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Golf Facility: Mjölby Golfklubb
Prepared by: Mårten Wallberg
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Executive Summary

Site-visit 05/07, first renewal of certification initially awarded in 2014. Present during the audit were the members of the sustainability group, the chairman of the board and the course manager. The club has from the start been characterized by genuine non-profit work by its members, a policy that puts a lot of demand on the members. But, as the club now has employed a club director, the sustainability working group, and of course all the other groups and committees, has more time to develop its work. Founded in 1983 with 18 holes completed in 1989 Mjölby resides in a surrounding with both old farmland and mountains with old-growth forests. Especially the mountains and forests area are perfect for nature trails, a fact that the club are realizing with great enthusiasm together with in all forms enhancing the biodiversity. Nine holes are situated in the old farmland and the other nine holes in the forest area. The club has as a part of its philosophy to let the original landscape rule the management and construction of the course, without letting down the game of golf. The collaboration with the community has increased during the past years with for example a joint-project with the County Board concerning a nature trail and also about the ponds. All in all the club is constantly developing its sustainable work in a good manner.

Nature

The course is suited on old farmland containing meadows and grazing land and old forests. The area where the forests and grazing land are is inaccessible terrain and it was bold to decide to construct a golf course there. The club has made surveys of the flora, large mammals, birds, batrachians and reptiles. The surveys were conducted by the local environmental NGO, the municipality and by the members themselves. The forests several large mammals like elk, fox and marten. Each year the club arrange walks on the course with an official from the municipality and a representative from the local NGO to localise changes in the environment. This self-monitoring contains checking habitats and bird nests. During the last years habitats for amphibians and water birds are included in the self-monitoring. One finding is that some of the water birds have decreased in number, maybe due to construction works in the neighbourhood. Anyway, other birds have increased in number.

Noticeable is that the ponds contains the rare species crested newt and moorhen. A project, partly sponsored by the government, concerning the ponds has been carried out with great success. The project has been to create better habitats for amphibians, that is slopes down to the ponds and rocks and this has been done in corporation with the ecologist from the municipality. This together with signs has made the municipality proud and it is spreading this to other municipalities. A really thorough survey of the ponds is to be carried out together with the local NGO. New

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signs of noticeable species and fauna depots have been set up during the last years.



The meadows that occur on the club's area are being hay made by the staff when the flowers have had the time to produce seeds. The hay made flowers is let lie to dry and then taken away, with the purpose to enhance the biodiversity. The forests are managed in an extensive way by the municipality and are in many places left to free development. Dead wood is left alone with the purpose of enhancing the biodiversity and the ground vegetation around the oaks is regularly cleaned out.

Although red fescue (*Festuca rubra*,) and common bent (*Agrostis tenuis/capillaris*) initially were put out on the greens, fairways and tees the dominating species now is *Poa annua*. To get rid of the *Poa annua* the club would have to reconstruct all the greens, which is a will from the club. But, this is not possible for the club due to the economy for the moment. One tee is reconstructed with a mix of red fescue and common bent. So, when future reconstructions are carried out this mix is used. The club has a rather detailed management plan but the greenkeeper is always taking the reality of the day in consideration and thus often changes the plan from day to day.

The amount of fertilizers used is around average for clubs in Sweden. During the fall of 2018 the club will test to use organic fertilizers. The club is using P-K-plus, which contains potassium phosphite, a product that up regulates the turfs defense mechanism and Primo Maxx, a product that reduces the growing of the grass.

A full-scale water quality analysis is now being carried out, thanks partly to the focus on the pond regeneration project, which includes samples from inflow, on-site and outflow. This is being done twice a year. The analysis shows decreases of N and P at the outflow, which of course is great. All ponds are now harvested except for some areas due to animals.

The club is doing everything you must do according to Swedish law and is also continuously thinking about things to improve. An embryo of a risk analysis was carried out during fall 2013. This analysis gave birth to the absorption cloth mentioned below.

Waste2Water is used since 2006 when cleaning the machines etc. W2W is a closed system with microbes doing the job of breaking down pollutants. The water is recycled to be used again. The hazardous materials are kept in the same room as the Waste2Water. Of course the materials are kept in a locked storeroom, because in case of an accident the W2W is there to help taking care of the chemicals.

The filling of diesel is also carried out in the same room as the W2W. A grease trap is used to take care of the grease coming from the restaurant. The grease is then taken care of by a slurry exhauster and fetched by a firm. The pesticide filling is carried out in the same room as the W2W.

The greenkeeper has equipped the mowers with an absorbing cloth to be used during oil leakage from the mowers. The cloths are put in

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sawn-off pipes, which are engaged on the mowers and the method is very effective and innovative. All of the mowers are since 2015 equipped with these items.



Resources

The water used for irrigation is mainly taken from the ponds on the course, which get their water from a creek that runs into the course from a nearby lake. When needed, the club can get water from a nearby large river, Svartån, which has been done only once during the last 11-12 years. The municipality takes water from the same river.

