

ARC-Small Grain False Armyworm moth numbers

Caledon and Swellendam
Week 38

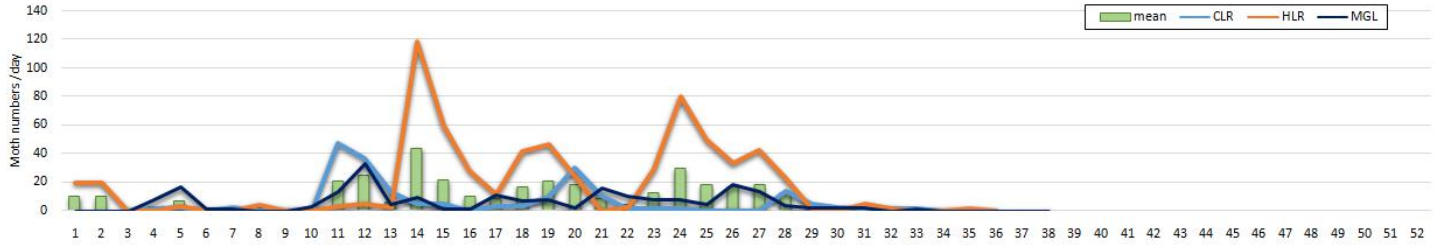


Caledon Moth traps

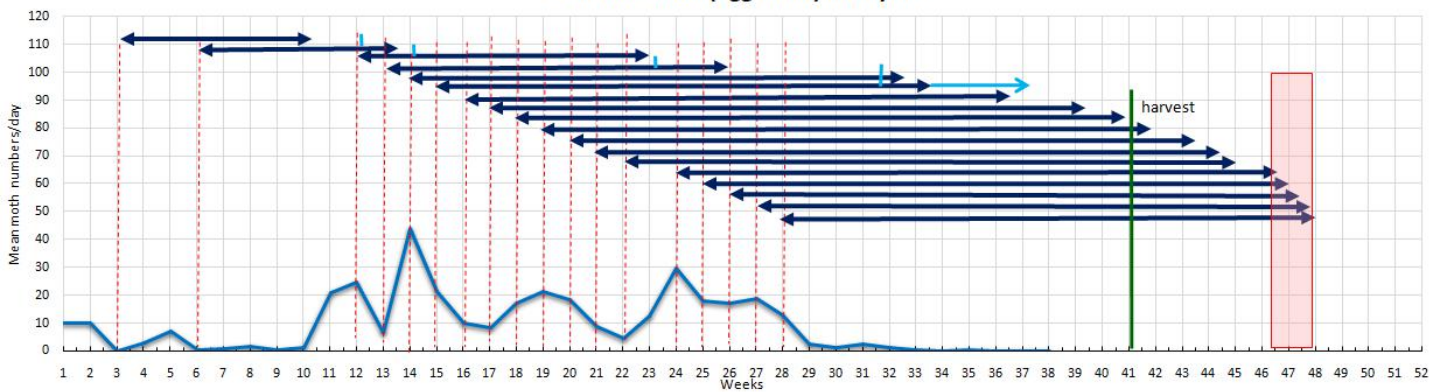
First graph indicates the original data recieved from the farmers.

- The second graph indicates the total life cycle length according to the model calculations. The dark blue arrows indicate the life cycles as forecasted. No new flight peaks occurred.
- Many flight peaks are predicted in September, October and November. However current moth numbers very low posing no threat to the crop.
- Light blue vertical lines and arrows indicate cycle length according to current temperatures
- Table shows current larvae until end of September dependig on the temperatures

