



PRAIRIE PEST
MONITORING NETWORK



Forecast and Risk Maps for Insect Pests of Prairie Field Crops based on 2019 Surveys

With funding and support from*:



Agriculture and
Agri-Food Canada



*List limited to current direct funders

Prairie Insect Monitoring Team

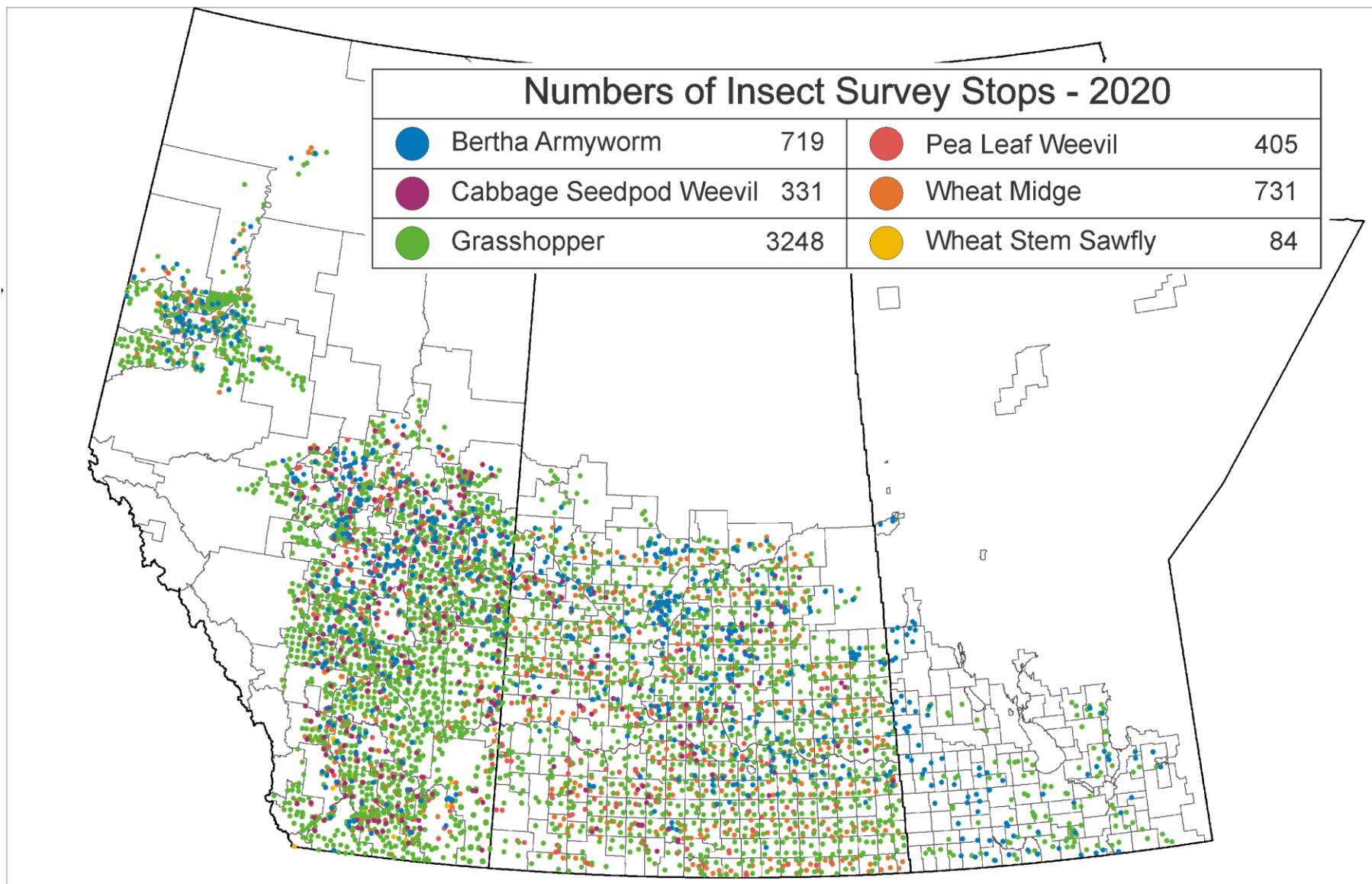
Data provided through partnership with:

- Alberta Agriculture and Forestry
- Saskatchewan Ministry of Agriculture
- Manitoba Agriculture and Resource Development
- Western Grains Research Foundation
- Saskatchewan Canola Development Commission
- Saskatchewan Pulse Growers
- Manitoba Canola Growers Association
- Alberta Wheat Commission
- Saskatchewan Wheat Development Commission
- Prairie Oat Growers Association
- Manitoba Crop Alliance
- Manitoba Pulse and Soybean Growers
- Saskatchewan Flax Development Commission
- BC Grain Producers Association
- Saskatchewan Crop Insurance Corporation
- Canola Council of Canada
- Alberta Canola Producers Commission

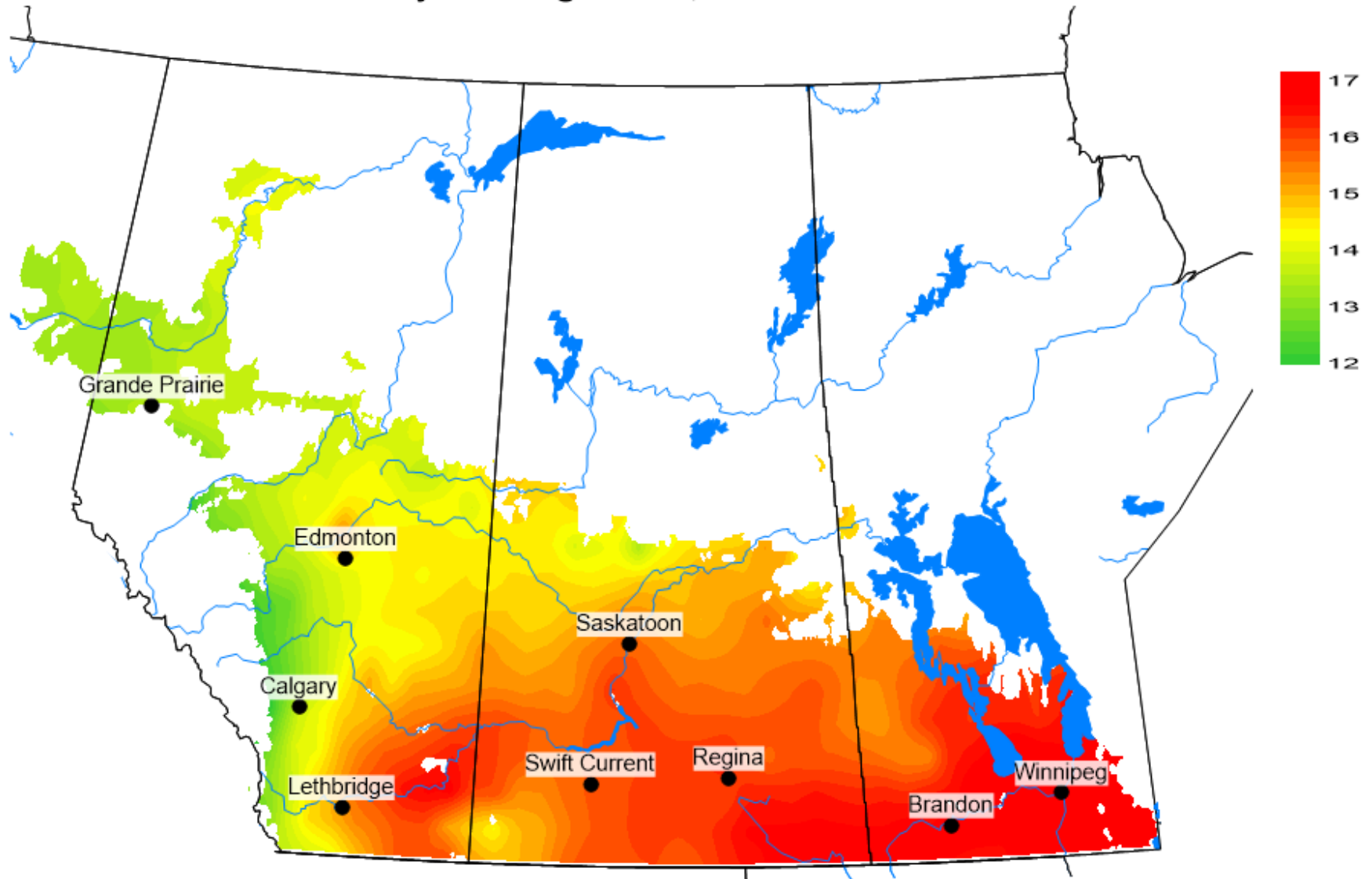
Maps prepared by David Giffen and Ross Weiss, Agriculture and Agri-Food Canada – Saskatoon Research and Development Centre.



Jon Williams



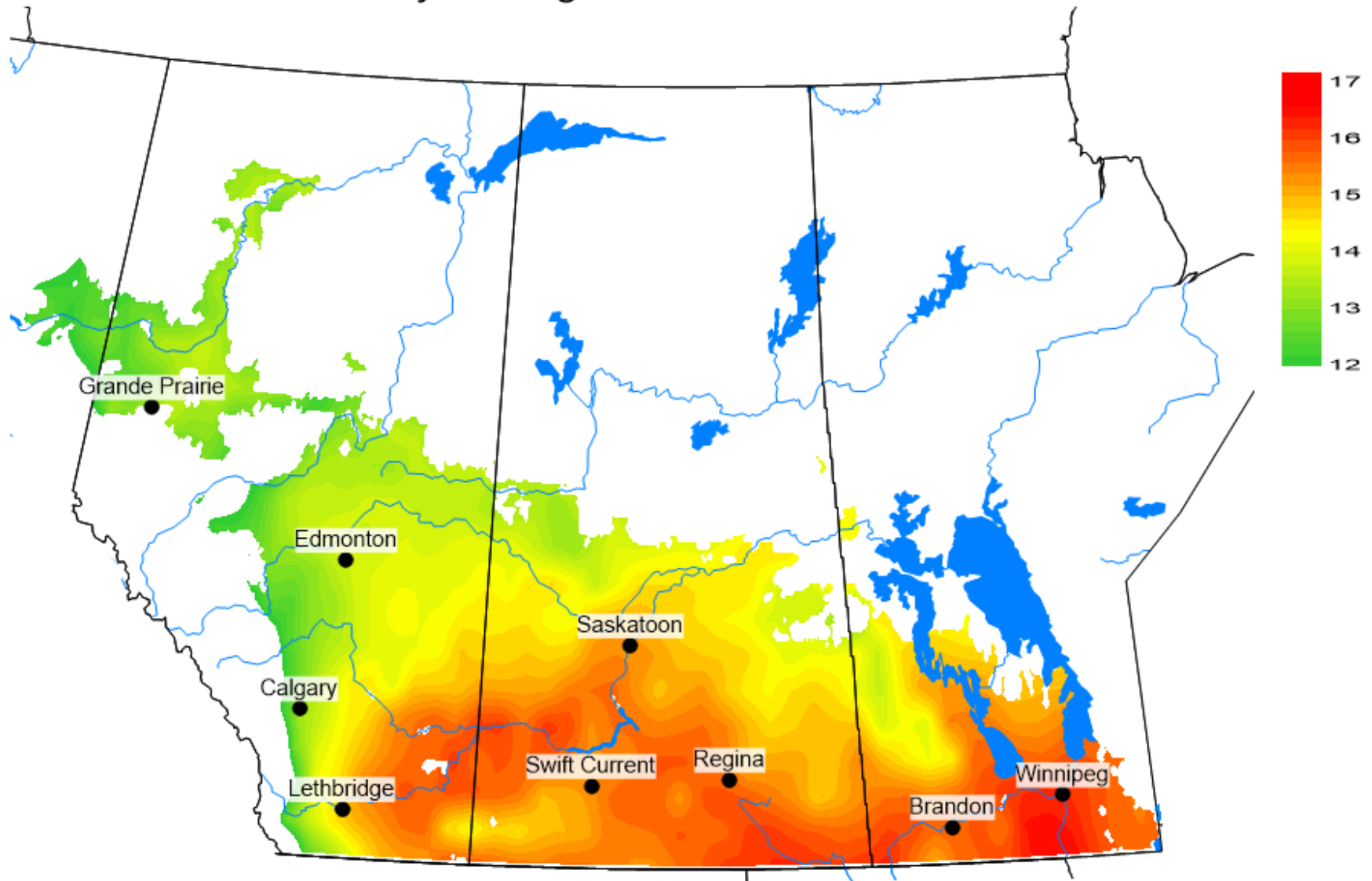
Growing season average temperature (C)
Observed (Avg=14.8 C)
May 1 - August 31, 2020



