

Sustainability and environmental risks of pesticide use on golf courses

Welcome to an International Seminar held by STERF and NIBIO

WELCOME!

What can be done to improve sustainability and minimize risk associated with the use of chemical pesticides on golf courses ?

The background for this seminar is the STERF project *'Risks for surface runoff and leaching of fungicides from golf greens varying in rootzone composition and amount of thatch'* which is coming to an end in February 2019.

We want to share and discuss with representatives for the golf industry, chemical industry and legislative authorities the outcomes and possible implications of this project and other related research projects at the European level.

7TH MARCH 2019

Oslo, Norway

Vallda GC. Photo: Peter Corden



NIBIO
NORSK INSTITUTT FOR
BIOØKONOMI



PROGRAM

THURSDAY 7TH MARCH 2019

Clarion Hotel & Congress, Oslo Airport Gardermoen

09.00- 09:45

Arrival, registration, coffee

MORNING SESSION

Moderator: Bruno Hedlund, STERF board chairman

09.45

Sustainable golf course management related to Agenda 2030.

Bruno Hedlund, STERF

10.00

Enforcement of safe use of plant protection products on Swedish golf courses.

Marie-Louise Nilsson / Henrik Appelgren, Swedish Environmental Protection Agency

10.40

Experiences with an upper limit for total pesticide use on Danish golf courses.

Anita Fjeldsted, Danish Environmental Protection Agency

11.10

Brief updates on the implementation of EU's directive on sustainable pesticide use for golf course in other North-European countries

Norway: Torhild Tveito Compaore; Norwegian Food Safety Authority

Finland: Elina Solarmo; Finnish Safety and Chemicals Agency Tukes

(Other countries may be added)

11.30

Lunch

AFTERNOON SESSION

Moderator: Marianne Stenrød, department leader NIBIO

12.15

Risks for surface runoff and leaching of fungicides from golf greens varying in rootzone composition and amount of thatch'.

Results from STERF project 2016-2018

(including a brief summary of previous STERF projects)

Marit Almvik and Trygve S. Aamlid, NIBIO, Norway

13.15

Estimating pesticide leaching to groundwater from greens and fairways.

Results from the Danish project PEST GOLF.

Annette E. Rosenbom, Geological Survey for Denmark and Greenland

Anne Mette Dahl Jensen, Copenhagen University

13.50

Short break / Refreshments

14.10

GREEN WATER: Decision support models for pesticide use on German golf courses.

Marc Biber, German Golf Federation

14.30

Towards a total pesticide ban on golf courses: The Dutch experience.

Niels Dokkuma, Netherlands Golf Federation

14.50

A Swedish case: The need for pesticides at Halmstad GC and results from a court trial regarding a total pesticide ban.

Course manager Stefan Ljungdahl and Jonas Henriksson, IVL Swedish Environmental Research Institute

15.20

Panel discussion on sustainable pesticides use on golf courses

STERF director Maria Strandberg, all speakers, representatives for chemical companies.

Moderator: Bruno Hedlund

16.00

End of seminar

ABOUT SPEAKERS



Bruno Hedlund is the Chairman of the Scandinavian Turfgrass and Environment Research Foundation, STERF, since 2004 and has also been on the Board of Directors for the Swedish Golf Federation, SGF, for twelve years. Bruno has worked for more than fifteen years with sustainable golf development and strategic development of the golf sport.



Marie-Louise Nilsson / Henrik Appelgren have long experience of work within several of the major legislations dealing with plant protection products and biocides. This includes risk assessments of active ingredients in EU as well as national authorisations. At this seminar they will present the outcome of the project 'Enforcement of the safe use of plant protection products on golf courses'.



Anita Fjelsted represents the Danish Environmental Protection Agency. She has worked with integrated pest management and implementation of the EU directive on sustainable use for several years. She has also initiated a number of projects on IPM on golf courses and education on IPM for greenkeepers. At this seminar she will give a presentation about a Danish regulation that requires the golf courses to keep their pesticide use below a certain limit of pesticide load.



Marit Almvik and **Trygve S. Aamlid** have been the main NIBIO scientists working with the STERF-project *Risks for surface runoff and leaching of fungicides from golf greens varying in rootzone composition and amount of thatch*. At this seminar they will present the major outcomes of the project, including implications for the golf industry.



Annette E. Rosenbom and **Anne Mette Dahl Jensen** were responsible for the project '*PESTGOLF: Pesticide leaching from golf areas*' - funded by the Danish Environment Protection Agency. At this seminar, they will present the major outcomes of this project and discuss possible implications for more sustainable pesticide use on greens and fairways.



Marc Biber is an agronomist working for the German Golf Association. Marc was the manager for the research project GREENwater. This decision support model in combination with recommendations for a ground water monitoring has been developed for a sustainable selection of plant protection products. At this seminar, he will present the major outcomes of this project and the implications not only for golf courses with surfaces in water protection areas.



Niels Dokkuma is an agronomist working with sustainable management and for the Royal Netherlands Golf Federation. Niels will share the strategy and approach that golf in The Netherlands is taking to work on phasing out pesticide use in the light of a potential total ban. He will share developments and experiences in working together with many stakeholders.



Stefan Ljungdahl, Greenkeeper at Halmstad Golf Club and **Jonas Henriksson**, scientist at IVL Swedish Environmental Research Institute. Both of us are working with sustainable pesticide use on golf courses which are situated in protected areas for drinking water extraction. We will present our methodology for environmental assessment of sustainable pesticide use, how we succeeded to get the permit for Halmstad Golf Club and our recommendations for a simplified permission process.



PRACTICAL INFORMATION

Registration & fee

Register no later than **February 18th 2019 at 23:00.**

The fee for attendance is 800 NKR / 85 EURO

This includes morning coffee, lunch, refreshments and afternoon coffee. As well as copies of the technical presentations and handouts. Please register and pay at: <https://nibio.pameldingssystem.no/golf-seminar-2019#/>

Location

The seminar will be held at **Clarion Hotel & Congress, Oslo Airport Gardermoen** (Hans Gaardervei 15).
Phone number: +47 63 94 94 94

Hotel

If you need accommodation, it is your own responsibility to book a room at the conference hotel or another hotel.

40 rooms have been prebooked at the conference hotel, **Clarion Hotel & Congress Oslo Airport**, and will be available until deadline for registration 18. February 2019. Single room cost 1050,-NOK and double room cost 1250,-NOK.

Please inform the hotel that you will attend the conference arranged by NIBIO. Reference - NIBIO hotel rooms- If you want to take advantage of prebooked rooms, please send email to maia.workinn@choice.no

<https://www.nordicchoicehotels.no/hotell/norge/oslo-airport/clarion-hotel-oslo-airport>

More information

For any questions please contact:
Trygve S. Aamlid, trygve.aamlid@nibio.no
Elise Krey Pedersen, elise.pedersen@nibio.no



ABOUT ORGANIZERS

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 and ecosystem services', 'Sustainable water management' and 'Winter stress management'. More information about STERF can be found at www.sterf.org

NIBIO, The Norwegian Institute of Bioeconomy Research, is a research institute owned by the Norwegian Ministry of Agriculture and Food. Its goal is to contribute to food security, sustainable resource management, innovation and value creation through research and knowledge production. The project *Risks for surface runoff and leaching of fungicides from golf greens varying in root-zone composition and amount of thatch (2016-2018)* was a collaborative effort by NIBIO's departments for 'Urban Greening and Environmental Engineering' and 'Pesticides and Natural Product Chemistry'. Besides STERF, the project was funded by the Norwegian Action Plan for Sustainable Use of Pesticides.