Caledon moth numbers 2019



Caledon: Total (egg-moth) life cycle



Caledon 2020 Larvae										
Week	Mean temperature				Real temperature				Difference	
	Start	Week	Larvae er	Days	Week	Start	Week	Larvae er		Days
2	07-Jan	6	04-Feb	29	2	07-Jan	6	04-Feb	29	0
5	28-Jan	9	23-Feb	27	5	28-Jan	9	23-Feb	27	0
11	10-Mar	15	11-Apr	33	11	10-Mar	16	15-Apr	37	4
12	17-Mar	17	21-Apr	36	12	17-Mar	17	24-Apr	39	3
14	30-Mar	19	09-May	41	14	30-Mar	19	09-May	41	0
15	06-Apr	21	18-May	43	15	06-Apr	21	20-May	45	2
16	14-Apr	23	31-May	48	16	14-Apr	22	29-May	46	-2
17	20-Apr	24	11-Jun	53	17	20-Apr	23	06-Jun	48	-5
18	27-Apr	26	26-Jun	61	18	27-Apr	25	20-Jun	55	-6
19	04-May	28	11-Jul	69	19	04-May	27	03-Jul	61	-8
20	12-May	31	31-Jul	81	20	12-May	31	30-Jul	80	-1
21	18-May	33	14-Aug	89	21	18-May	33	14-Aug	95	6
23	01-Jun	36	05-Sep	97	23	01-Jun	37	11-Sep	102	5
24	08-Jun	37	10-Sep	95	24	08-Jun				-9.5
25	15-Jun	38	16-Sep	94	25	15-Jun				-9.4
26	22-Jun	39	20-Sep	91	26	22-Jun				-9.1
27	29-Jun	39	25-Sep	89	27	29-Jun				-8.9
28	06-Jul	40	29-Sep	86	28	06-Jul				-8.6

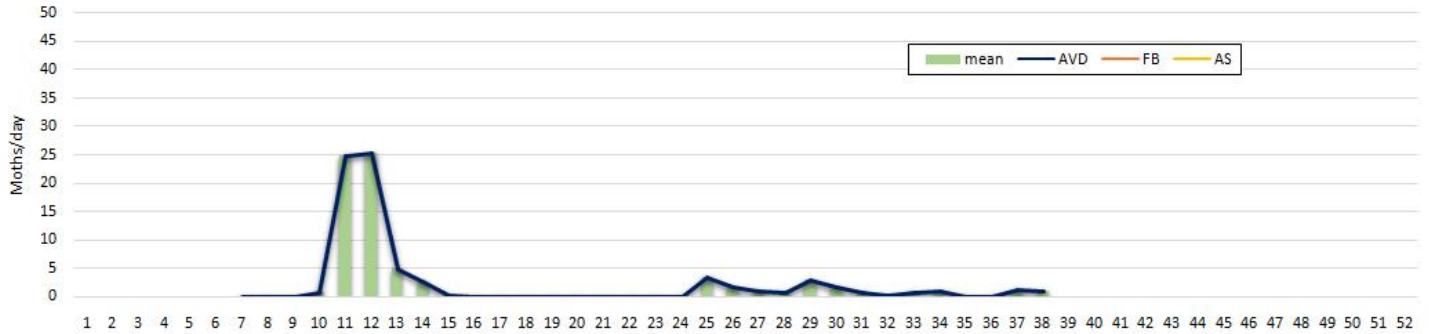
Caledon 2020 New moth peaks										
Week	Mean temperature				Real temperature				Difference	
	Start	Week	New moth	Days	Week	Start	Week	New moth		Days
2	07-Jan	9	26-Feb	51	2	07-Jan	9	27-Feb	52	1
5	28-Jan	12	19-Mar	52	5	28-Jan	12	19-Mar	52	0
11	10-Mar	22	25-May	77	11	10-Mar	22	28-May	81	4
12	17-Mar	24	12-Jun	88	12	17-Mar				
14	30-Mar	32	05-Aug	129	14	30-Mar	31	31-Jul	123	-6
15	06-Apr	35	26-Aug	143	15	06-Apr	37	08-Sep	156	13
16	14-Apr	38	15-Sep	156	16	14-Apr				-15.6
17	20-Apr	39	24-Sep	159	17	20-Apr				-15.9
18	27-Apr	41	04-Oct	161	18	27-Apr				-16.1
19	04-May	42	13-Oct	163	19	04-May				-16.3
20	12-May	43	19-Oct	161	20	12-May				-16.1
21	18-May	44	25-Oct	161	21	18-May				-16.1
23	01-Jun	45	05-Nov	157	23	01-Jun				-15.7
24	08-Jun	45	07-Nov	153	24	08-Jun				-15.3
25	15-Jun	46	10-Nov	149	25	15-Jun				-14.9
26	22-Jun	46	12-Nov	144	26	22-Jun				-14.4
27	29-Jun	47	15-Nov	140	27	29-Jun				-14.0
28	06-Jul	47	17-Nov	135	28	06-Jul				-13.5