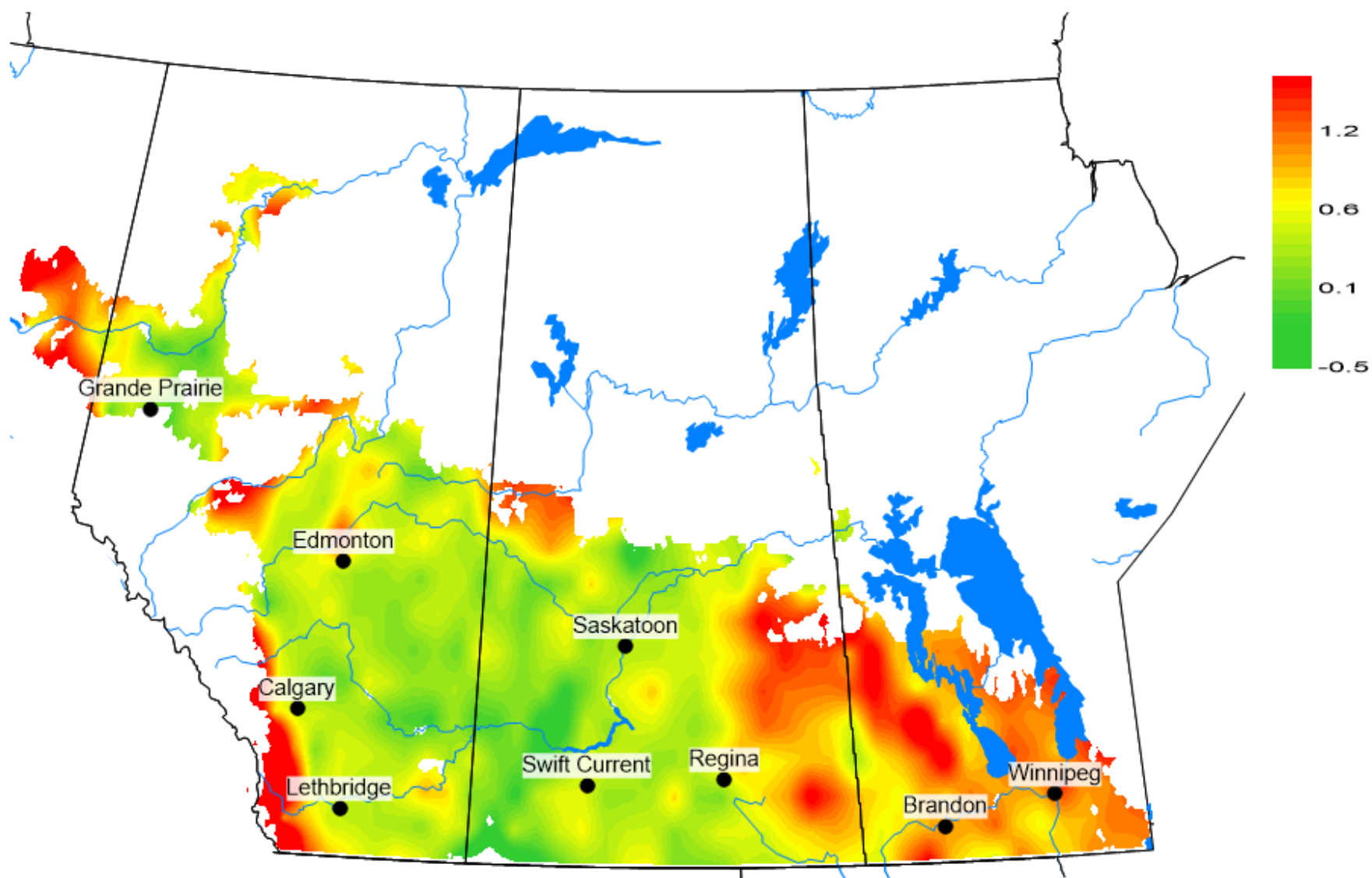
Growing season average temperature (C)

Long term normal (Avg=13.9 C)

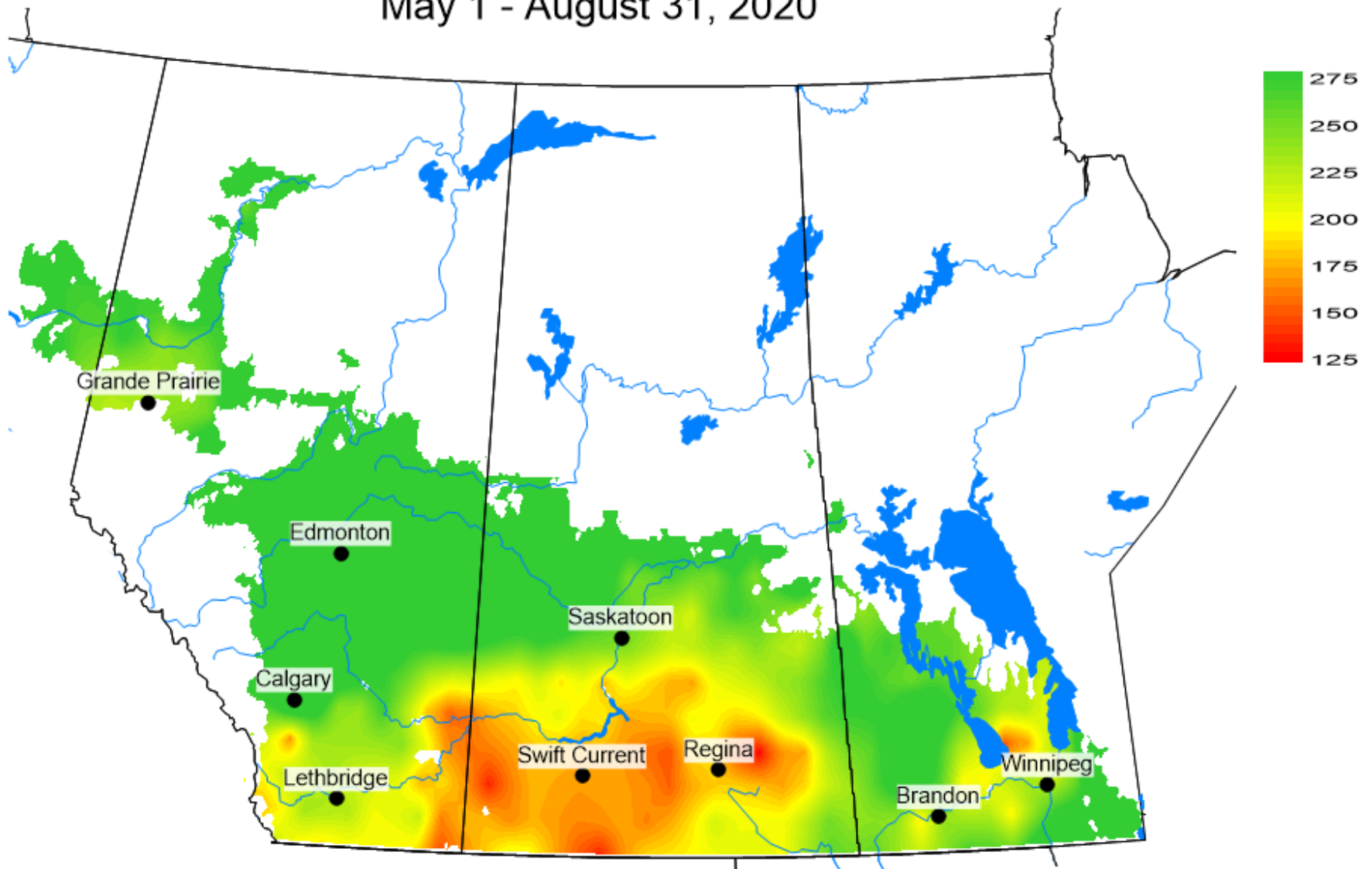
May 1 - August 31



Growing season temperature difference from normal (C) May 1 - August 31



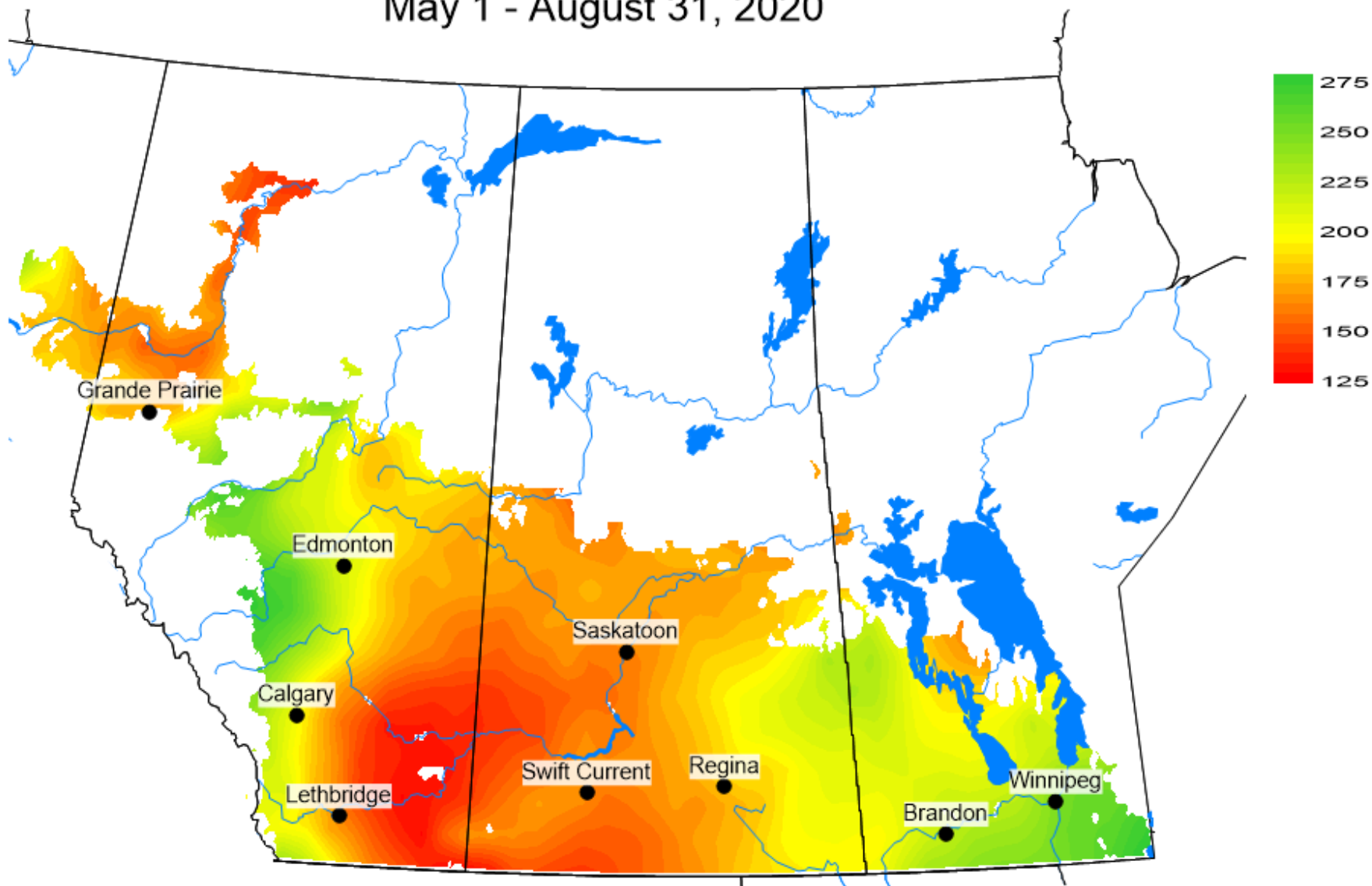
Growing Season cumulative rain (mm)
Observed (Avg=273 mm)
May 1 - August 31, 2020



