



How the FEGGA Scholarship has helped me with my career

Bianca Mignon Pronk & Pepe Jimeno Fernández

FEGGA Team 2022

Mikko Halla, Finland

Helgi Valor Ingolfsson & Ingibergur Alex Elvarsson, Iceland

Martin Richter, Slovakia

Josip Domic, Croatia

Pepe Jimeno Fernández, Spain

Bianca Mignon Pronk, South Africa



Education

- Support from associated companies
- Education delivered by experts in their field
- Field trips and on site visit
- Practical experience gained
- ITRC
- Attended European Tour held by Halmstad GK



Projects

- Pepe Jimeno Fernández and Ingibergur Alex Elvarsson
 - Paddle Green
- Bianca Mignon Pronk
 - Importance of irrigation on the East Course
- Mikko Halla
 - Divot Mix
- Helgi Valor Ingolfsson
 - Repair and maintain old practice green
- Martin Richter and Josip Domic
 - Turf Nursery

Bianca Mignon Pronk

- South Africa & Dutch
- MSc in Conservation Ecology
- 2021 – Kvicksund GK
- 2022 – FEGGA Scholarship
Kristianstads GK
- 2023 – Sustainability and
Environmental Officer Kristianstads
GK



My experience and future ambitions

- Started with little knowledge
- Gained valuable information to further my career
- Hands-on experience at the GK
- Day to day operations, importance of golf course setup during a competition

