



Short communication

Perceived accessibility on golf courses – Perspectives from the golf federation



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ABSTRACT

This pilot study addresses the effect of golf course establishments on public accessibility to recreational areas. There has been debate over whether golf courses represent a limitation to public access to green spaces and thereby the possibility for outdoor recreation. In Scandinavia, freedom to roam is an important legislation providing public access to the countryside. However, freedom to roam is not without limitations, and common rights does not necessarily lead to frequent use of accessible areas. In this study we assess whether golf course establishment prevent or provide accessibility to recreational areas in practice. Through interviews with green keepers and representatives from the golf federations in four Scandinavian countries we found that the effects of golf course establishment on accessibility vary between golf courses. In areas with limitations to freedom to roam and infrequent recreational use prior to the golf course establishment, the use can actually increase due to introduction of inviting elements such as information signs, paths and public resting areas.

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1. Introduction

Landscapes, particularly in near urban areas, are under great pressure from a diversity of interests, and the European Landscape Convention (Council of Europe, 2003) explicitly highlights the need to safeguard everyday landscapes for the benefit of people. Access to recreational landscapes has become an increasing concern in European policy and planning over the last decades. Accessibility to areas for low threshold recreation is understood as one important prerequisite and driver of physical activity in urban populations (Koppen et al., 2014). The view on outdoor recreation has changed from hiking in the forest or mountain to also include walks in the neighbourhood. This is for example mirrored in the Norwegian Environment Agency's campaign on urban outdoor recreation (Norwegian Environment Agency, 2014).

Since pressure on urban green spaces is increasing, there is a need to start looking at all urban green spaces that could be used as recreational spaces. In this article we focus on golf courses, these can contribute to the need for recreation in near urban areas. Golf has become an increasingly popular sport in Scandinavia, and the Norwegian Golf Federation is currently the third largest sports federation in Norway. As a consequence the number of golf courses

has increased dramatically, as in Norway, where the number of golf courses increased from 40 in 1995 to 174 in 2011. A similar development has been seen in Sweden, where golf is now the third largest sport, with 474,000 golfers registered in 2014. Golf courses occupy large areas. A standard 18 hole golf course typically covers between 50 and 100 hectares (Norwegian Golf Federation, 2002). At a typical 18 hole golf course about 50–60% is not used for golf play, hence there is a potential for other kind of recreational uses such as walking which in Norway is the most common outdoor recreation activity (Odden, 2008). As many golf courses have been established near cities, it has been debated whether this can be in conflict with the objective of equal accessibility to green structure for recreation for the urban population. As safeguarding attractive near urban recreational areas is high on the political agenda, understanding and predicting the effects of golf course establishments for public accessibility is of importance both to national and local planning authorities and to the Scandinavian Golf Federations. There is very limited research on public access, or perception of access, to golf courses. But when suggesting establishments of new golf courses the topics is discussed in both media and on the web (e.g. Gundersen, 2001; Reusch, 2013; Mellingsæter, 2014). A large body of literature is dealing with golf tourism (e.g. Markwick, 2000; Priestley, 2006; Woodside, 2009) or ecological or environmental impacts when establishment of new golf courses (e.g. Salgot and Tapias, 2006; Colding and Folke, 2009). Conflicting interests in relation to land use, such as protection of cultural landscapes (Norderhaug, 1990) or nature conservation

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(Jönsson, 2009) or people's opinions about establishment of new golf courses are also found (Briassoulis, 2010).