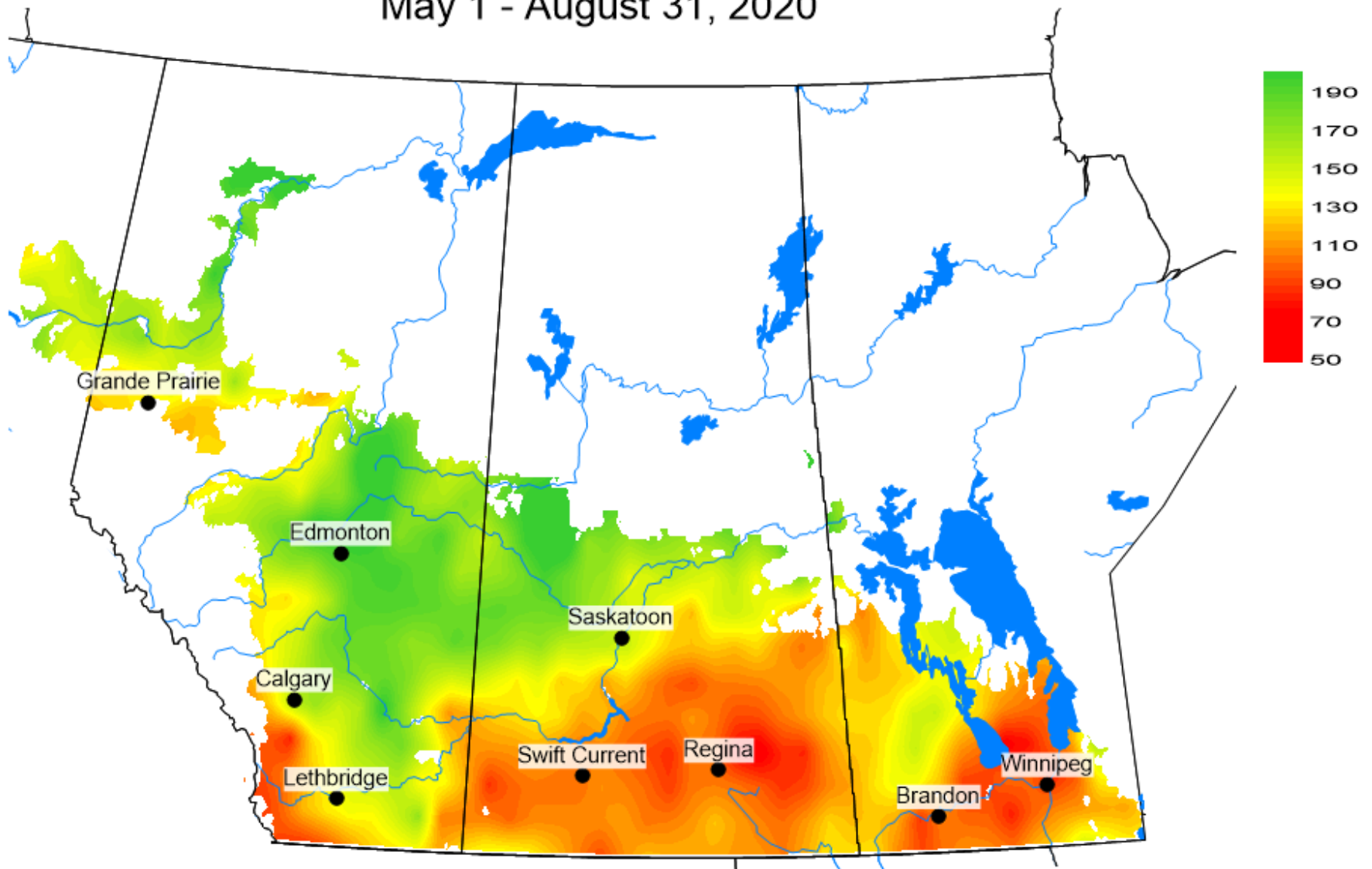
Growing Season cumulative rain (mm)

Long term normal (Avg=190 mm)

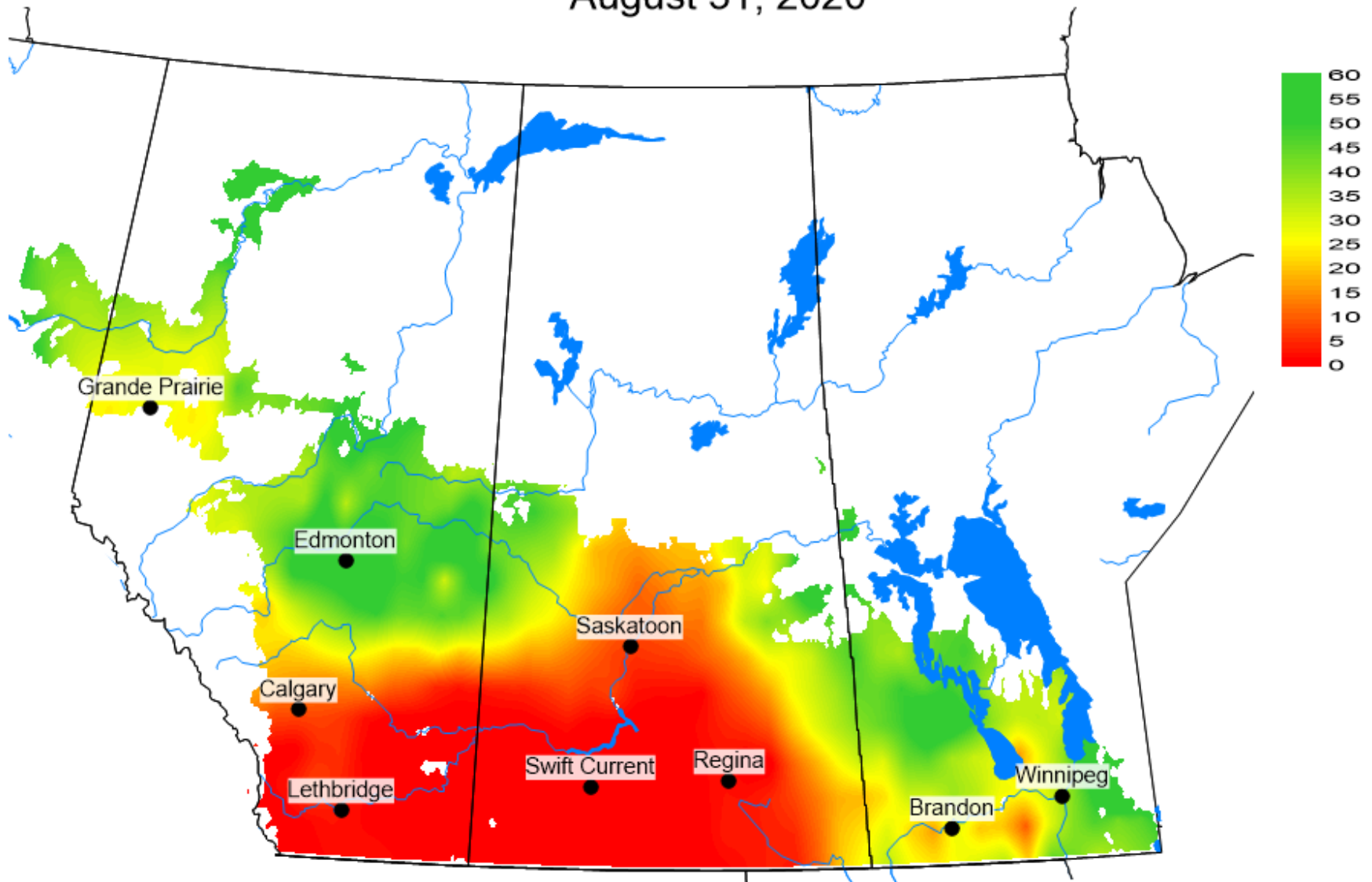
May 1 - August 31, 2020



Growing Season cumulative rain (%)
Percent of climate normal (146%)
May 1 - August 31, 2020



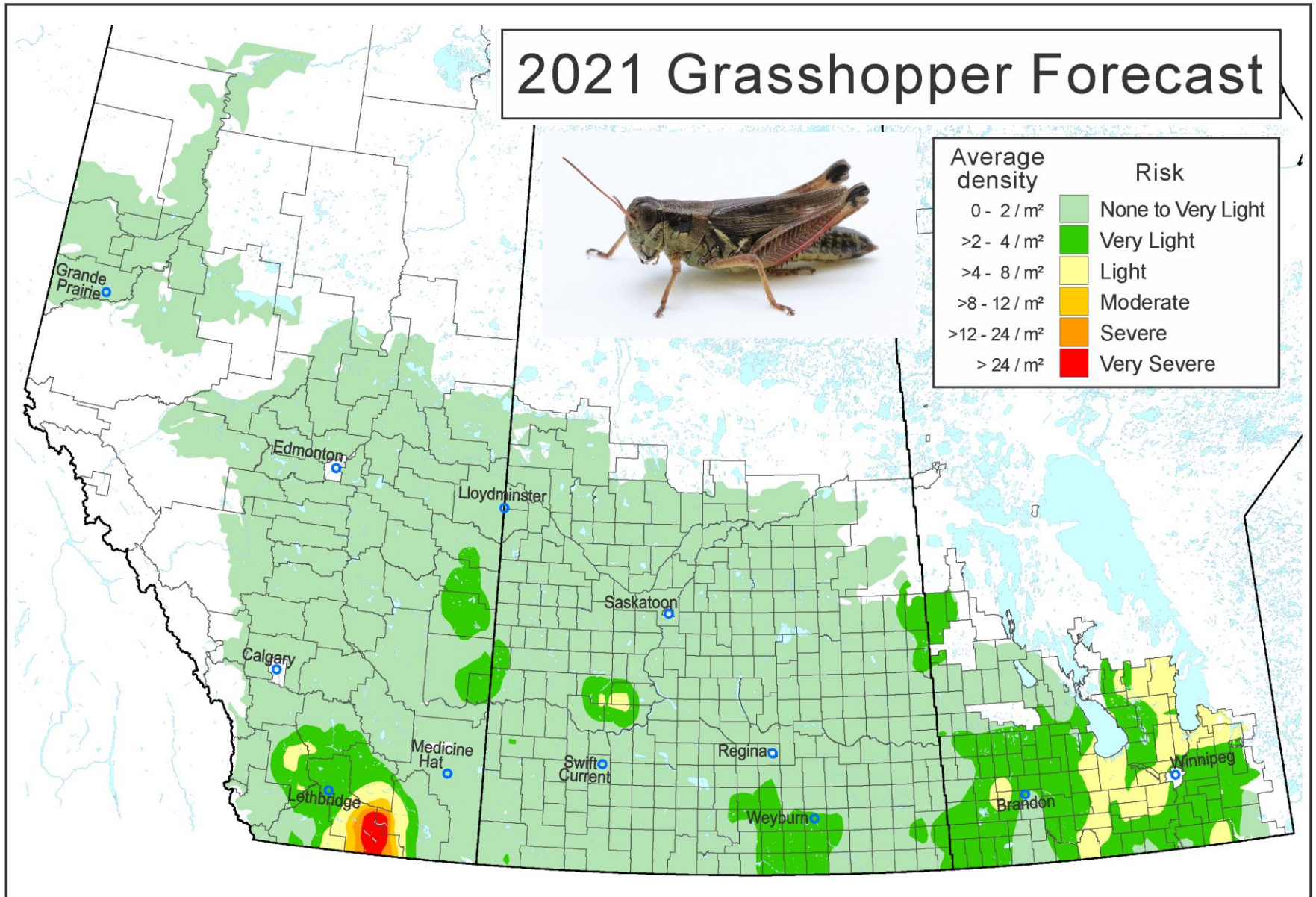
Soil Moisture (%)
Modelled
August 31, 2020



