

International Study Trip Sweden 2023

From Tuesday 30 May to Thursday 1 June, the annual study trip took place, this year to Sweden.

Stefan Nilson was our host and together with his colleagues from the Swedish Golf Federation, they had put together a nice program.

Representatives came from Denmark, Germany, the Netherlands and Sweden. The theme is sustainability.

Day 1

After an early but smooth journey, we met our host Stefan Nilsson at the airport of Goteborg. We quickly headed to Hills Golf & Sports Club (Möln dal). The reception was followed by an introduction about Hills GK by course manager Christoffer Andersson. Golf at Hills Golf & Sports Club is very much what it sounds like. Rolling hills and stimulating scenery are part of the distinctive character of the course. But you'll also find towering pines, sparkling streams, Caribbean-style white bunkers and swaying reeds. 18 holes PAR 71. Green fee SEK 900-1600 (€ 77.00-138.00) Full membership SEK 22900 (€ 1,975.00). European Tour: 2018: Nordea Masters 2019: Scandinavian Invitation. The course has changed hands several times recently. Financially difficult to get profitable, probably also because there are many beautiful golf courses nearby. Initially designed and laid out for the better golfer, but this limited the influx of golfers. In the meantime, the course has been made easier, aiming for the average golfer. The track is currently very dry as it has not rained for 6 weeks.



Peter Edman (SGF) then gives a presentation about Sweden as a golf country. In Sweden there are more than 400 golf courses and the percentage of the population that plays golf is about 20% (in the Netherlands it is <2.5%). Almost all courses are closed from November to March due to snow. The country has various climate zones which causes considerable differences in golf course maintenance. Winters, especially in the North, are long and cold, which places great restrictions on the ability to have fine grasses on greens and fairways. It seems that climate change is

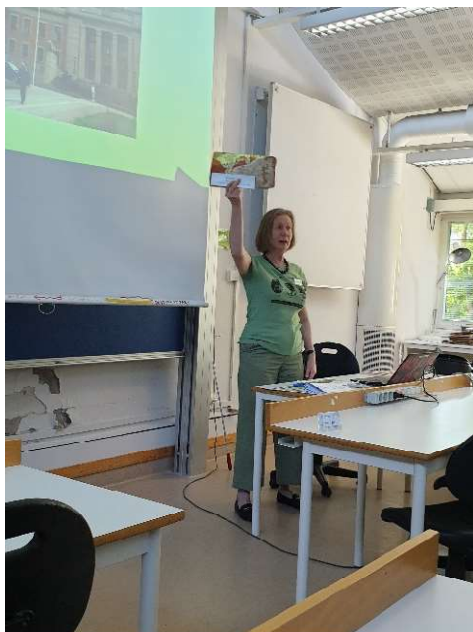
making this even more unfavorable. Poa Annua is dominant on 85% of the golf courses. This applies to all common types of greens such as Push up, USGA and other sand based greens. This also means that some fungi are very active and need to be dealt with. This includes snow mold and dollar spot. There are exceptions such as Vallda GK (100 % fescue) where we will visit on the last day.

Next, Patrik Niklasson of Skovde GK gives a presentation on automowers, MLSN and grass clippings. After many pioneers in the past, the last generations are professional without cables and can handle many hectares. Financially interesting but large start-up capital needed. Of course, they are not completely maintenance-free. On fairways and in the semirough the



quality improves. Husqvarna 550 aims for top 10 golf courses. Patrik has carried out tests to mow from 16.00 – 07.00 hr on red fescue fairways. That turns out to be going very well! 26 automowers are needed for 10 ha fairway and 5 ha rough. The cost is about half of a fairway mower. He notes a significant improvement in quality, but wormcastings are still a major problem. There seems to be a beneficial effect on less disease pressure due to better N level and a harder surface. Members respond positively to it.

Patrik is also working on MLSN and grass clipping volumes, but does this mainly out of interest in collecting data and not yet directly to manage it. He has a dashboard with stimp – HOT – clippings.



Then we went to the Botanical Garden where Marina Usoltseva, director of the Botanical Analysis Group (founded in 1998), tells us about her work in researching fungi in grasses. Since 2003, they have started collecting samples from golf courses. The analyses include data on 30 different diseases, nematodes and insects. The top 3 diseases are snow fungus, Anthracnose and dollar spot. Rolling has proven to be good against dollar spot, but at the same time densification must be prevented. In the meantime, a lot of knowledge has been built up cause and effect. However, the practical application still seems to be a difficult point. Thomas Phil reports that in Denmark good experiences have been gained with a mix of canina and colonial bent (no dollar spot) and with a mix of red fescue and colonial bent (slight infestations).

After this we went to Dagsholm GK, where we were received by Niklas Jansson. We enjoyed a tasteful dinner with as a special mooseburger in a very nice setting.



Marco Blom gives a presentation after dinner about his experiences with water management. He shows how he uses the data from his weather station to tightly control water consumption. He also gives examples of how you can reduce water consumption.

Day 2

We stayed at the Bohusgården hotel. After breakfast we returned to Dagsholm Golf Club (Färgelanda) Dagsholm GC is one of the most easily accessible complete 18-hole golf courses in Western Sweden. The course is located next to Lake Ellenö in the municipality of Färgelanda in southern Dalsland. Each hole gives you a unique experience because the nature is varied with forest areas, ponds, streams and a hilly and in between completely open terrain. 18 holes par 72. Green fee SEK 350-550 (€ 30.00-47.50). Full membership SEK 5.800 (€ 500,00). We received a presentation from the owner Niklas Jansson about his vision on the sustainable management of the track. The whole family is involved in maintenance and management. In the past it was financially difficult to run. But now the course is flourishing, literally and figuratively. He pays



attention to minimizing costs but at maximum quality. He has achieved this, among other things, by using special Eco diesel. Lower consumption and better for the environment. And the members are happy.