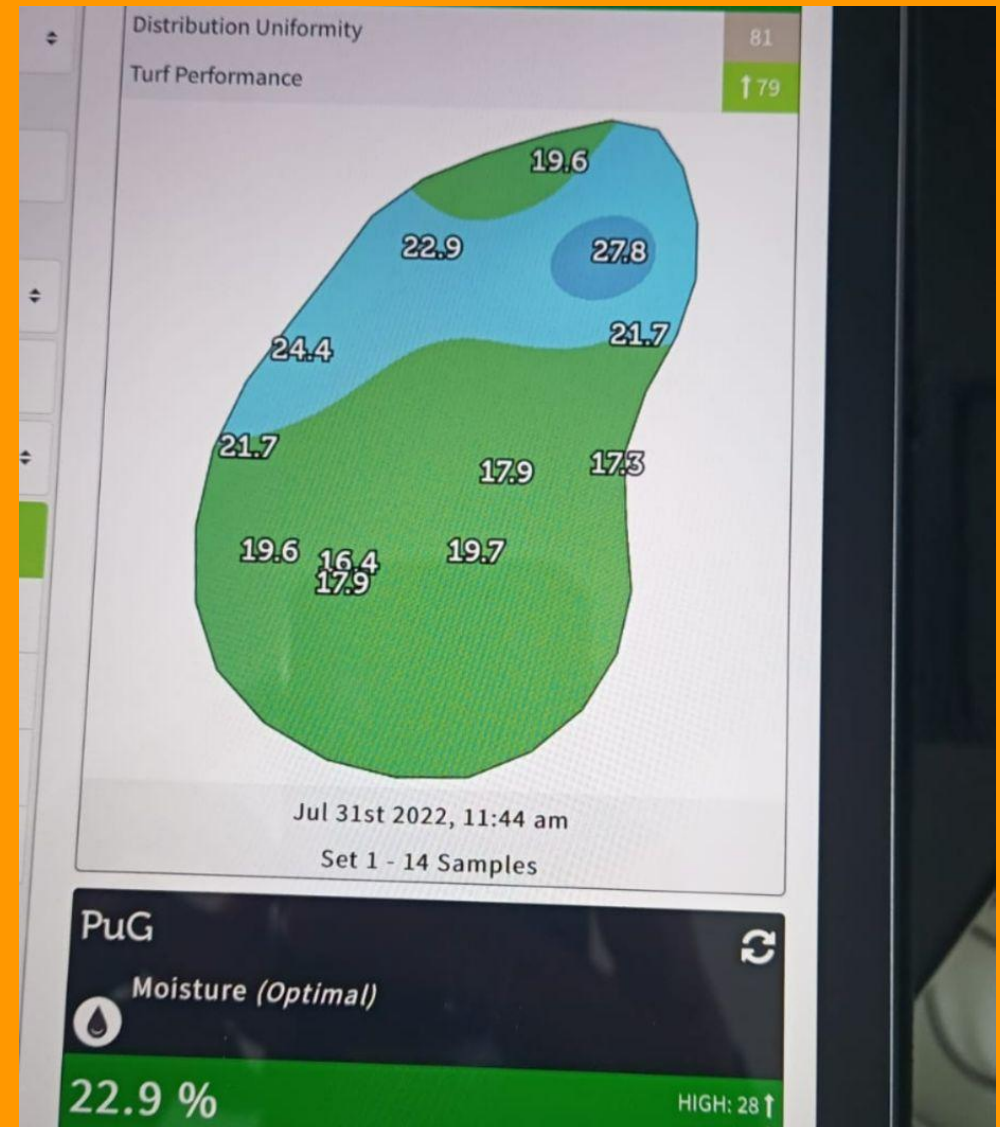


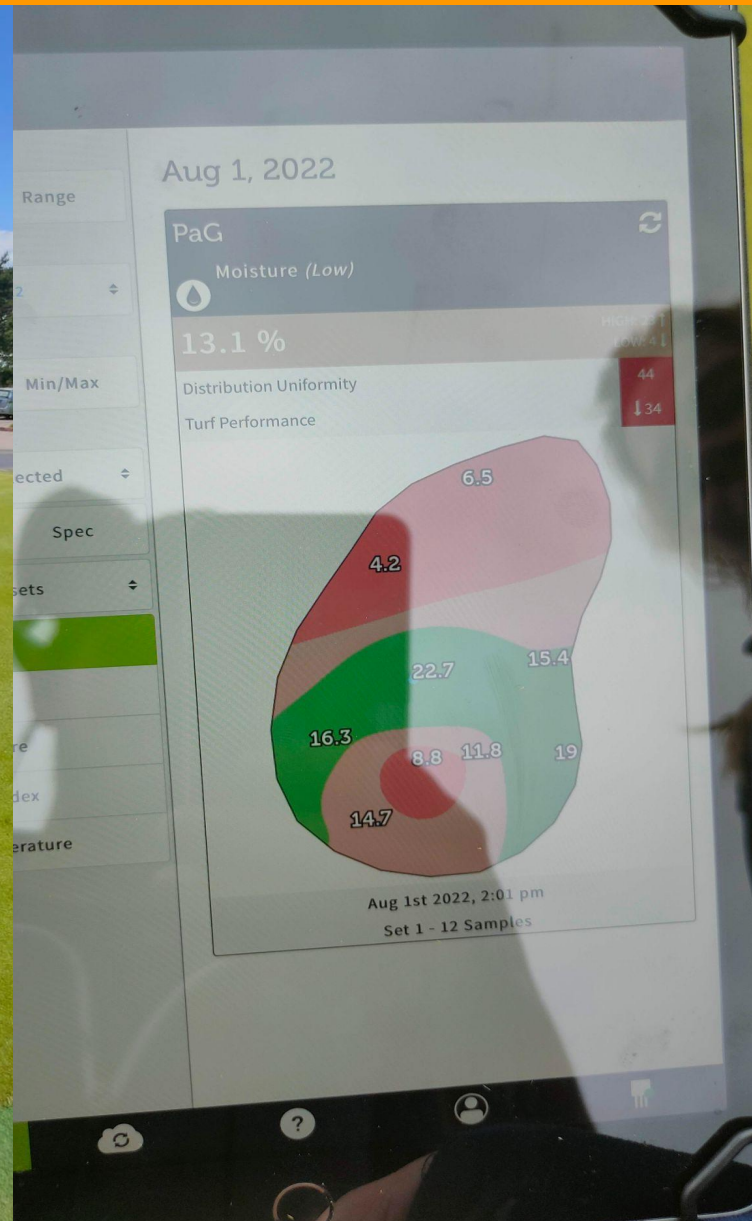
Importance of Irrigation

POGO testing everyday

Reduced water usage 8%

Adjust irrigation system





Sustainability projects at KGK

Mikko - Recycling on and around the golf course

Martin - Ecological sites on the golf course and bat roosting boxes

Alex and Helgi - Insect hotels

Josip - Bird and owl roosting boxes

Pepe - Something very special

Ambitions and goals

- Conservation, biodiversity and sustainability importance
- Part of pioneering sustainability
- Assistance to other golf courses
- Help prove golf courses are a sink for biodiversity



Pepe Jimeno

- Spain - Seville
- 2020 - C.E.N.E.C. football pitch maintenance.
- 2021 - EADE, Master in maintenance and management of golf and football fields.
- 2021 - Real Club Pineda, master internship.
- 2022 - FEGGA, Greenkeeping scholarship program hosted by Kristianstad's golf club.
- Actuality - Head groundsman of Malaga C.F. (Royalverd technic)



FEGGA project:Paddle green

- Main goal: Fastest green in Sweden.
- Second goal: Reduce fert and chemicals and water control.

