

**ARC-Small Grain False Armyworm moth numbers**  
Caledon and Swellendam  
Week 47 - 49

Prepared by Goddy Prinsloo

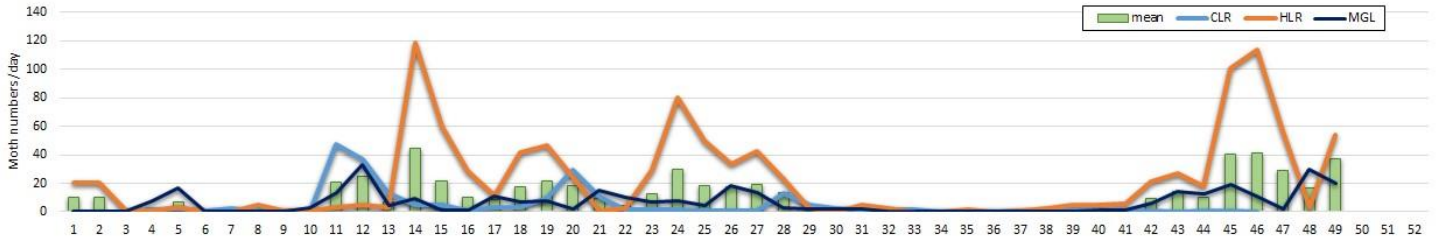


**Caledon moth traps**

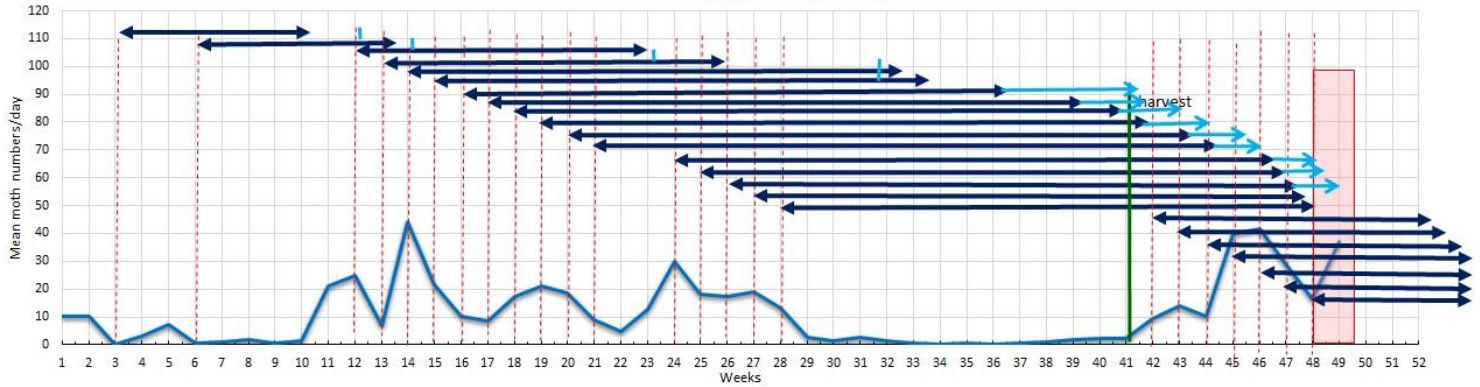
First graph indicates the original data recieved from the farmers.

- The second graph indicates the mean number of moths, while the dark blue arrows indicate the life cycles as forecasted by the average mean daily temperatures. Light blue arrows indicate the extension or reduction of the forecasted life cycle as calculated according to current temperatures.
- Table indicate the dates when larvae will be present (left) and when the new moth flights could be happen.

