are least able to tolerate weeds. Lillebælt golf course, Denmark. Photo: Anne Mette Dahl Jensen

LOW HANDICAP PLAYERS DO NOT LIKE WEEDS ON THE FAIRWAY

Golf courses are trying to cut down on pesticide use – in some countries due to legislation. Most pesticides used on a course are weed control chemicals and most of these are used on fairways. Therefore if the amount of pesticide use on a golf course has to be reduced, one of the major problems will be the occurrence of weeds on fairways and on semi-roughs and roughs.

When asked about weed occurrence on fairways, most players surveyed responded that different types of weed do not have a large influence on their play.

More than 50% of the players stated that broadleaved weeds and clover have little or no influence on their golf play, but approx. 50% of the players reported that they might deselect a golf course if there were too many weeds on fairways. Players that are disturbed by weeds are mainly low handicap players.

Pests on a golf course include fungi, insects and weeds. Golf players are least able to tolerate weeds.



The element with the largest impact on the play at tee areas is evenness of the area. Hornbæk golf course, Denmark.
 Photo: Jens Peter Nielsen

WE MUST CONSTRUCT LARGE TEE AREAS

The element with the largest impact on the play at tee areas is evenness of the area.

Evenness is an on-going struggle for many green keepers, especially for short Par 3 holes. When the majority of players use an iron, there is a large possibility of many turf marks being created. These marks must be filled with sand and seed in order to maintain an even tee area and the area must be kept out of play for a period of time in order for the grass to recover. This might be difficult if the tee area is small.

Therefore a tee area must be relatively large in order to maintain even areas for the players during the entire season.



Tee at Copenhagen GK. Photo: Jens Peter Nielsen



Most players find it important that the ball does not sink too deep into the sand, that there are no stones or water in the bunker and that the edges are well defined. Torekov golf course, Sweden. Photo: Karin Schmidt

BUNKERS MUST BE MAINTAINED

Bunkers are strategic elements on the course and players try to avoid them. But during a round of golf most players will land in a bunker.

Most players find it important that the ball does not sink too deep into the sand, that there are no stones or water in the bunker and that the edges are well defined. There is an overall perception that many of the different playing quality parameters for all elements on the course, including those relating to bunkers, influence the play for many players.

Therefore golf clubs need to pay more attention to bunker construction and maintenance and keep grass and weeds from growing into the bunkers, because the players do not like that.



Bunkershot at Mølleåen golf course, Denmark. Photo: Jens Peter Nielsen



High handicap players in particular want the rough to be cut low. However the low handicap players want the rough to be high, because this gives more fair play. Gyldensteen golf course, Denmark. Photo: Anne Mette Dahl Jensen

PLAYERS DO NOT WANT THE BALL TO DISAPPEAR IN THE ROUGH

The rough is designed to be punitive to players who miss the fairways. According to the definition, the rough areas on a golf course generally feature higher, thicker grass or naturally growing vegetation.

The element that has the most impact on the play from rough areas is “that the ball does not disappear”. Only 10% of the players surveyed claimed that it has little or no effect on their play if the ball disappears. Weeds in the rough, especially clover, are often responsible for disappearing balls.

There are huge differences among golf courses regarding how the rough is managed. Some courses cut all rough areas down to a few centimetres, whereas other courses have high, unmown rough.

But what do the golf players want? 70% of the golf players in this survey want the rough between fairways to be cut. High handicap players in particular want the rough to be cut low. These players more often land their ball in the rough and they want to be able to find it again. However the low handicap players want the rough to be high, because this gives more fair play.

Cutting the rough frequently might reduce the biodiversity, so this player demand conflicts with the fact

that 65% of the players want the rough to have a rich flora and fauna.

In Denmark, a volunteer pesticide agreement between the Danish Golf Federation and the Ministry of Environment prohibits the use of herbicides in rough areas. This means that if the rough is not cut, there is a possibility that a large amount of broadleaved weeds will occur and the ball will be difficult to find.

A few golf courses in Denmark and Sweden have introduced grazing animals on the course in order to fight weeds in the rough. This might be a viable solution, as nearly 70% of the golf players surveyed would accept grazing animals in rough areas.



Sheep grazing at Hornbæk golf course, Denmark. Photo: Anne Mette Dahl Jensen



Nature experience has the greatest impact on the golf experience in combination with the design of the course. Cape Kidnappers, NZ. Photo: Karin Schmidt.

NATURE MORE IMPORTANT THAN LAYOUT

Some overall elements have an influence on the whole golf experience. The main issue among players is the nature experience. This element has the greatest impact on the golf experience in combination with the design of the course.

There is a correlation to age – older players are more interested – but generally the nature experience is important to most age groups. Women are also more interested in the nature experience, as are high handicap players.

Part of the nature experience involves the aesthetic value of trees on the course. Nearly 90% say that whether the trees look healthy has a large or some impact on the playing experience.

Therefore golf courses should take more care to enhance their nature value, because the players want nature – healthy looking nature.



Healthy looking nature at Hornbæk golf course, Denmark. Photo: Jens Peter Nielsen



Sustainable management of the golf course is more important to players in Denmark and Sweden than to players in Finland and Norway. Hornbæk golf course, Denmark. Photo: Anne Mette Dahl Jensen

ENVIRONMENTAL FRIENDLINESS - A MARKETING ARGUMENT?

Golf is an outdoor sport and a golf course is a piece of nature – some of it managed but often large areas are managed only rarely or not at all. There are trees, birds, streams or lakes. Today there is a general focus on nature conservation, including the nature on golf courses.