In Scandinavia the legislation is different in terms of the right to roam the countryside. In this study we focus on Sweden, Norway, Denmark and Iceland. In these countries the public has access to roam on privately owned forest and farm land as long as it is not in conflict with crop production or otherwise a nuisance to the property owner (Ministry of the Environment, 1957; Ministry for the Environment and Natural Resources, 1999; Swedish Environmental Protection Agency, 2013). This means that farm land can be accessed during winter time when the ground is frozen. In Denmark, it is not permitted to trespass on private land except on permanent roads and foot paths (Danish Ministry of the Environment, 2014). Most of the golf courses in Scandinavia are privately owned, however, only few restrictions apply for movement for non-players on the courses. Except for Denmark, it is not allowed to put up "No access" signs, nor to fence off the area. However, warning signs are allowed, in order to make the public aware of possible danger from flying golf balls and to guide them to use safe areas and foot paths. Old accesses and rights of way have to be maintained. Restrictions of access differ from course to course. On many courses, not only in Scandinavia, the clubs have put up illegal signs and fences. Another dilemma is that the public in countries that practice freedom to roam, tend to think they are restricted to use public paths only. The buildings of public paths so to speak restrict their access unintentionally. The Norwegian government suggests that to secure environmental or sustainable goals it can be necessary to divide the area regulated to golf sport into different zones where walking path zone is one example (Ministry of Local Government and Modernisation, 2000).

The freedom to roam is seen as an important public right and a key prerequisite for people's possibility to enjoy nature and outdoor recreation. Compared to the situation prior to golf course establishment, where freedom to roam has applied in the majority of cases, golf course establishment is seen as an impediment to public accessibility in the area. However, the accessibility in terms of freedom to roam does not necessarily result in high frequency in actual use of an area. Even if outdoor recreation is very common in Scandinavia and deeply rooted in the population (Gelther, 2000) it is not so that all people want wild nature. Instead many people appreciate managed routes and signs of accessibility and care to feel safe (Nassauer, 1995; Kaplan et al., 1998). Many golf courses have introduced elements to enhance internal accessibility in the area, such as roads and paths, as well as signs, benches and other recreational elements. Provided that the public perceives the courses as open to them, the accessibility in terms of facility of movement, as well as the actual recreational use, may therefore have increased.

One can assume that one of the reasons to involve in the golf sport is likely the experience of the outdoor. However, does the recreational value only benefit the golfers? The aim of this study is to assess the public access and accessibility on golf courses and the impact on access to recreational areas for people from golf course establishment. The study is a pilot study focusing only on green keepers' and professionals' experiences with construction of golf

courses. In the paper we will study physical accessibility rather than cultural or social accessibility (Koppen et al., 2014). This means our focus is on different attributes and elements introduced on golf courses, and how they could contribute to perceived accessibility. We will discuss accessibility in the summer and winter season, as these differ distinctly in Scandinavia, leading to different possibilities for recreation throughout the year.

2. Method

2.1. Choice of golf courses

The Scandinavian Turfgrass and Environment Research Foundation, STERF, was contacted to find relevant golf courses to be part of the study. The criteria for choice of golf courses were: a variety in urban and rural settings and diversity in landscape types. STERF suggested 3–4 golf courses from each of the Scandinavian membership countries (except for Finland). From these we chose two from each country, which gave us a sample of eight golf courses. The courses are typical for Scandinavia when it comes to size, landscape setting and design. They were all surrounded by natural or agricultural land and five of them also by housing estates. For a list and facts of the golf courses see Table 1.

2.2. Interviews

To assess how design of a golf course can influence perceived accessibility and people's use of an area, we completed interviews with people with local golf knowledge. At each course (except Ledereborg) interviews were made with two interviewees: a local green keeper and a head of course facilities in the golf unions in each of the countries. In total 15 persons were interviewed. It was important that the interviewee knew the history of the site and the development from before the golf course establishment. The first part of the interview was performed as a walking interview with the green keeper. This means that the interviewee walked together with the researcher on the golf course while talking about signs of accessibility. Walking on the golf course created an important context for the interview and made it possible to point at important features in the landscape while talking about them. Based on literature on both external and internal accessibility (Koppen et al., 2014) four signs of accessibility were registered:

- *access points* – the number of public access points.
- *information signs/boards* – signs/boards that give information about accessibility on the golf course.
- *public roads/paths* – presence of public roads/paths on the golf course.
- *public resting areas* – presence of seating on the golf course.