Swellendam Moth traps

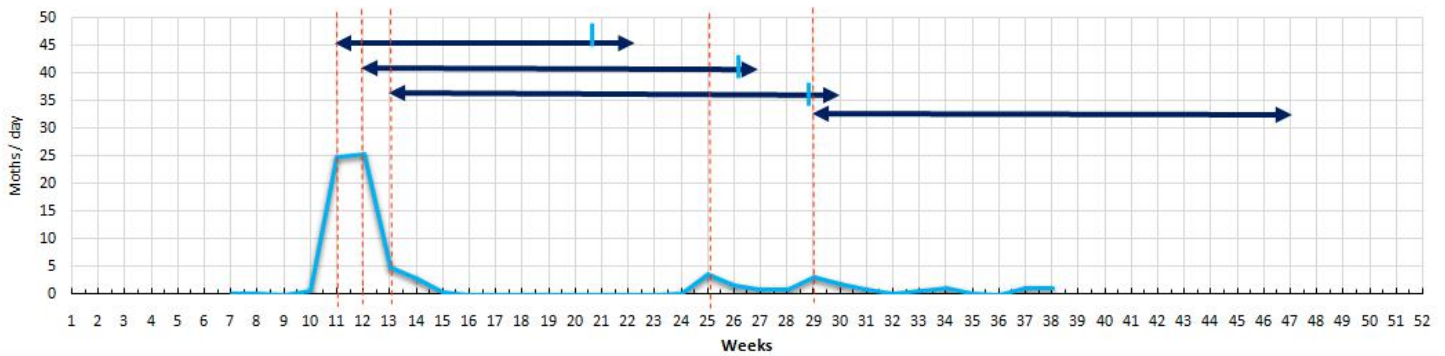
First graph indicates the original data received from the farmers.

- The second graph indicates the total life cycle length according to the model calculations. The dark blue arrows indicate the life cycles as forecasted.
- Light blue markings indicate the calculation from real temperatures.
- The table indicate larvae until the end of September, while new moth flights could be expected by mid-November. Moth number very low because of cold conditions - not threat to crop