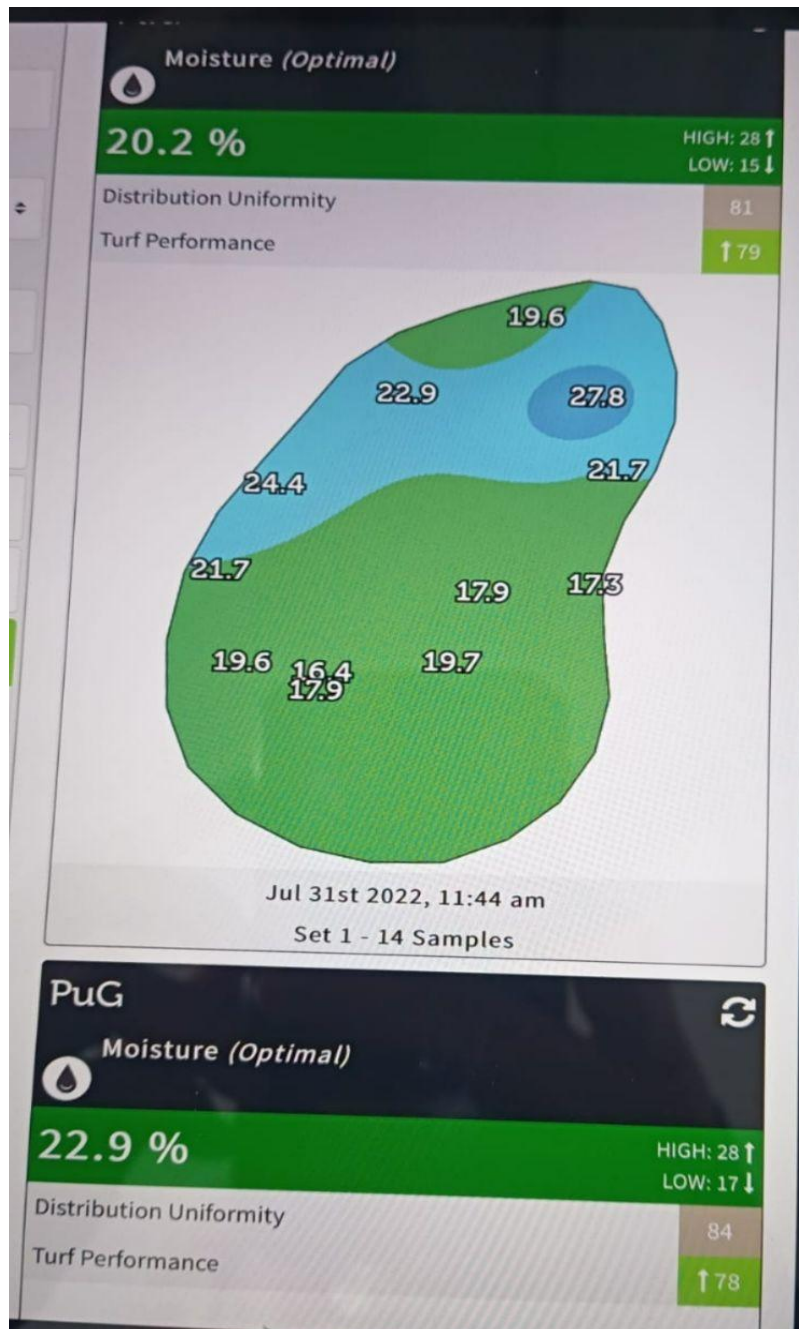
Paddle green

Focus in 4 parameters:

Frequency, chemicals, irrigation and cutting height.

Cutting height

Weeks	19-25	25-30	30-32	32-33	33-36	36
Cutting height	3 mm	2,5 mm	2 mm	1,9 mm	1,6 mm	3 mm
Average stimp	9,5	12,2	13,2	13,6	15,8	





Övningsgreenen utanför Kristianstads GK:s lodge mätte hela 16,5 på stimpmetern under måndagen // Foto: Instagram

Nyheter

16,5 på stimpen – “Är det sant så flyttar jag i morgon”

Skånebanans green snabbast i Europa?

Text: Martin Strömberg • 2022-08-23

Conclusion:

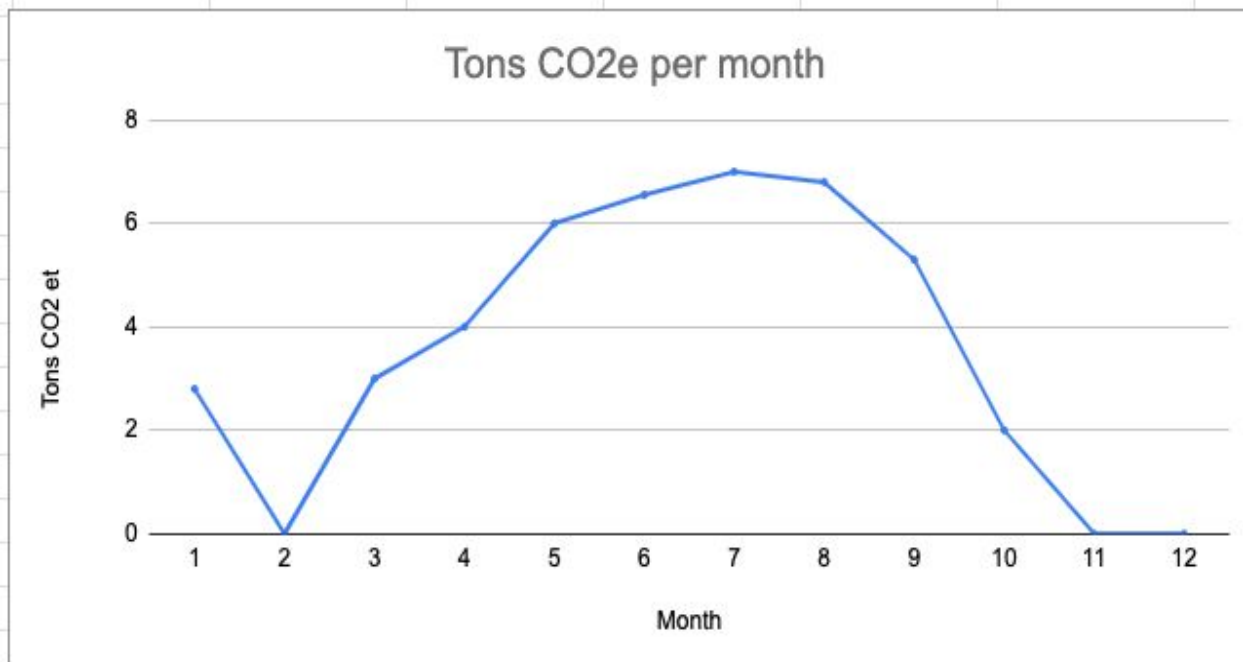
- Stimp record in 16,5.
- No poa annua.
- No fertiliser.
- Less water.
- Fun green for players.
- Social media repercussion.