**Caledon moth numbers 2020**



**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	39	23-Sep	108	13
25	15-Jun	38	16-Sep	94	25	15-Jun	40	29-Sep	107	13
26	22-Jun	39	20-Sep	91	26	22-Jun	41	06-Oct	107	16
27	29-Jun	39	25-Sep	89	27	29-Jun	42	13-Oct	106	17
28	06-Jul	40	29-Sep	86	28	06-Jul	42	17-Oct	104	18
42	12-Oct	45	01-Nov	42	42	12-Oct	48	24-Nov	43	1
43	19-Oct	48	28-Nov	41	43	19-Oct	49	30-Nov	43	2
44	26-Oct	49	03-Dec	39	44	26-Oct				-39
45	02-Nov	50	12-Dec	37	45	02-Nov				-37
46	09-Nov	51	13-Dec	35	46	09-Nov				-35
47	16-Nov	51	19-Dec	34	47	16-Nov				-34
48	24-Nov	52	25-Dec	32	48	24-Nov				-32
49	30-Nov	53	31-Dec	32	49	30-Nov				-32

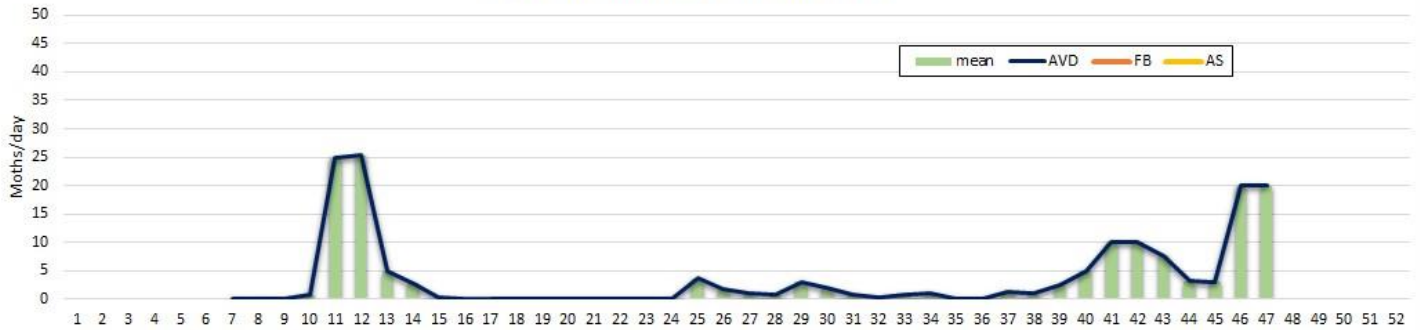
Caledon 2020 New moth peaks										
Week	Mean temperature				Real temperature				Difference	
	Start	Week	New moth	Days	Week	Start	Week	New moth		Days
2	07-Jan	9	26-Feb	51	2	07-Jan	9	27-Feb	52	1
5	28-Jan	12	19-Mar	52	5	28-Jan	12	19-Mar	52	0
11	10-Mar	22	25-May	77	11	10-Mar	22	28-May	81	4
12	17-Mar	24	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	39	22-Sep	162	6
17	20-Apr	39	24-Sep	159	17	20-Apr	41	06-Oct	170	11
18	27-Apr	41	04-Oct	161	18	27-Apr	43	18-Oct	175	14
19	04-May	42	13-Oct	163	19	04-May	44	25-Oct	175	12
20	12-May	43	19-Oct	161	20	12-May	45	03-Nov	176	15
21	18-May	44	25-Oct	161	21	18-May	45	06-Nov	173	12
23	01-Jun	45	05-Nov	157	23	01-Jun	47	16-Nov	169	12
24	08-Jun	45	07-Nov	153	24	08-Jun	47	21-Nov	167	14
25	15-Jun	46	10-Nov	149	25	15-Jun	48	23-Nov	162	13
26	22-Jun	46	12-Nov	144	26	22-Jun	48	28-Nov	160	16
27	29-Jun	47	15-Nov	140	27	29-Jun				-140
28	06-Jul	47	17-Nov	135	28	06-Jul				-135
42	12-Oct	52	22-Dec	72	42	12-Oct				-72
43	19-Oct	53	27-Dec	75	43	19-Oct				-75
44	26-Oct	53	01-Jan	68	44	26-Oct				-68
45	02-Nov	1	07-Jan	67	45	02-Nov				-67
46	09-Nov	2	13-Jan	66	46	09-Nov				-66
47	16-Nov	3	19-Jan	65	47	16-Nov				-65
48	24-Nov	4	25-Jan	63	48	24-Nov				-63
49	30-Nov	4	30-Jan	62	49	30-Nov				-62