2021 Grasshopper Forecast

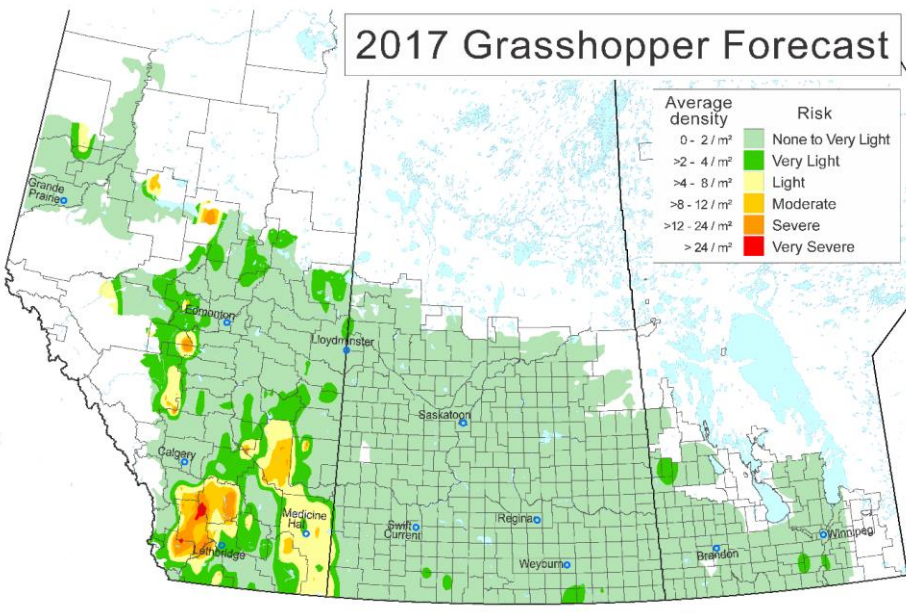


Average density	Risk
0 - 2 / m ²	None to Very Light
>2 - 4 / m ²	Very Light
>4 - 8 / m ²	Light
>8 - 12 / m ²	Moderate
>12 - 24 / m ²	Severe
> 24 / m ²	Very Severe