Swellendam moth number 2020



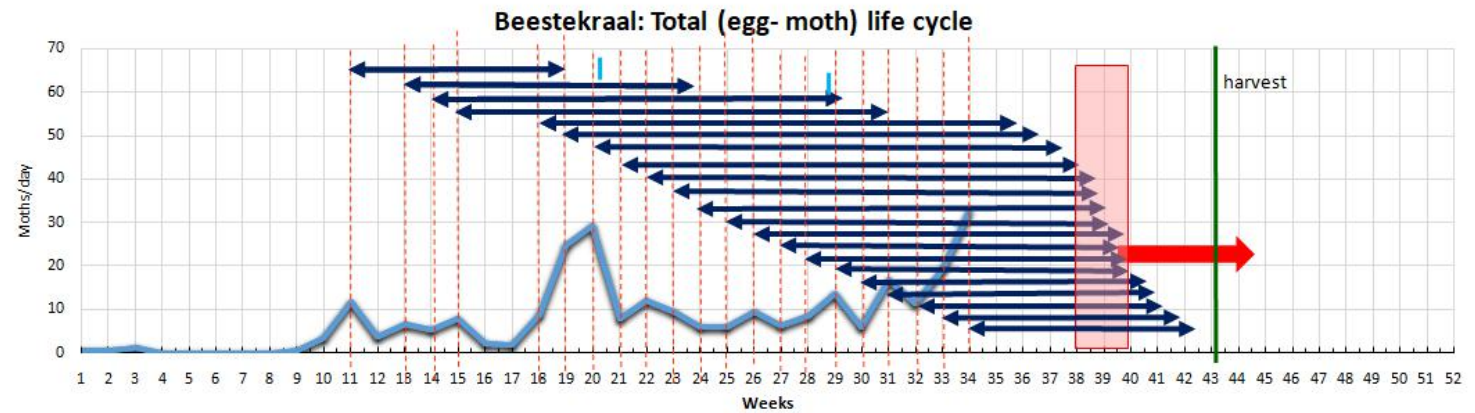
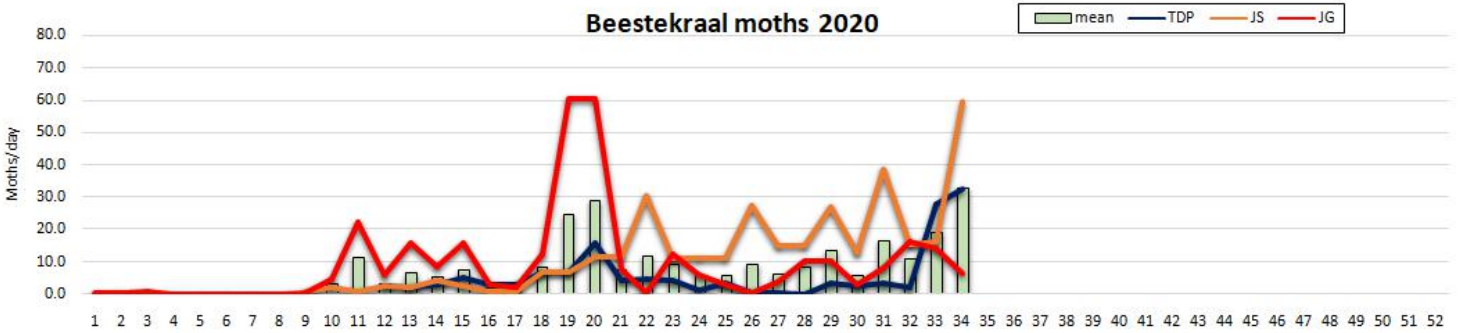
Swellendam : Total (egg -adult) Life cycle



Swellendam 2020 Larvae										Swellendam 2020 New moth peaks											
Mean temperature					Real temperature					Difference	Mean temperature					Real temperature					Difference
Week	Start	Week	Larvae en	Days	Week	Start	Week	Larvae en	Days		Week	Start	Week	New moth	Days	Week	Start	Week	New moth	Days	
11	10-Mar	16	12-Apr	34	11	10-Mar	16	16-Apr	38	4	11	10-Mar	22	28-May	80	11	10-Mar	22	30-May	82	2
12	19-Mar	18	26-Apr	39	12	19-Mar	18	26-Apr	39	0	12	19-Mar	27	28-Jun	102	12	19-Mar	26	23-Jun	97	-5
13	25-Mar	19	04-May	41	13	25-Mar	19	04-May	41	0	13	25-Mar	30	25-Jul	123	13	25-Mar	28	09-Jul	107	-16
25	16-Jun	37	12-Sep	89	25	16-Jun				-89	25	16-Jun	45	05-Nov	143	25	16-Jun				-143
29	14-Jul	40	28-Sep	77	29	14-Jul				-77	29	14-Jul	46	14-Nov	124	29	14-Jul				-124

Beestekraal Moth traps

- First graph indicates the original data received from the farmers.
- The second graph indicates the total life cycle length according to the model calculations. The dark blue arrows indicate the life cycles as forecasted. Many moth cycle forecasted for September. They will give rise to larvae feeding until week 45 while harvesting will start around week 43 - **SO BE CAREFUL AND WATCH OUT**. New moth flights forecasted for period just before harvest.
- Light blue bars indicate real temperature times
- The table shows that larvae from the current cycle will be present until 20 September.