### Swellendam moth traps

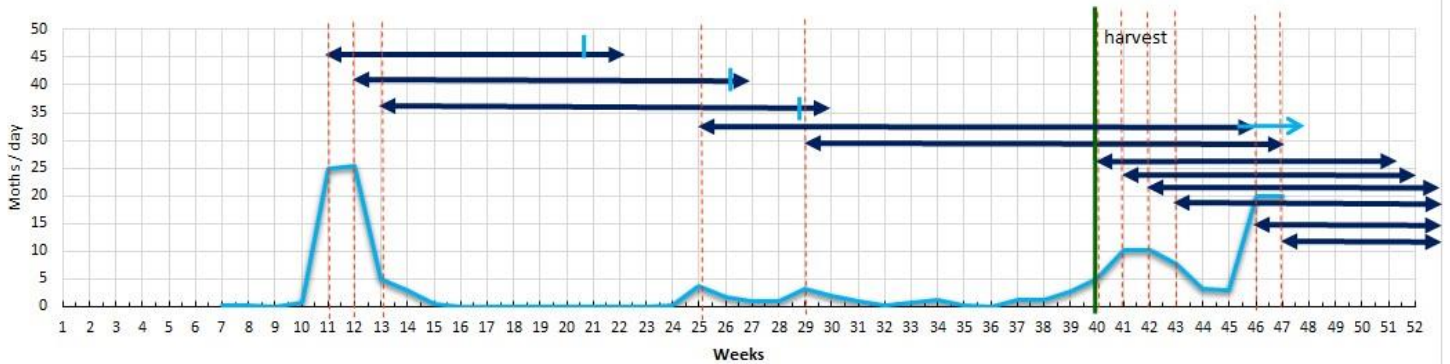
First graph indicates the original data recieved from the farmers.

- The second graph indicates the mean number of moths, while the dark blue arrows indicate the life cycles as forecasted by the average mean daily temperatures. Light blue lines/arrows indicate the extension or reduction of the forecasted life cycle as calculated according to current temperatures.
- According to the model there was no threat for an outbreak in the area, and new moth cycles are predicted for the beginning of the 2021
- Table indicate the dates when larvae will be present (left) and when the new moth flights could be happen.

#### Swellendam moth number 2020



#### Swellendam : Total (egg -adult) Life cycle



Swellendam 2020 Larvae											Swellendam 2020 New moth peaks										
Mean temperature					Real temperature					Mean temperature					Real temperature						
Week	Start	Week	Larvae en	Days	Week	Start	Week	Larvae en	Days	Difference	Week	Start	Week	New moth	Days	Week	Start	Week	New moth	Days	Difference
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	39	17-Oct	99	10	25	16-Jun	45	05-Nov	143	25	16-Jun	47	20-Nov	158	15
29	14-Jul	40	28-Sep	77	29	14-Jul	42	17-Oct	96	19	29	14-Jul	46	14-Nov	124	29	14-Jul				-124
40	29-Sep	46	12-Nov	45	40	29-Sep	47	16-Nov	49	4	40	29-Sep	51	14-Dec	77	40	29-Sep				-77
41	06-Oct	47	17-Nov	43	41	06-Oct	47	20-Nov	46	3	41	06-Oct	51	18-Dec	74	41	06-Oct				-74
42	13-Oct	48	23-Nov	42	42	13-Oct	48	24-Nov	43	1	42	13-Oct	52	23-Dec	72	42	13-Oct				-72
43	20-Oct	49	29-Nov	41	43	20-Oct	49	30-Nov	42	1	43	20-Oct	53	28-Dec	70	43	20-Oct				-70
46	12-Nov	51	16-Dec	35	46	12-Nov				-35	46	12-Nov	2	12-Jan	62	46	12-Nov				-62
47	16-Nov	51	19-Dec	34	47	16-Nov				-34	47	16-Nov	2	15-Jan	61	47	16-Nov				-61