We grouped the number of access criteria into *few*, *moderate* and *many*, see Table 2. The numbers are based on general experience from golf courses in Scandinavia, UK and New Zealand on what is common and can be functional on a golf course with mixed groups

Table 1
An overview of the eight golf courses in the study.

Golf course	Location	Country	Type of golf course	Area in hectares
Oppgård golf course	Oslo	Norway	18 holes	70
Vestfold golf course	Tønsberg	Norway	18 holes + 9 holes	85
Delsjö golf course	Göteborg	Sweden	18 holes	80
Ullared-Flädje golf course	Falkenberg	Sweden	18 holes	75
Smørum golf course	København	Denmark	27 holes + 9 holes	190
Ledreborg golf course	Roskilde	Denmark	18 holes + 9 holes	170
Korpa golf course	Reykjavik	Iceland	18 holes	70
Tungudalsvöllur golf course	Isafjordur	Iceland	9 holes	12

Table 2
Access criteria's that were used to measure internal accessibility on the golf course.

	Few	Moderate	Many
Access points	<3	3–5	>5
Information signs/boards	<5	5–15	>15
Roads/paths	<2	2–5	>5
Seating	<2	2–10	>10

of golfers and visitors. In addition to the grouping notes were also taken during the interview.

After the walking interview a group discussion were performed with the researcher, the green keeper and the representative from the golf union. Questions regarding public use and accessibility before and after construction of the golf course were discussed in light of the situation prior to golf course establishment when freedom to roam applied (in Denmark: limited freedom to roam). Maps and historical books with photographs were used in the discussion. During the interview the researcher took notes and made comments on maps/photos.

3. Results

Results from the study shows that all but one golf course (Ullared-Flädje) had many access points. The number of signs/boards at the golf courses differed from none at Ledreborg, a few at Tungudalsvöllur, Smørum, Ullared-Flädje and Oppegård and many at the other golf courses. The reason why Ledreborg did not have any signs/boards was because of a wish to minimize all kinds of signs on the course to keep the traditional cultural landscape free of any visual disturbance. Most golf courses had several to many paths/roads through the golf course. The number of resting areas differed between the golf courses, Delsjö had many public resting areas, Korpa and Vestfold had moderate number of seating while the rest had few or none, see [Table 3](#).

In the group discussions we found that despite the principle of freedom to roam, the land at several of the golf courses had in practice not been accessible to the public prior to golf course establishment. Four of the eight courses were considered as being closed to the public prior to course establishment. A reason for this was that on all four sites there had been crop production, which limits the freedom to roam, or there had been physical landscape hindrances that made it difficult to use the area, at least during summer season. Three of the golf courses were considered partly open, due to presence of paths/roads in the area. One golf course, Korpa, had previously been open and accessible to the public, in accordance with the principle of freedom to roam. The area at Korpa had been used for recreation long before the golf course was constructed. Hence, after the golf course establishment Korpa was less accessible while all other golf courses became more accessible and more used, as confirmed by the green keepers' judgement.

4. Discussion

The high number of recent golf course establishments has created debate concerning the effect on public access to and use of

Table 3
Presence of signs of accessibility.

Golf courses	Access points	Information signs/boards	Roads/paths	Seating
Oppegård golf course	Many	Few	Moderate	Few
Vestfold golf course	Many	Many	Many	Moderate
Delsjö golf course	Many	Many	Many	Many
Ullared-Flädje golf course	Few	Few	Moderate	Few
Smørum golf course	Many	Moderate	Many	Few
Ledreborg golf course	Many	None	Many	Few
Korpa golf course	Many	Many	Many	Moderate
Tungudalsvöllur golf course	Many	Few	Few	None

these areas. Where the principle of freedom to roam is strong, it has been claimed that golf courses restrict public access to these often attractive and large areas, which could be important recreational areas also to non-golfers. This pilot study, however, show that the situation is rather nuanced.