Beestekraal 2020 Larvae										
Week	Mean temperature			Real temperature			Difference			
	Start	Week	Larvae end	Days	Week	Start			Week	Larvae end
11	10-Mar	14	03-Apr	25	11	10-Mar	15	07-Apr	29	4
13	24-Mar	17	22-Apr	30	13	24-Mar	17	24-Apr	32	2
14	01-Apr	19	04-May	36	14	01-Apr	19	08-May	38	2
15	08-Apr	20	15-May	38	15	08-Apr	21	19-May	42	4
18	29-Apr	26	27-Jun	60	18	29-Apr	31	28-Jul	91	31
19	06-May	29	14-Jul	70	19	06-May	33	09-Aug	96	26
20	12-May	30	25-Jul	75	20	12-May	34	16-Aug	97	22
21	19-May	32	02-Aug	75	21	19-May				-75
22	27-May	33	09-Aug	75	22	27-May				-75
23	03-Jun	33	13-Aug	72	23	03-Jun				-72
24	10-Jun	34	16-Aug	68	24	10-Jun				-68
25	15-Jun	34	19-Aug	66	25	15-Jun				-66
26	22-Jun	34	21-Aug	61	26	22-Jun				-61
27	30-Jun	35	25-Aug	57	27	30-Jun				-57
28	06-Jul	35	27-Aug	53	28	06-Jul				-53
29	13-Jul	36	30-Aug	49	29	13-Jul				-49
30	21-Jul	36	02-Sep	44	30	21-Jul				-44
31	27-Jul	37	06-Sep	42	31	27-Jul				-42
32	03-Aug	37	10-Sep	39	32	03-Aug				-39
33	10-Aug	38	15-Sep	37	33	10-Aug				-37
34	17-Aug	39	20-Sep	35	34	17-Aug				-35

Beestekraal 2020 New moth peaks										
Week	Mean temperature			Real temperature			Difference			
	Start	Week	New moths	Days	Week	Start				
11	10-Mar	19	04-May	56	11	10-Mar	20	11-May	63	7
13	24-Mar	23	04-Jun	73	13	24-Mar	28	08-Jul	108	35
14	01-Apr	29	14-Jul	105	14	01-Apr				-105
15	08-Apr	31	01-Aug	116	15	08-Apr				-116
18	29-Apr	35	27-Aug	121	18	29-Apr				-121
19	06-May	36	02-Sep	120	19	06-May				-120
20	12-May	37	07-Sep	119	20	12-May				-119
21	19-May	37	12-Sep	117	21	19-May				-117
22	27-May	38	16-Sep	113	22	27-May				-113
23	03-Jun	38	18-Sep	108	23	03-Jun				-108
24	10-Jun	39	20-Sep	103	24	10-Jun				-103
25	15-Jun	39	21-Sep	99	25	15-Jun				-99
26	22-Jun	39	23-Sep	94	26	22-Jun				-94
27	30-Jun	39	24-Sep	87	27	30-Jun				-87
28	06-Jul	39	26-Sep	83	28	06-Jul				-83
29	13-Jul	40	27-Sep	77	29	13-Jul				-77
30	21-Jul	40	30-Sep	72	30	21-Jul				-72
31	27-Jul	40	02-Oct	68	31	27-Jul				-68
32	03-Aug	41	05-Oct	64	32	03-Aug				-64
33	10-Aug	41	09-Oct	61	33	10-Aug				-61
34	17-Aug	42	13-Oct	58	34	17-Aug				-58