The board has decided to invest in a new irrigation system, which is necessary as the irrigation system is quite old, 20 years, and among other things the sprinklers have a tendency of sinking down. But also, the authorities are getting tougher when it comes to irrigation due to water availability. The plan, which was taken in 2018, says to start with the greens, tees and some foregreens at hole 1-4. At the same time the club will look at the drainage system. The whole project will cost around 2-3 million SEK and will take maximum 5 years and will mean that not only six fairways will have irrigation possibilities. The club uses a rather modest amount of water for irrigation. Each year the self-monitoring contains checking the amount of water used, checking the pump house, irrigation system and uptime.

The Waste2Water-system used by the club is an efficient way of recycling the wastewater from the washing facility. The club use single level mixers in all wash basins, which may seem like a small activity but is (as every household knows) a really effective way of keeping the amount of water used down.

The club is a member of a collaboration of several companies, which shares the cost of the energy bought. This is apparently a good way of reducing the costs of energy. The club has a thorough knowledge about the amount of energy consumed in the different areas of the facility.

The club will again look at the prices for green tariff in order to increase the amount. A meeting with the energy advisor from the municipality was booked but unfortunately he only visit private persons, not organizations or corporates. A closer look at the possibility of installing solar cells is now engaging the club. Today, around 50-60 % of the energy comes from renewable resources and the level of consumption has decreased the last years down to about 200,000 kWh per year, which is somewhat low.

Even though the consumption as a whole has gone up in small amounts he consumption in the clubhouse has gone down due to measures. The club has installed air heat pumps in the restaurant and maintenance house and small machines uses for maintenance is run with alkylate petrol which is less harmful to the environment, cleaner on the machines and produces around 50% less emissions.

The club has by itself gone through the different parts of the facility to see where it could reduce energy and fuel consumption. The motto is:

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“Why use energy where you don’t need it.” The club has lowered the price for locker boxes to make people bicycle instead of taking the car.



The club has installed a recycling system in the restaurant, which is working very well. All in all, the club has a thorough system for reuse and recycling and it is continuously refining it, for example with recycling centers around the course and the club house and the introduction of the “green bag”, a way of collecting organic material in order to convert it to biogas, which works better and better. The waste that goes to recycling is taken care of by an external specialist company.

Each year the self-monitoring of the supply chains contains consumption of fertilizers and pesticides. Other domains that are monitored are follow-up of products used and the amounts of waste. The club is generally very strict in using the decisions made about what to do in a good way.

The club has a thorough purchasing policy, which contains regulations about ethics, environment and moral. The policy is used mainly when large purchases are being made, for example when the club is about to buy new furniture. At this example the club makes sure that the wood is certified by FSC.

A large amount of suppliers are within 10 kilometers from the club, which is a very good thing. The only domain that has all the suppliers outside the range of 10 kilometer is the course supplier, which is typical for this element of a golf facility's supply chain.

Community

The nature trail, which was in the planning stage in 2014, has now been realised with co-funding from the County Board. It's a great little trail, going up and down in the hilly landscape just beside the course and contains very pedagogical and informative signs about the surrounding nature. Since the opening amongst others kindergarten classes have walked the trail, which is just superb.

When it comes to leading the club it has now employed a club director, for the moment mostly engaged in the administrative work but will have a broader line of work later.

The club has been awarded ‘Club of the Year’ in Östergötland County, much because of their sustainability work and their relations with the community. An article in the regional newspaper was published because of this occasion. The sustainability work is an essential part of the new operation system for the club that has being created.

A self-monitoring system gives the club a clear view of the sustainability work. Part of the self-monitoring been going on since 2006 (Waste2Water, pesticides, hazardous material etc) and the rest was started in 2014. The club takes the national environmental goals in consideration during the management, especially those about water, emission and nature.

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The computer system at the club is used in a very good way to document what's being done on the facility, not at least the sustainability work.



The sustainability working group is fully integrated in the club's management and people from the local community and the environmental NGO in the municipality are in close collaboration with the group.

The club has a very good relationship with the municipality and the latter initiated the self-monitoring program. Schools are often visiting the club, both by invitations from the club and uncompelled. The club finds this collaboration very yielding.

A historic stonewall on the course is taken good care of but apart from that, the area where the club is situated doesn't contain any valuable cultural heritage except for the old cottage next to the wall.

The sustainability group is a part of the website and the club has a monthly newsletter with information about the sustainability work. The course guide contains visible information about the sustainability work

Conclusion

One thing is for sure; Mjölby is driving its sustainability further. As before the club puts extremely high value on its sustainability work and is working very hard with it. A lot of good things have happened at the club since 2014. The nature trail, very well suited for all ages, is a way to in one action educate about nature, attract new possible members and get youngsters out in the nature. This action alone proves the club to be a splendid ambassador for sustainability in golf. However, sustainability runs through every department of the club and the board is investing in a new efficient irrigation system. At the same time the club will look at the drainage system to make more efficient use of rain water that falls on the site and replenishes the ponds. The whole project will cost around 2-3 million SEK and will take maximum 5 years.

A project, partly sponsored by the government, concerning the ponds has been carried out with great success. The project has been to create better habitats for amphibians, that is slopes down to the ponds and rocks and this has been done in cooperation with the ecologist from the municipality. This together with signs has made the municipality proud and it is spreading this to other municipalities. It's no wonder the chairman for the club often talks about sustainability while doing presentations on company meetings, like Rotary etc.

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