Niklas is also very active to give nature its best chances in the natural parts of the golf course. He has turned wasteland into a very varied flower country by burning it down. Usually this happens in March. On balance, great profit for nature. This was then shown and explained again with a circular walk.



Olaf Bos then gave a presentation on growing, selecting and propagating grass. It is a very long process that can take up to 16 years. It is also a difficult process from selecting grass to getting it to the market. The focus is mainly on disease resistance, growth rate and sustainability. Nowadays, coolseason and warmseason grasses are mixed more often. Grass species that experience less heat stress also seem less susceptible to diseases such as dollar spot. New species are also tested for greater tolerance of gluttons by grubs (Resilient Blue). The listing on the rankings is

expensive, therefore not all varieties are registered and not all lists are used. Olaf shows how specific and in depth the properties are looked at. In the end, the best varieties come together in the bags. But with specific wishes you can always approach him.

After this we went south, where we had lunch in a fine restaurant Salt et Silt in Klädesholmen, a very beautiful village on the coast where we made a short walk to enjoy the beautiful sights.

Our next visit was to Hofgårds GK (Rolfstorp). Hofgårds is an environmentally sustainable golf course. The course is located about 15 km east of Varberg in the beautiful valley of Himleån. Half of the course is played in an open heath area, the other half in a hilly deciduous forest area adjacent to "Gässlösa Naturreservat", one of the most beautiful beech forest reserves in Halland.



Ecological track management. Hofgård GC is managed according to the motto "Golf on nature's terms" - golfers and birds, animals and plants must thrive on the course and the species and individual diversity must be as great as possible. The most important part of this is that they never use any kind of chemical fungicides or pesticides on the course. Drainage water is recovered and used for the irrigation of the track. Hofgård Golf Course is at the forefront of ecological course management, both seen from a Swedish and international perspective. The management ideas according to which work has been carried out for more than twenty years correspond to what is nowadays called IPM (Integrated Pest Management). 18 holes PAR 70. Green fee SEK 300-550 (€ 26.00-47.50). Full membership SEK 5.600 (€ 483,00).

After a hospitable welcome, the owner Mr. PG Peterson told us about his great success namely 30 years of pesticide and fungicide free management, with a beautiful course as a result including a beautiful and flourishing nature. Then the head greenkeeper, Pär Sturesson, told more details about the sustainable maintenance, completely chemistry-free. Greens were a mix poa/bent. They also overseed with fescue but it was little observed. Top layer seemed pretty nice. Greens were quite

humid despite the fact that little irrigation had been applied. Signs of recovery from snow fungus were still visible. Often recovery comes with poa annua. We ended the afternoon with a circular walk through the course. After thanking our hosts, we said goodbye and drove to our hotel called Gottskär.

After dinner we had a presentation about Artificial Intelligence and the application possibilities at golf by Claes Holmström. He has set himself the goal of collecting data to create a tool that helps make decisions. First of all, it is important to formulate what the problem is that we want to solve. This may be followed up in consultation with a number of representatives of the study trip.

Day 3

We are warmly welcomed at Vallda Golf & Country Club. It is a Scottish Inland links course on the west coast of Sweden that is ranked as one of Sweden's top ten courses. 18 holes PAR 72. Green fee SEK 850-1,250 (€ 73.00-108.00). Full membership SEK 13.900 (€ 1.198,00). 900 members. European Tour: 2021: Scandinavian Mixed.



Head greenkeeper Johan Axgren talks about the golf course and the maintenance at Vallda G&CC. Vallda is clearly a high end course. 32,000 rounds are played annually. Built on clay and during the construction, a lot of sand was applied. A thick sand layer created. Red fescue roots go deep into the clay. But the top layer is poor and therefore little bothered by weeds and poa annua. Red fescue is the focus everywhere. Johan has 9 permanent staff and 6 seasonal employees. Total 15 in full season. Long term maintenance is the focus. Most of all dress sand is applied in spring. This is also

the case on the greens. Maybe 2x later in the season. He uses little fertilization and also little water. Sprinkle on during the rain (soak). He has a 4000m² nursery and the grass is used completely every year.

Stefan Nilsson then talks about the construction of Vallda G&CC.

Flip Wirth gave a presentation about the latest developments of DGB, the DGB NGA knowledge platform and the status of the ongoing trials.

Arthur Wolleswinkel explains the state of affairs of the dollar spot investigation in the Netherlands.



After lunch we take another group photo, thank our hosts and then the delegations head for home.



What was remarkable:

The courses visited were low with use of nitrogen 70 kg N/ha/year, with no precipitation from the air as is the case in the Netherlands with 25-30 kg N/ha/year.

The greens had quite a lot of red fescue/bent grass.

Play quality of the greens is good and quite fast, as they mow quite short. In addition, they also come out of the winter quite well. In the Netherlands we may have a little more playing damage and they may have more frost damage. But the turf can recover quite quickly. The fact that it was quite poor and dry at the time of our visit does not really cause much problems, it may have looked a bit less beautiful, but for the game it was fine. In addition, it was noticeable that many greenkeepers try to think from: 'what the golfer wants' or 'how can we make the best of it for the golfer', which you sometimes see differently among Dutch greenkeepers.



The DGB group had some extra time and found a nice spot on the coast to get some sea breeze before we went to the airport for the home trip.

On the DGB website you will find the presentations: <https://www.dgbbeheer.nl/en/studiereis-zweden-2023/> and the link to the photos.