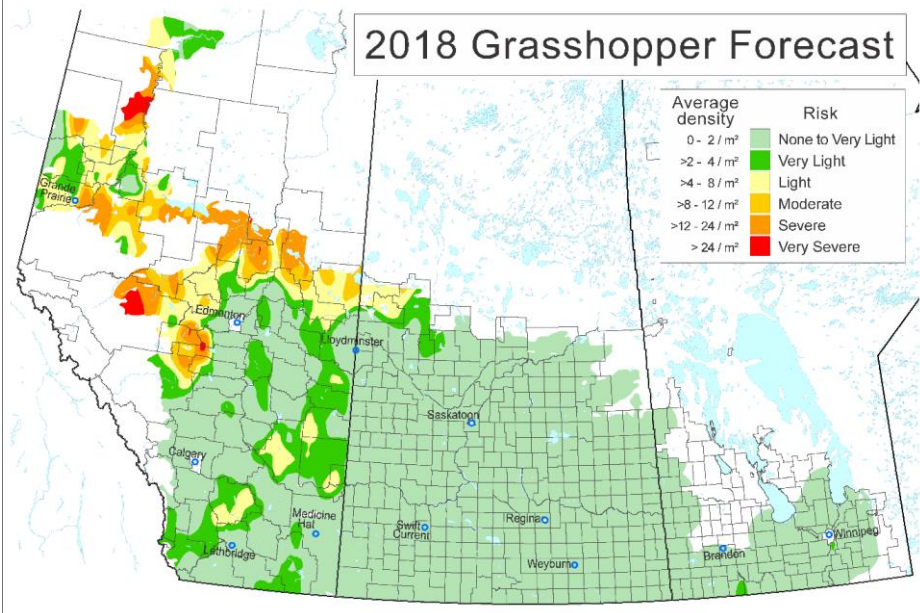


Map by David Giffen; Image by Jon Williams

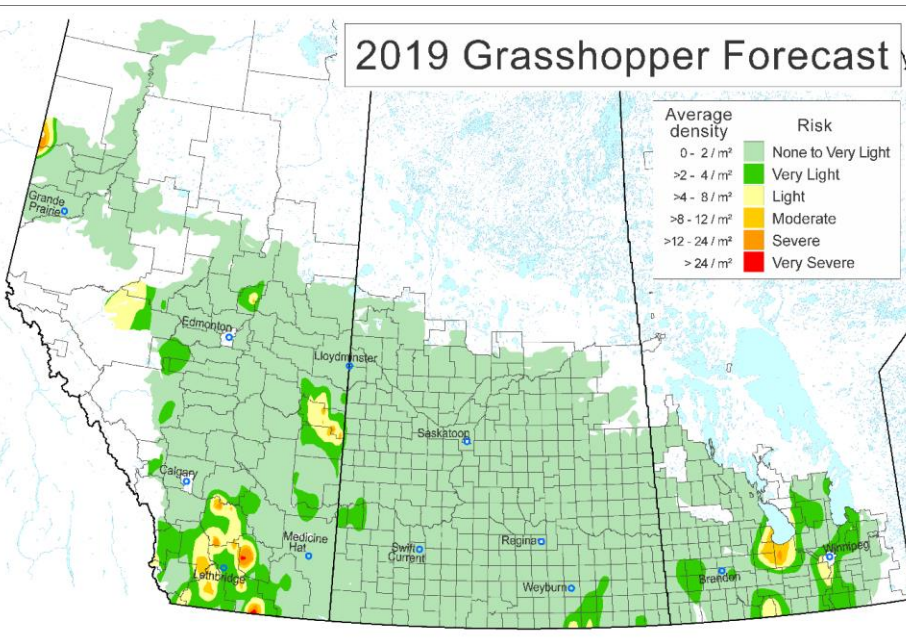
2017 Grasshopper Forecast



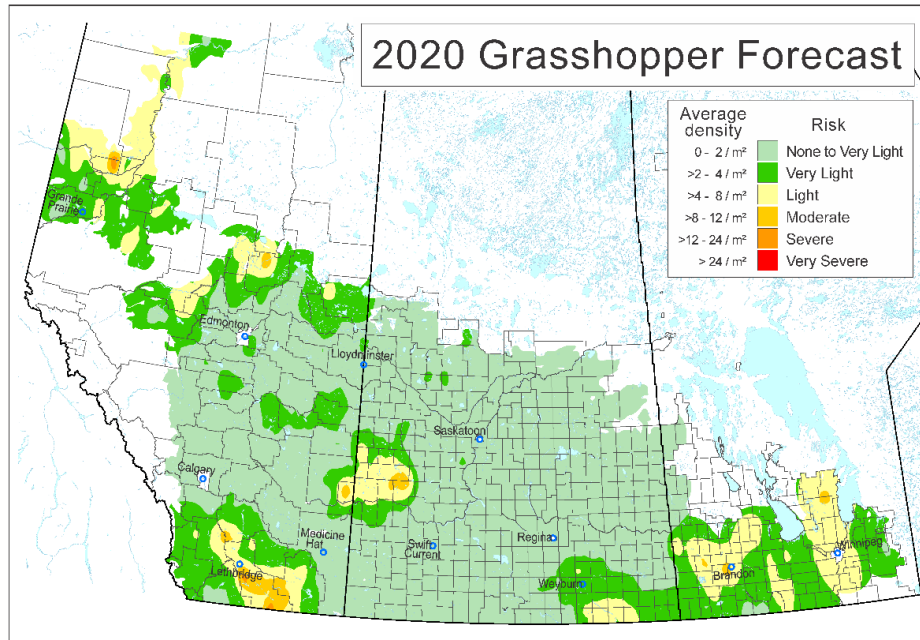
2018 Grasshopper Forecast



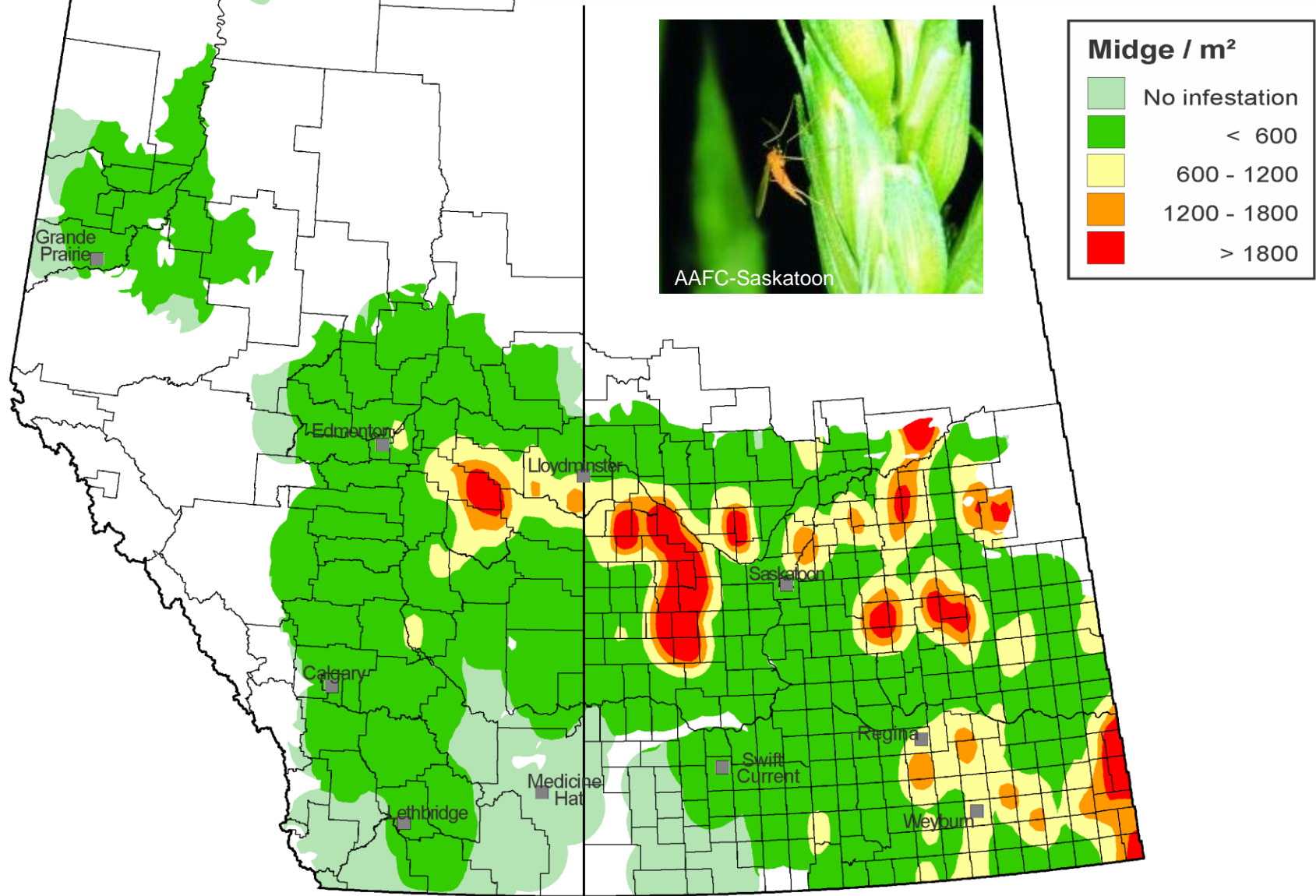
2019 Grasshopper Forecast



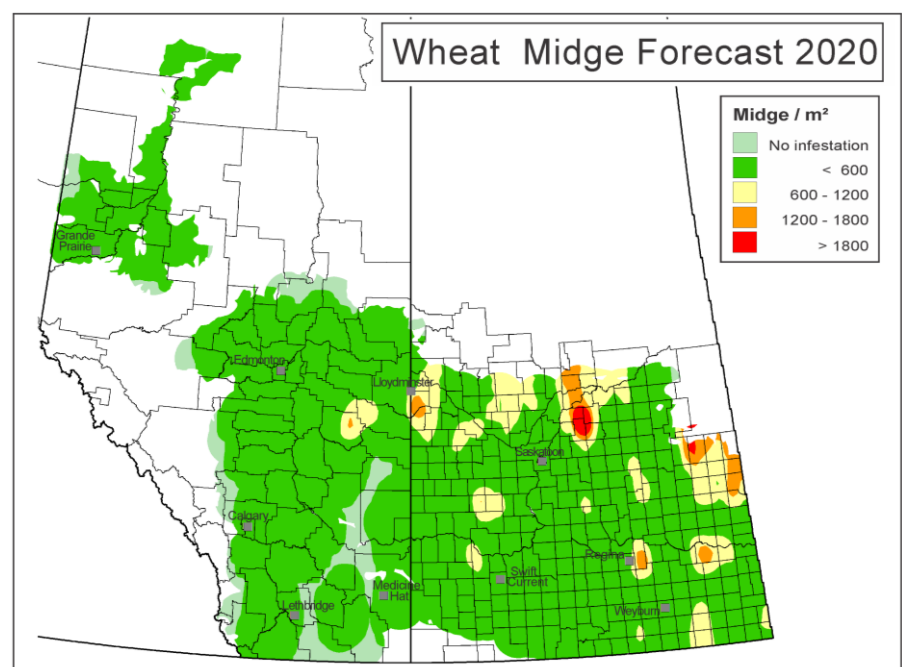
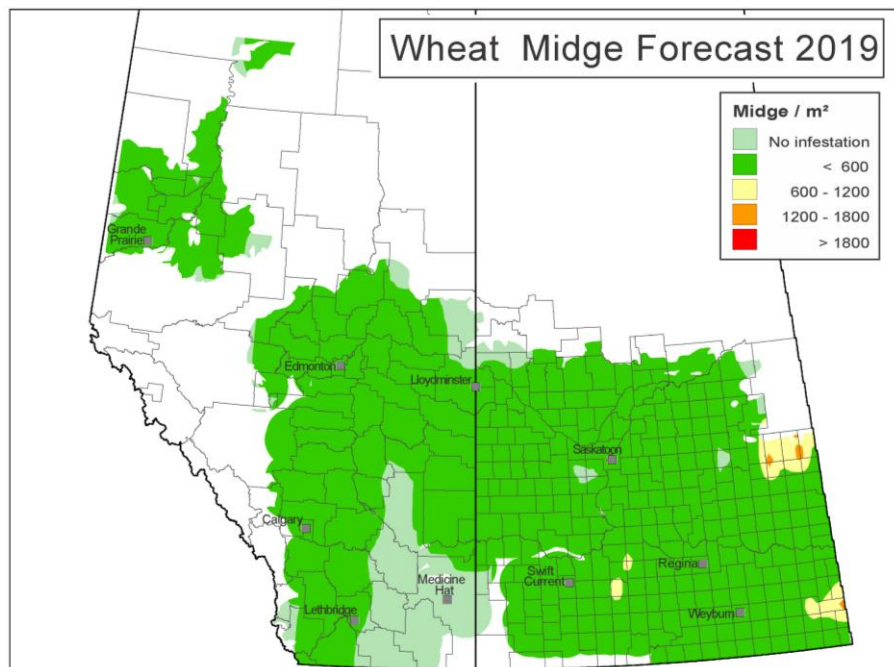
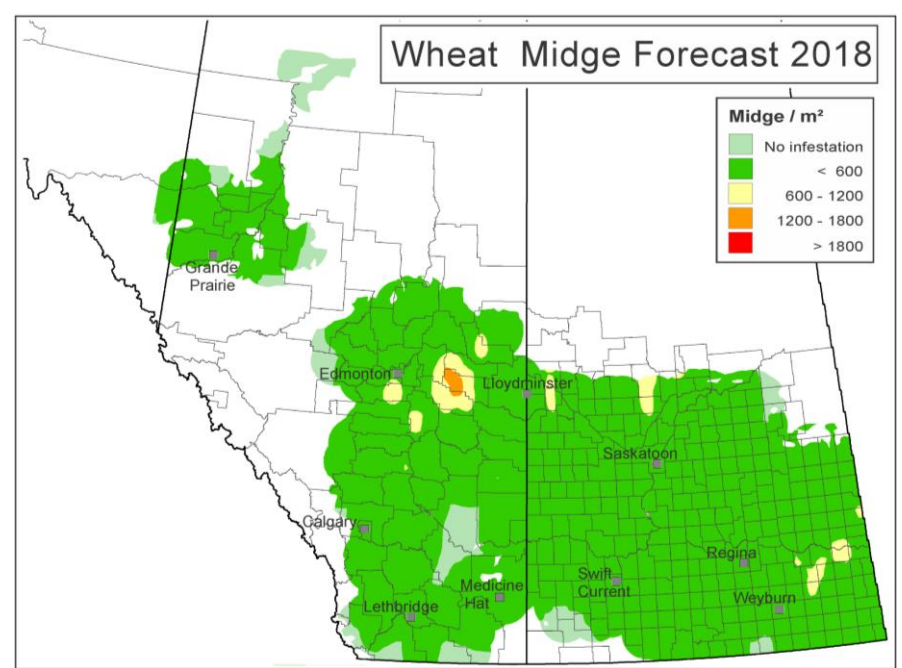
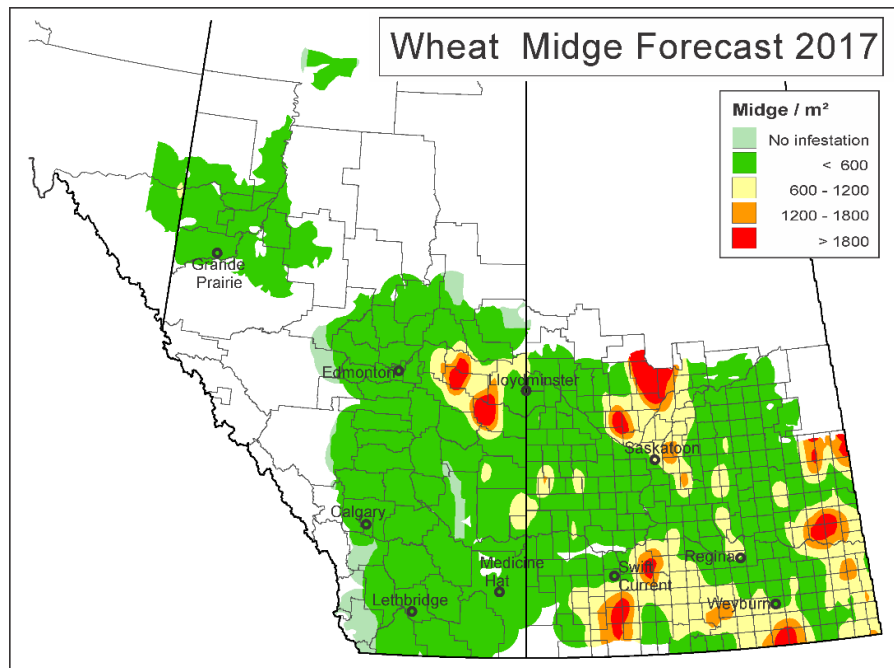
2020 Grasshopper Forecast



