

Practical measures to increase biodiversity on golf courses

in Falkenberg and Varberg municipalities



By Peter Edman, Swedish Golf Federation and Maria Strandberg, STERF

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Thick rough at Hofgård's GK. Photo: Peter Edman



Flower rich rough environment. Photo: Peter Edman

Among golf players, the phrase “Even if I hit the ruff, I want to find the ball” is frequently uttered.

Therefore, creating sparse, lean and herb-rich ruffs are in line with both the player’s desire as well as to maintain a favourable condition for biodiversity. One of the biggest global threats we face today is the loss of biodiversity and the collapse of important ecosystems. The EU’s biodiversity strategy for 2030 emphasizes a more holistic approach

to saving biodiversity. To succeed in this important work, a landscape perspective is required. All actors in the landscape must collaborate and contribute to a rich flora and fauna and participate in the work with green infrastructure.

Several scientific reports mention that the decrease in insects is due to reduction of meadows and pastures and increasing distances between flower-rich grasslands. In this project, we want to study whether the golf course can help replace some of these lands.

Golf courses consist of a mosaic of natural and created environments that either have high natural values or have great potential to develop high natural values.

By creating course-adapted methods, field trips and information materials we want to improve and develop the biological diversity at our golf facilities. Ultimately, the goal is to benefit a rich plant life and pollinating insects.

BIOLOGICAL DIVERSITY ON GOLF COURSES

Project period: 2020 – 2023

Funding: The project has been granted LONA support (Local nature conservation initiative) by Halland County Administrative Board. 50% of the costs for the project is funded by LONA, the rest in kind.

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Project objectives:

- To create a model for local collaboration between the golf club, the municipality and other actors in the community with the aim of creating rich plant and animal life.
- To improve biodiversity on golf courses through increased knowledge of how different measures and maintenance routines on the golf course can

contribute to creating a rich plant and wildlife.

- To study the effects of different care routines to increase the number of pollinating insects and the playability of the golf course’s roughs.
- To evaluate how different care routines, benefit specific insect species.
- To spread knowledge and experience to golf clubs, municipalities and other organizations in society nationally and internationally.

Measures

The project includes several measures to promote biodiversity. The methods are adapted to each golf club's conditions. The project aims to benefit insects by creating flower-rich soils with exposed sand. The selection of measures and maintenance efforts can be adapted to a golf course anywhere in the municipality, region or country.

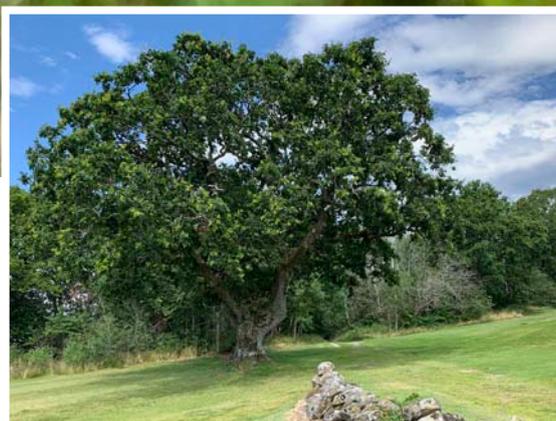
Individual action plans have been drawn up for five golf courses in the municipalities of Falkenberg and Varberg; Falkenbergs GK, Ullared Flädje GK, Harabäckens GK, Hofgårds GK and Vinbergs GK. The action plans describe what, where and when measures for biological diversity can take place on each individual course. The plans also include an assessment of the time required and costs for the measure.

The following measures are included in the management plans:

- Development of flower-rich rough environments through mowing and collection, spring burning and sowing of rattles or meadow flower seeds as well as sand dressing. These environments are dependent on continued annual care to achieve the positive effects.
- Bunkers cut vertically at 10–20 cm in a position to the south and west. Heaps of sand are laid in hot locations at edges or other places where they do not interfere with the game and are renewed every two or three years.
- Old coarse trees, especially deciduous trees and pines are felled. Dead wood is left as habitats for insects where they do not disturb the game or are perceived as disturbing.
- Flowering and bearing shrubs and trees benefit. Species typical of the region are used.



Above: Six-spot Burnet.
Right: Older, solitary tree
Photos: Kill Persson



Inventories

During the summer of 2020, inventories were carried out partly to document the initial situation and partly to identify suitable locations for what and where measures can be carried out. In parallel with this, a dialogue has been held with the Golf Federation and the golf club's course staff to make sure that the action proposals can be coordinated with the golf game itself.

During the autumn of 2020, the preliminary action plan that has been produced has been communicated and implemented in each course's mana-

gement plan for 2021. The goal is that the final inventories by 2023 will show improved flora and insect diversity on the golf courses.

Communication of new knowledge

We will arrange field trips, create a guide and videos that can help golf clubs in their nature conservation work and produce material to be spread to authorities and the general public about golf courses benefits to nature. Results and experiences will be presented at Nordic and international conferences.