This survey shows that most players do not care whether the club has an environmental protection policy and that environmentally friendly management does not affect their golf experience. Only 14% reported that environmental awareness has a large influence on their golf experience.

Players with the greatest focus on the environment are older players, women and players with a relatively high handicap. Sustainable management of the golf course is more important to players in Denmark and Sweden than to players in Finland and Norway.

More and more clubs around Europe are becoming GEO certified – a kind of environmental certification. Some courses in the Nordic countries have also been certified and more are in the process of becoming certified.

A discussion is going on as to whether GEO certification can be used as a marketing tool to attract golf players. The results from this survey seem to indicate that GEO certification cannot be used as a strong marketing tool in order to attract players. GEO certification must primarily be sought because the club/course wants to commit to sustainable development. Instead, courses might benefit more from marketing nature or actually improving their nature.



Nesting box. Gräppås golf course, Sweden. Photo: Karin Schmidt



A large proportion of players would accept fees being raised if chemical control of pests is restricted and maintenance costs have to rise in order to maintain playing quality. Research at Furesø golf course, Denmark. Photo: Anne Mette Dahl Jensen

EU LEGISLATION – PLAYERS WILL SUPPORT RESEARCH

National or EU legislation provides some challenges to golf courses. An important piece of legislation with a possible impact on golf course playing quality is the EU directive on sustainable use of pesticides. The amount of pesticides used on golf courses has to be reduced and this might affect the playing quality.

This survey showed that many playing quality parameters are important to the golf players. But approx. 60% of the golf players do not know the consequences of the pesticide ban in relation to playing quality.

A large proportion of players, approximately 60%, would accept fees/charges being raised if chemical control of pests is restricted and maintenance costs

have to rise in order to maintain playing quality. In addition, about 50% of players are willing to pay more for playing golf in order to enable clubs to support research into course maintenance.

This is a higher percentage than expected and providing more information to players in relation to legislation and research might even increase this figure.



Meeting at Smörum Golfcenter, Denmark. Photo: Karin Schmidt

COMMUNICATING ENVIRONMENTAL ISSUES IS IMPORTANT

THE DANISH CASE

The Danish Golf Federation signed a pesticide agreement with the government in 2005. The aim was to reduce the use of pesticides. Reduction of pesticide use will to some extent affect course quality, since pesticide-free/pesticide-reduced management techniques are not yet fully developed.

40% of Danish golf players have never heard about the agreement and 55% do not know the consequences of a reduction in pesticide use.

An evaluation of communication strategies for environmental issues might be helpful. It seems necessary to make the players aware and to encourage them to accept a decline in quality or a fee increase due to increased maintenance costs.

However using the club website for this communication might be ineffective, because this survey revealed that only about 20% of players read the club website frequently.



The high quality courses displayed on television have exceptional green fairways and greens which might explain why a majority of the Nordic golf players surveyed claim that grass colour is of high or some importance. Pebble Beach, hole 18, two weeks before the US Open in 2010 (USA). Photo: Anne Mette Dahl Jensen

GOLF ON TV AFFECTS OUR PERCEPTION OF QUALITY AND COURSE AESTHETICS

Many golfers enjoy watching golf on television. Tournaments displayed on television are often played on high quality courses with a large budget for course maintenance and in countries with no or limited legislation regarding pesticide and water use.

In the Nordic countries, Swedish players watch more golf on the television than Danish, Finnish and Norwegian golf players. This is probably because a large number of Swedish golf players are currently playing

on the European or PGA tour. This might explain why the Swedish golf players place greater emphasis on quality.

These high quality courses displayed on television have exceptional green fairways and greens and this might explain why 75% of the Nordic golf players surveyed claim that grass colour is of high or some importance.

CONCLUSIONS

This survey demonstrates that the focus in a golf club should be on course quality – just as much as on playing pressure, safety, course design and clubhouse facilities.

Approx. 95% of the players surveyed believe that the course condition is of great or some importance. However, players do not know much regarding quality and what they can do to help. Approx. 60% of the players surveyed want more information regarding how they can help maintain course quality.

In general, the condition of the course, down to the smallest detail, is of great importance to most golf players and it influences their play. This means that golf course managers should focus on obtaining high course quality.

This survey also clearly indicates that communication strategies targeted at golf players can be improved.

There is a lack of knowledge among players regarding quality and environmental issues. If golf courses are forced to cut down on pesticides, the players need to be informed of possible consequences.

Low handicap players view course quality parameters differently than high handicap players. Therefore, each golf club has to decide whether it should focus on low handicap players and create a champion course, or whether it should be satisfied with a different quality preferred by the average golf player.

This survey also revealed that the factor that means the most in having a good golf experience is the nature experience. Therefore, course management should focus on each course element in detail, but also on establishing nature on the golf course.



The factor that means the most in having a good golf experience is the nature experience. Monterey Peninsula Dunes golf course, USA. Photo: Jens Peter Nielsen

Written by

ANNE METTE DAHL JENSEN

Forest & Landscape
University of Copenhagen

Sterf

STERF (Scandinavian Turfgrass and Environment Research Foundation) is the Nordic golf federations' joint research body. STERF supplies new knowledge that is essential for modern golf course management, knowledge that is of practical benefit and ready for use, for example directly on golf courses or in dialogue with the authorities and the public and in a credible environmental protection work. STERF is currently regarded as one of Europe's most important centres for research on the construction and upkeep of golf courses. STERF has decided to prioritise R&D within the following thematic platforms: Integrated pest management, Multifunctional golf facilities, Sustainable water management and Winter stress management. More information about STERF can be found at sterf.golf.se