Wheat Midge Forecast 2021

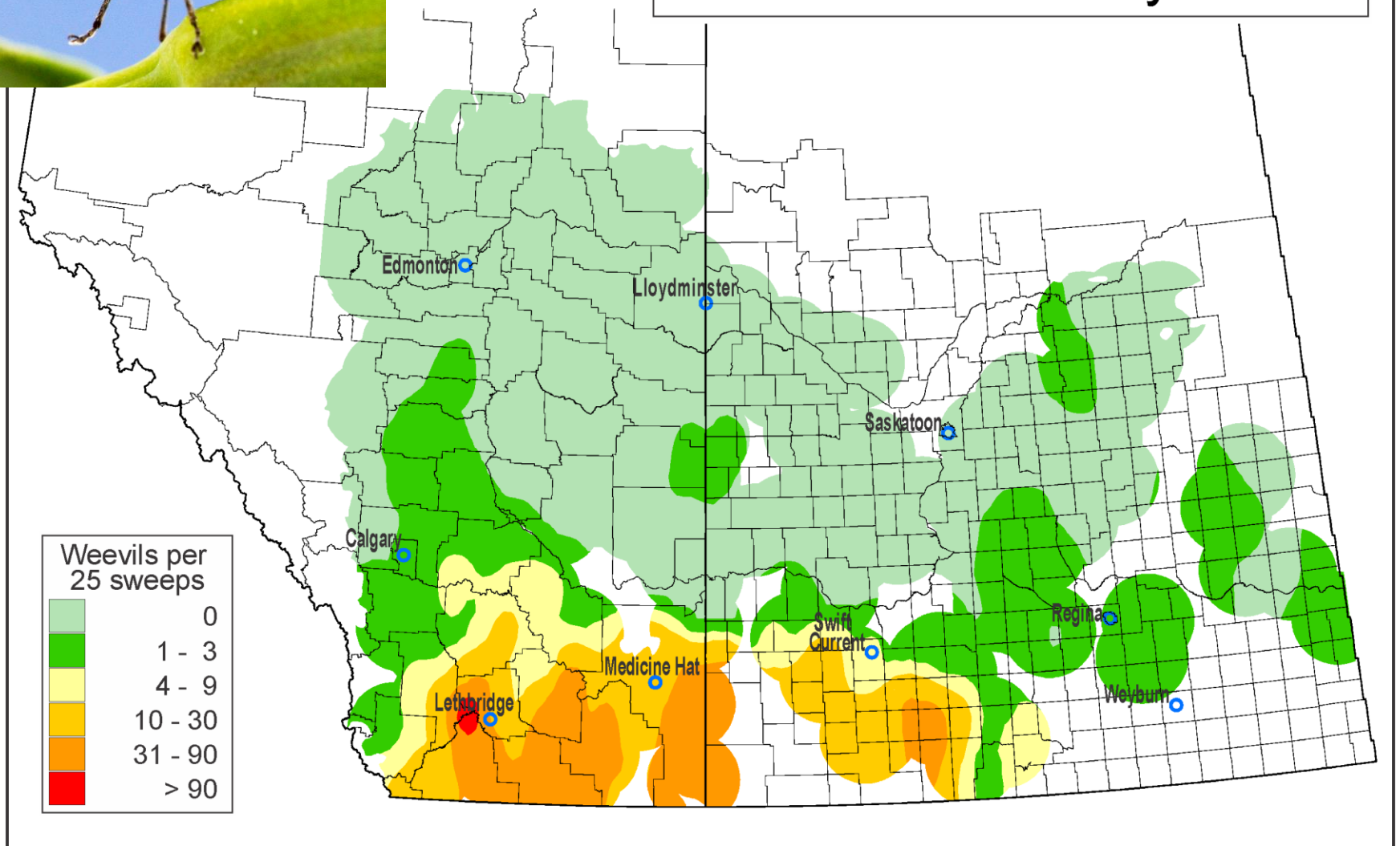


Map by David Giffen; Data from BC Peace not shown



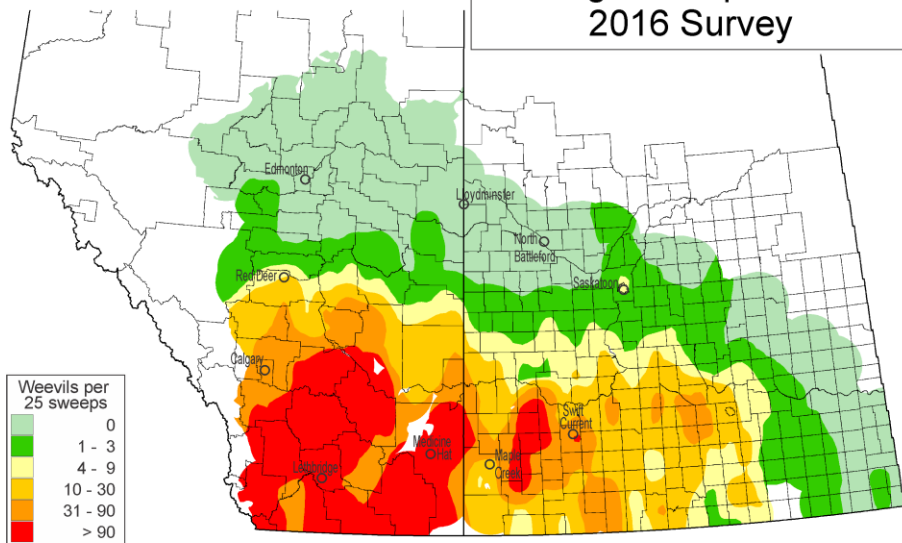


Cabbage Seedpod Weevil 2020 Survey

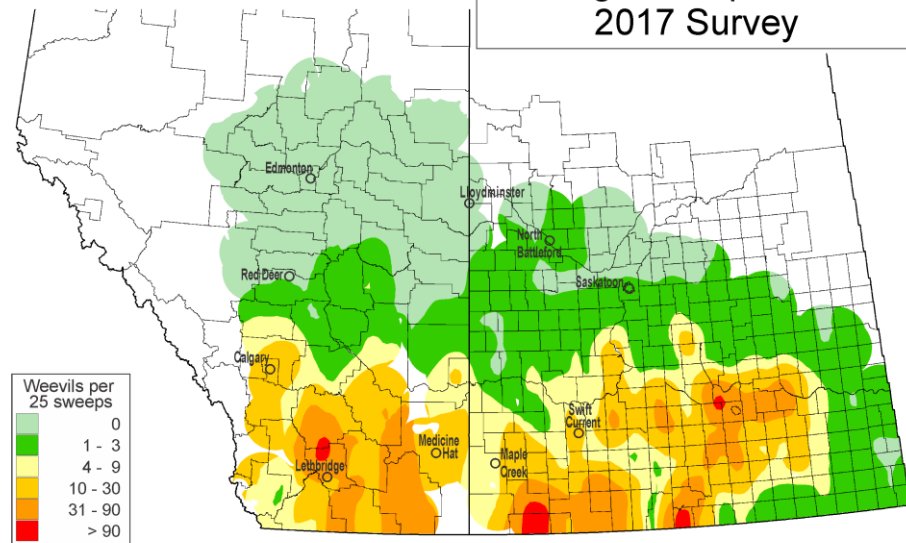


Map by David Giffen; Image by Shelley Barkley

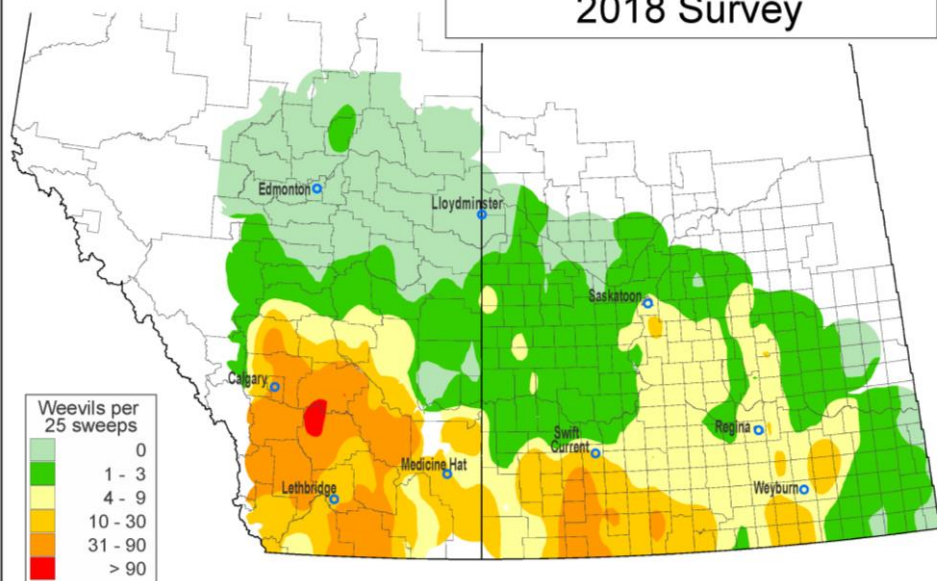
Cabbage Seedpod Weevil
2016 Survey



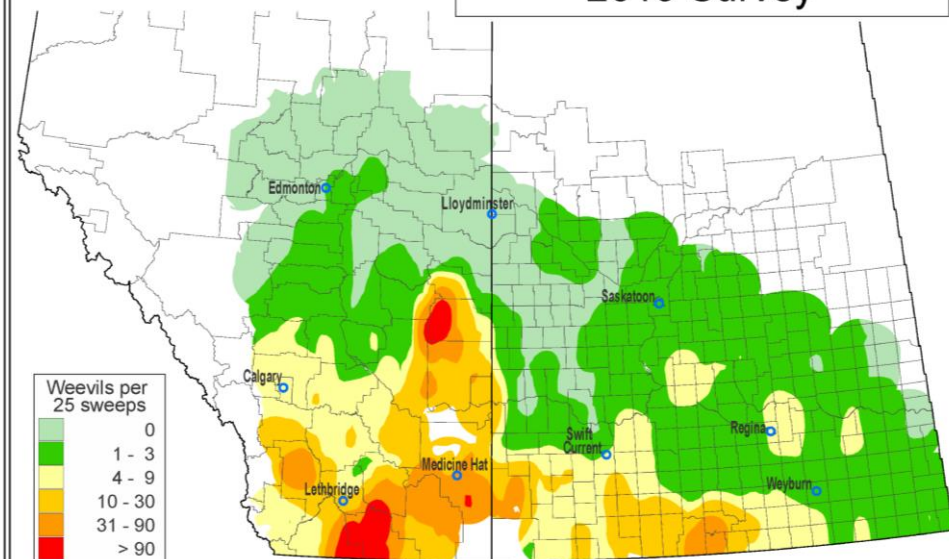
Cabbage Seedpod Weevil
2017 Survey



Cabbage Seedpod Weevil
2018 Survey



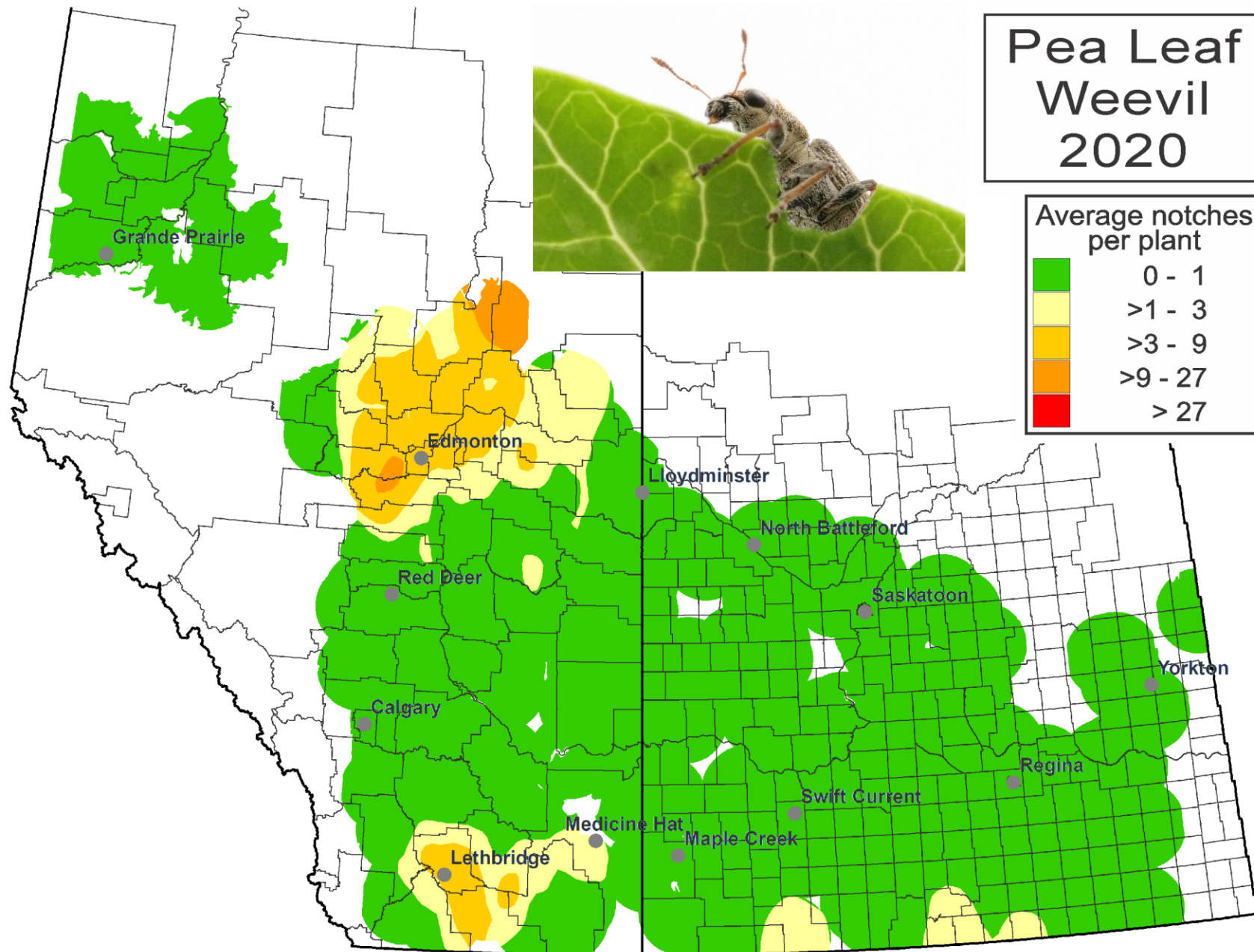
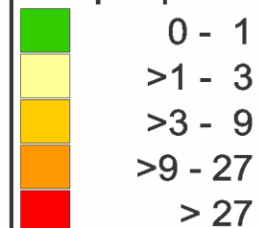
Cabbage Seedpod Weevil
2019 Survey