When analysing the change in use and accessibility after construction of the golf course we found that all but one (Korpa) were more accessible and more used by the public after construction of the golf course. We found that although freedom to roam applied prior to the golf course establishment (although with limitations in Denmark), many of the areas had land uses that restricted freedom to roam. Particularly, this relates to crop production, where people's access is restricted during the summer months. During the winter months these areas are open to the public, but this applies equally on the golf courses, where people are usually allowed to use the whole area during the winter season. Several golf courses also have ski tracks during winter to encourage public outdoor recreation. In the areas where access was previously restricted, we found that the golf course establishment actually increased accessibility. The increase in accessibility had in several cases to do with signs and presence of recreational elements such as benches and resting areas. The introduction of new paths and trails also facilitated movement on many of the golf courses as these were fully accessible to the public. As a result it is likely that a number of people may find the areas more attractive for walking, jogging and bicycling than before the roads were built. Green keepers also confirmed that non-golfers used the areas for recreation after establishment of the golf course.

In the areas that had not had restrictions for use prior to the golf course establishment, the actual accessibility has gone down, since movement is restricted to non-golfers outside trails and paths. This situation was found on Korpa. The interviews revealed that Korpa is less accessible to the public compared to before the golf course was established, even though public paths, cycle paths, signs and resting areas have been laid out on the site. Prior to the golf course establishment Korpa was a recreational area. Changing an existing recreational area into a golf course did result in restrictions related to movement on the site.

The results show that a range of different measures have been taken on the eight golf courses in terms of increasing perceived accessibility for the public. We found that after golf course establishment, signs of accessibility have been introduced on the golf courses to inform the public that they are welcome to use paths and resting areas on the courses. As an example, Delsjö close to the city of Gothenburg, is a very popular outdoor recreation area with joggers and families using the public paths on the golf course between the city and the adjacent nature reserve. Golf courses in rural areas have relatively few non-golfer visitors on the site and the need for resting areas is consequently low. In the urban situation the need is much higher as is the case for Oppegård, Delsjö, Smørum and Korpa. However, only two of them have high number of public resting areas. Even though several measures can be taken to open up for public recreational use, it is an issue of how lay people perceive accessibility. As Koppen and colleagues points

out (2014) there is a difference between physical accessibility and cultural, social and socio-psychological accessibility. A landscape can be perceived as accessible to some, but not to others, depending on peoples background. There seem to be a general scepticism to use golf courses for recreation. This scepticism most likely lies in lack of knowledge of what is allowed for and not on golf courses. People are generally afraid to step on private land – which golf courses probably are considered as by most laymen. Similar parallels can be drawn to coastal areas. According to Norwegian law these areas are free to roam but due to lack of knowledge about laws and rights, some people might find it difficult to use these sites (Skar and Vistad, 2013). Other limitations related to use might lie in the experience of a golf course to be an unsafe place. Increasing the amount of information and seeing other non-golfers on the golf courses can increase the feeling of safety and accessibility.

In addition to registrations of signs of accessibility on the golf courses this study is based on golf expert's perceptions (green keepers and members of the golf federations) of public accessibility on the golf courses. The experts are of course positive to the golf course establishment, hence results can be biased. But we were interested in the change of accessibility and use after golf course establishment hence these experts, with local knowledge, were highly relevant to interview. In future studies we aim to assess lay people's perceptions regarding use of golf courses for recreation. Not least to see whether signs of accessibility such as seating, information boards etc. actually help to promote public access. It would also be interesting to interview people that already use golf courses for recreation as well as potential users living nearby.

To conclude, despite the loss of freedom to roam as a general principle within golf courses, this pilot study has demonstrated that golf course establishments can in some cases increase accessibility. Freedom to roam does come with practical limitations, particularly during the summer months, and some of the previous land use implied more restrictions for recreational use than the golf course does. Introduction of inviting elements such as information signs, paths, seating will provide information about the possibilities for use for non-golfers. This pilot study has thus revealed a nuanced picture of the effects of golf courses on public accessibility, where golf courses can be both a constraint but also imply new possibilities for recreation.

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