

Sustainable Greenkeeping Conference Meeting Danes, Dutch, Germans and Swedes

Flip Wirth



DGB 17 YEARS at WORK



- DGB has grown to an active group of 23 members
- We have a state of the art database and website
- DGB provides in the need for exchange of knowledge and sharing information
- Frequent contacts by gatherings and several Whatsapp groups
- Several members are running trials supported by members of the DGB NGA platform
- However: a greenkeeper is not a scientist and therefore
 DGB will provide support to the willing greenkeeper



DATA DRIVEN MAINTENANCE

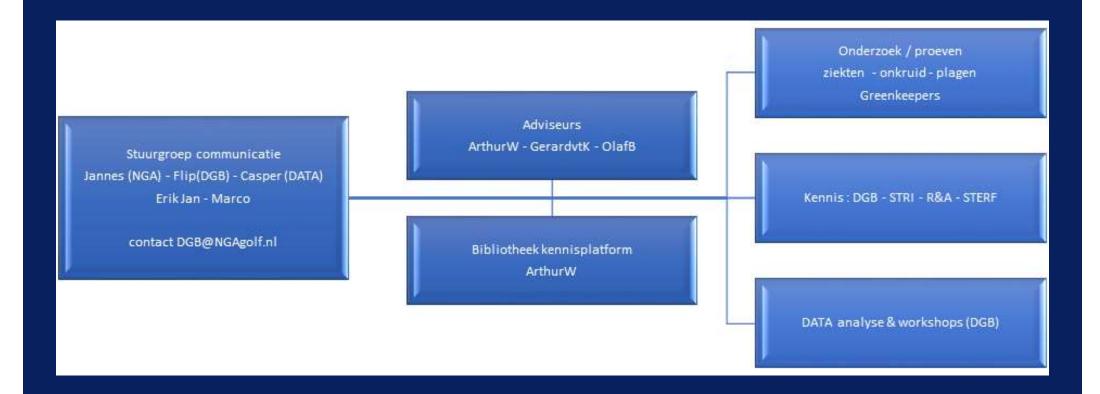


- Plan all work based on data collected
- Skip unnecessary work
- Reduce number of maintained ha's
- Reduce water consumption and fertilizer use
- Do not use pesticides or herbicides
- Reduce costs/hours maintaining the golf course
- Reduce fuel consumption
- Reduce use of electricity



KNOWLEDGE PLATFORM DGB - NGA







Current Activities



- Weed reduction trial in fairways GC Princenbosch
- Group DGB meteorologists with 6 systems operational end 2021
- Wetting agents trials (3 golf courses)
- Grass clippings volume group from 2022
- Grubs and leatherjackets investigation 2023??
- National research programme on dollarspot and microdochium following start 2020 and shadow group of 12 DGB courses



Weeds trial on the Fairway C8



- GC Princenbosch start 2019
- 108 plots (3 x 36)
- The weeds are counted 4 times a year
- We measure the moisture
- We measure DCI
- First evaluation end 2022
- New phase with mechanical removal of weeds and overseeding from 2023





Wetting Agents trials



- Participating courses GC Hoge Kleij (Amersfoort);
 GC The Links Valley (Nunspeet) GC 't Zelle (Hengelo GLD)
- Trials after 3 years no spectacular results.
- To be continued of a plot that can be left unirrigated
- Approx 6 7 visits per year
- Moisture 8 and 12 cm deep and NDVI



Trial Set-up

- Each plot repeated three times
- Moisture too much dominated by irrigation
- Will contue in better suitable plots



Spuitschema		
Middelen	Week nummer schema	Frequentie
A1 Untreated		
A2 Aquifer	18/22/26/30/34	elke 4 weken
A3 Revolution	18/22/26/30/34	elke 4 weken
A4 Oars Hs	18/24/30/36	elke 6 weken
A5 Trismart H2Pro	18/22/26/30/34	elke 4 weken
A6 Aqua Premium	18/22/26/30/34	elke 4 weken
A PBS150 Granulaat	rondom de proef strooien	1 x





Study on Chafer Grubs



- Pending funding by NGF
- Start in 2024 on GC Papendal and GC 't Zelle
- Serious problems in 2022 on several golfcourses
- Trials on tees, fairways and aprons
- Developing set of best practices
- Investigation of impact of hardness of soil
- Using modern detection techniques s.a. drone observation for better

prediction







Questions?