Greens can be pushed more than greenkeepers think.

Carbon footprint calculator

Kristianstad golf Club												
Zone	ha	Kg CO2e/ha	Kg CO2e/m2			CO2 emissions in tons						
Greens	2.00	802.00	0.08			Monthly-Total	Monthly-ha	Year-total	Year-ha	Pines Tree	Pines tree/ha	Total seques/ha
Foregreens	4.00	0.00	0.00		Sequestration	3.97	0.09	47.69	1.09	36.00	0.82	1.91
Tees	2.75	164.80	0.02		CO2et	6.55	0.15	43.45	0.10			
Fairways	20.00	147.16	0.01			-2.57	-0.06	4.24	1.19	40.24	2.01	
Rough	15.00	19.41	0.00									
Total	43.75	1133.37	0.11									

Data	
Month	Tons CO2 et
1	2.80
2	0.00
3	3.00
4	4.00
5	6.00
6	6.55
7	7.00
8	6.80
9	5.30
10	2.00
11	0.00
12	0.00
	43.45



	Machine	L avarage	Days working					
						L	kg CO2e	
	55	7.5	30		Diesel T	2100	5460	
	6	10			Petrol T	500	1100	
Green	56	8.5	30	Cleaning lap		Total	6560	
	14-17	2						
	Roll	5	30					
	Sprayer	5	2		Zone	L	kg CO2e	
					Greens	490	1274	Diesel
	1					150	330	Gasoline
	2	15	30		Foregreen	0	0	
Fairway	3				Tees	30	66	Diesel
	4	13	22			176	387.2	Gasoline
	Roll	18	22		Farwais	1132	2943.2	
	Semi		8		Rough	112	291.2	
	Sprayer				Bunkers W.	0	0	
Foregreens	53	10.5	15		Rest	336	873.6	Diesel
	54					174	382.8	Gasoline
Tees	18-20	2	15					
	Semi	22	8					
	Sprayer							
	Rough T.	28	4					
	Sandpro							

	Total / Year				Green				Foregreen	
Fert	Kg	kg CO2e		Fert	Kg	kg CO2e		Fert	Kg	kg C02e
N		0		N	300	2370		N		0
P		0		P	100	57		P		0
K		0		K	150	70.5		K		0
Chemicals				Chemicals				Chemicals		
Herbicide		0		Herbicide		0		Herbicide		0
Fungicide		0		Fungicide		0		Fungicide		0
Insecticide		0		Insecticide		0		Insecticide		0
Total	0	0		Total	550	2497.5		Total	0	0
	Fairways				Tees					
Fert	Kg	kg C02e		Fert	Kg	kg C02e				
N		0		N		0				
P		0		P		0				
K		0		K		0				
Chemicals				Chemicals						
Herbicide		0		Herbicide		0				
Fungicide		0		Fungicide		0				
Insecticide		0		Insecticide		0				
Total	0	0		Total	0	0				

Sand	Tons	Kg CO2e	Kg CO2 Transport	Total e	
Total buy	80	3666.4	4160	7826.4	
Zone	Tons	CO2e		Energy/KW	Kg CO2e
Green	80	7826.4		800000	48000
Foregreen		0			
Fairway		0			
Tee		0			
Total	80	7826.4			

For a normal aeration we can calculate approximately the total sand amount

	Hole distance	Tines distance			
Pro core distance	0.07	0.06	Holes surface	0.0042	m2
Diameter	12	Radio	Total holes	4,761,904.76	
Deep	0.1	0.006			
Cilinder area	0.000113097312	m2			
Volumen	0.000011309731	m3			
Total sand	53.85586286	m3			

Future ambitions

- Head groundsman of Real Betis C.F.
- Technician of half Andalucia.
- International interventions.



Questions