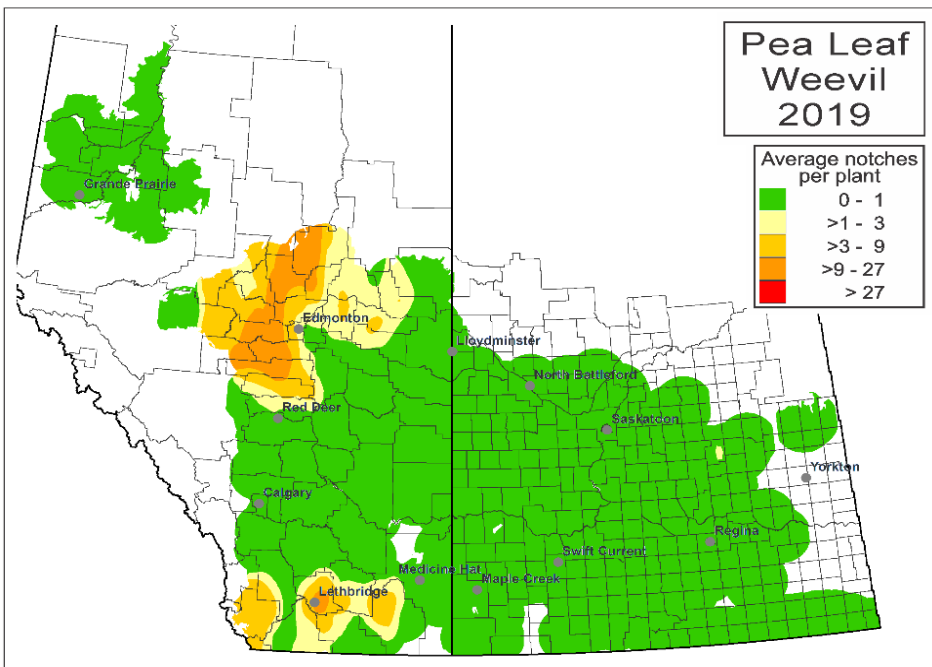
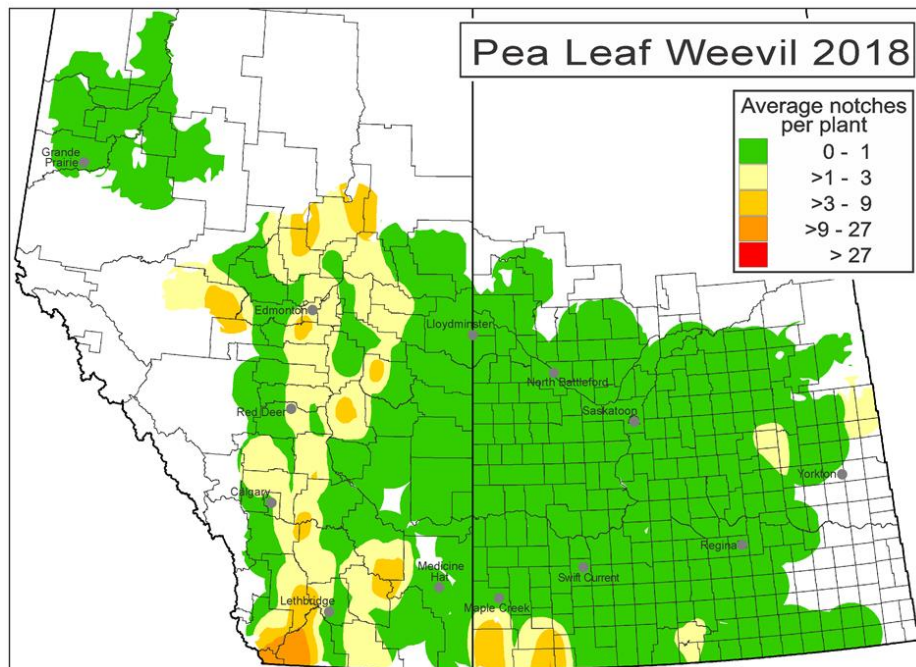
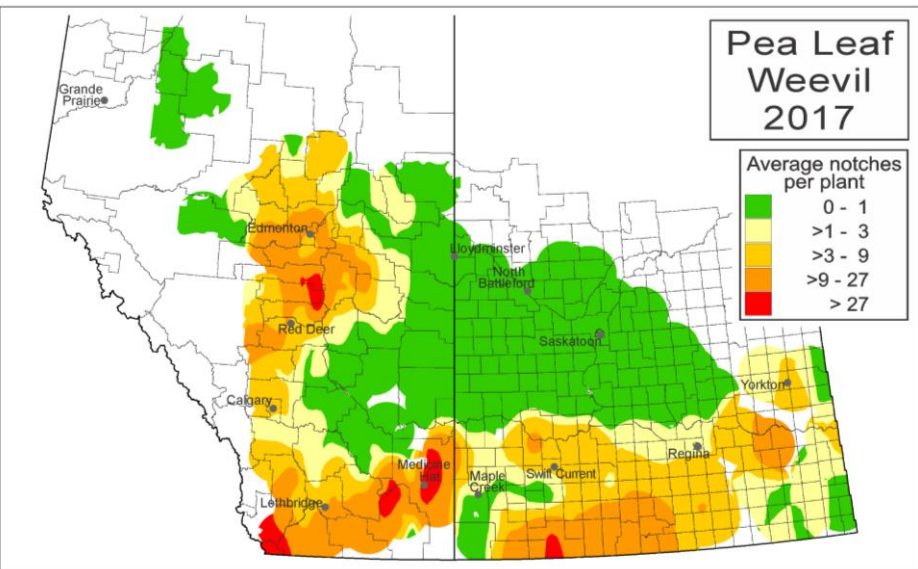
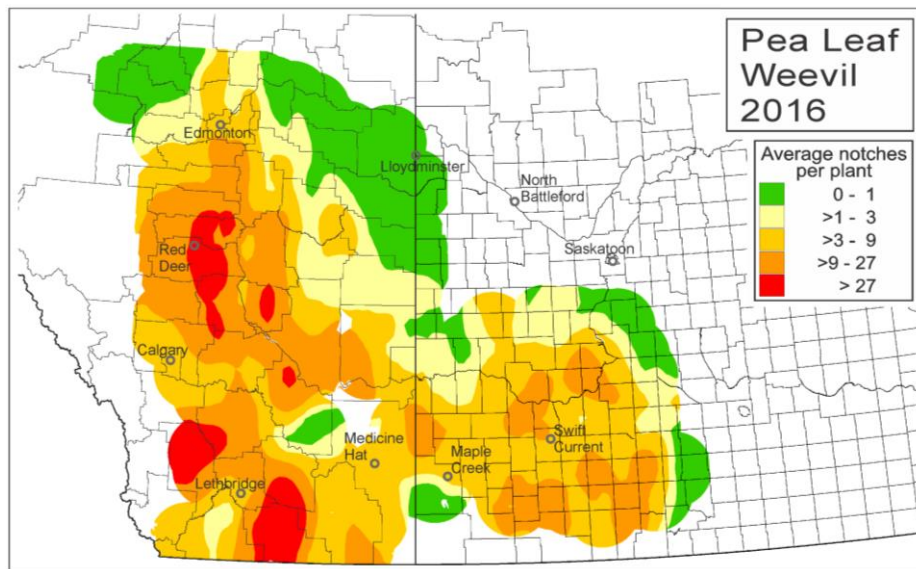
Pea Leaf Weevil 2020



Average notches
per plant



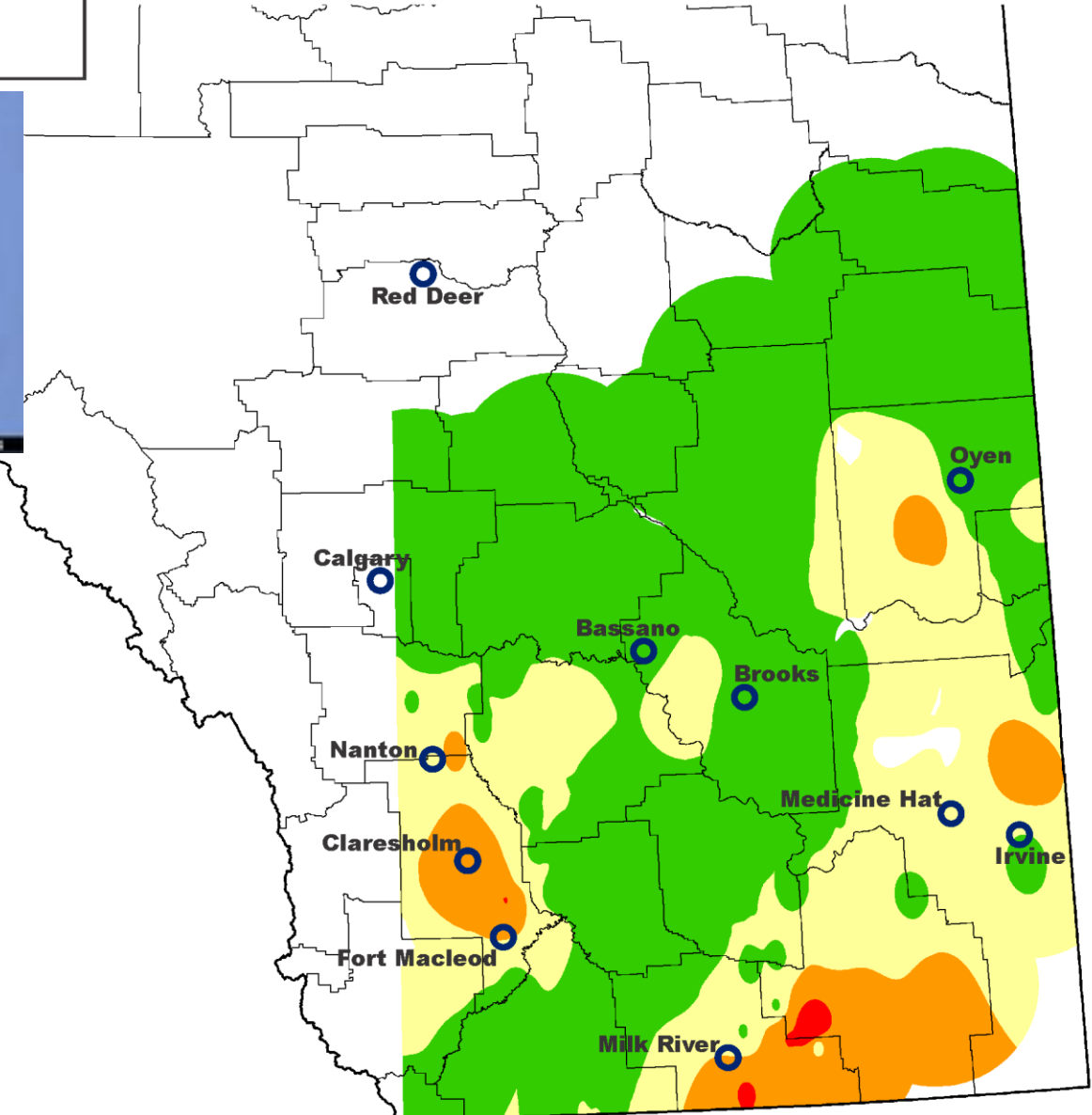
Map by David Giffen; Image by Jon Williams



Wheat Stem Sawfly 2020 Survey

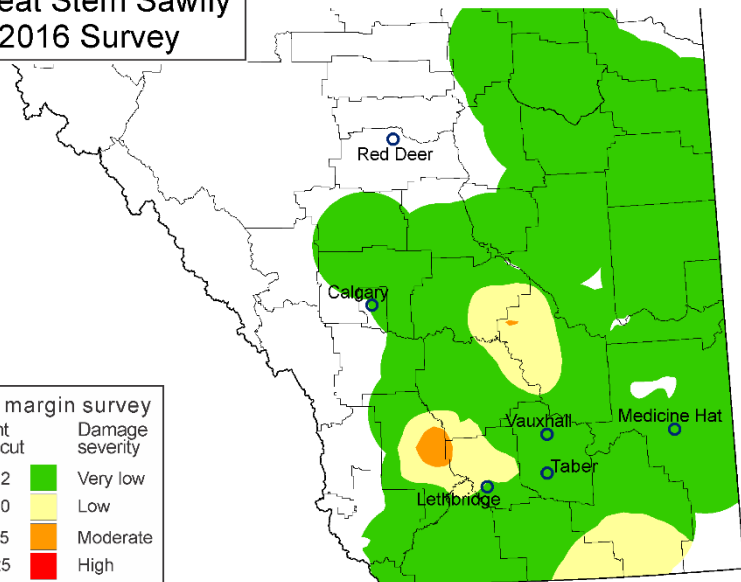
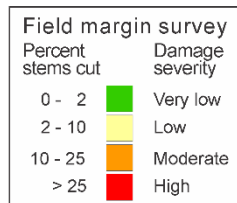


Field margin survey		
Percent stems cut		Damage severity
0 - 2	Green	Very low
2 - 10	Yellow	Low
10 - 25	Orange	Moderate
> 25	Red	High

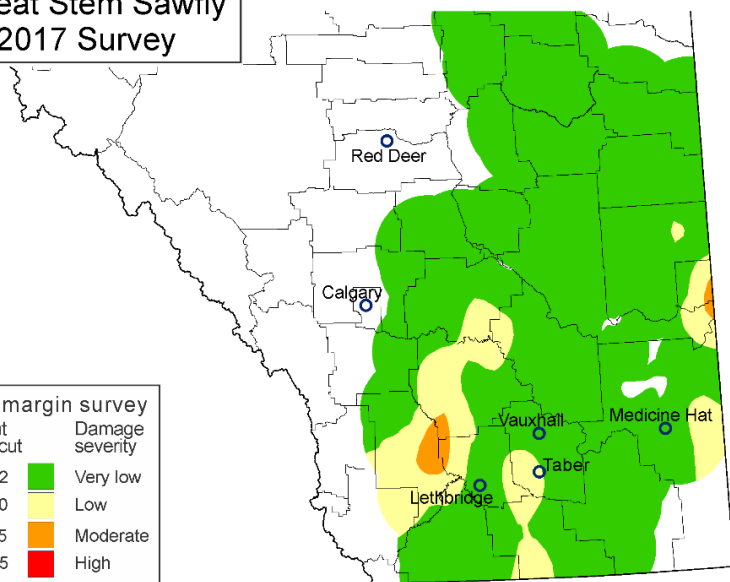
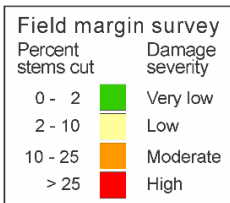


Map by David Giffen; Image by Pest and Diseases Image Library (bugwood.org)

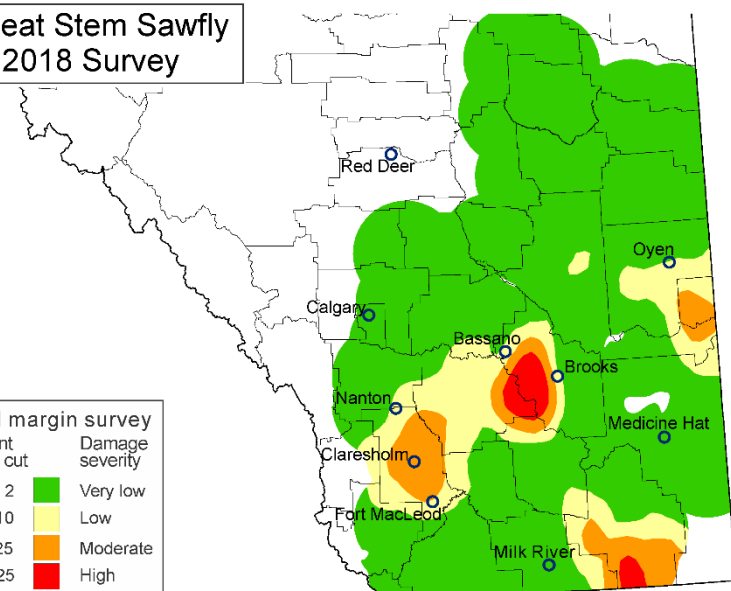
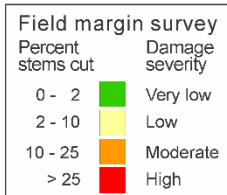
Wheat Stem Sawfly 2016 Survey



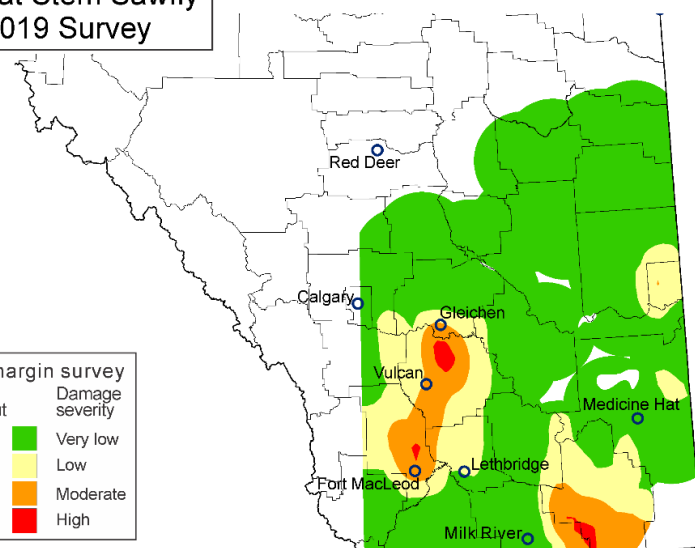
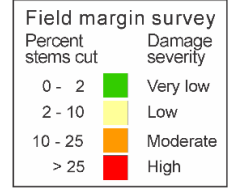
Wheat Stem Sawfly 2017 Survey



Wheat Stem Sawfly 2018 Survey



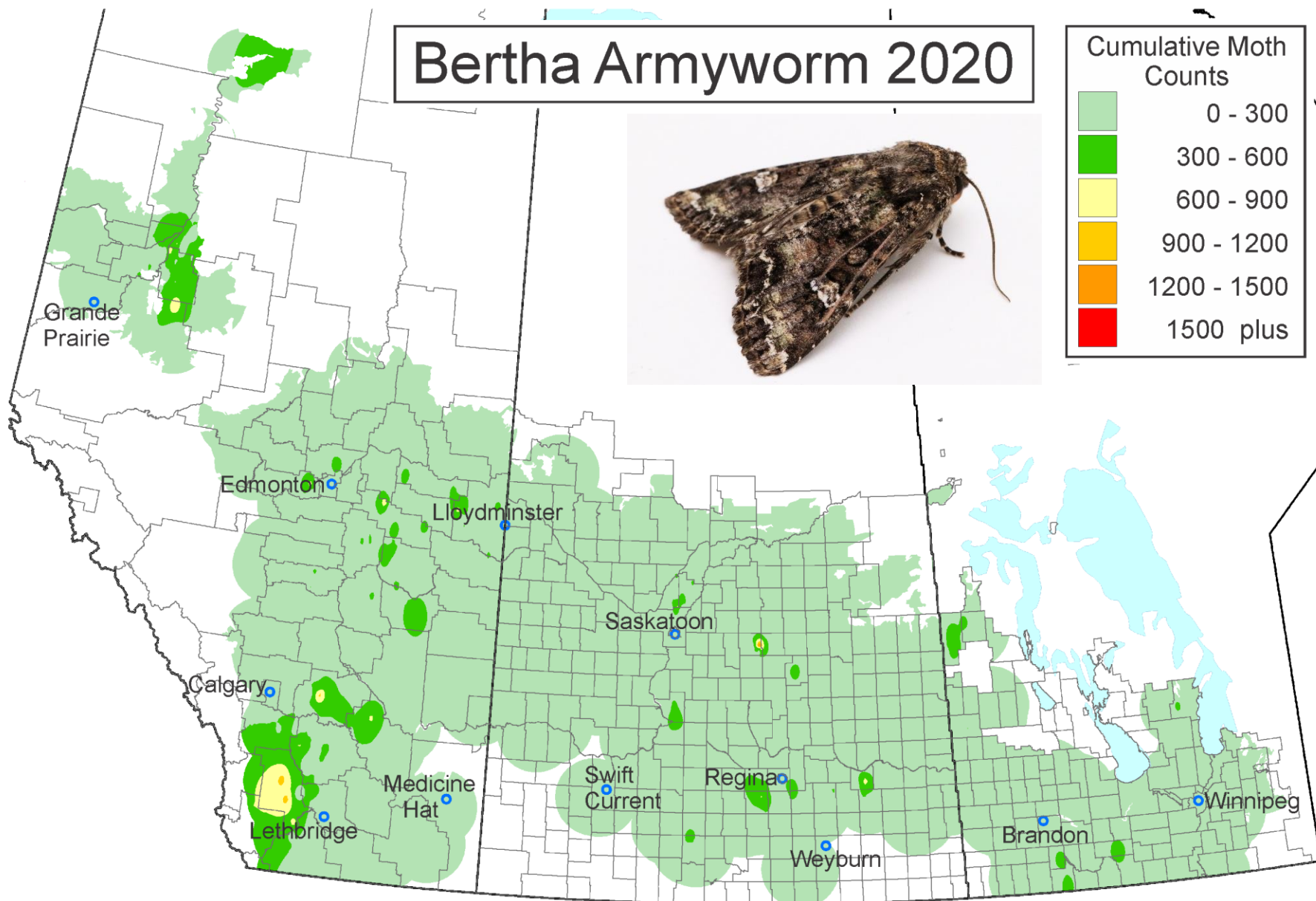
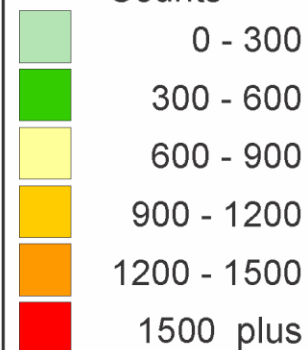
Wheat Stem Sawfly 2019 Survey



Bertha Armyworm 2020



Cumulative Moth Counts



Map by David Giffen; Image by Jon Williams

