



Distribution and Risk Maps for Insect Pests of Prairie Field Crops based on 2022 Surveys

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Agriculture and Agri-Food Canada, Saskatoon

With funding and support from*:



Agriculture and
Agri-Food Canada



*List limited to current direct funders

Prairie Insect Monitoring Team

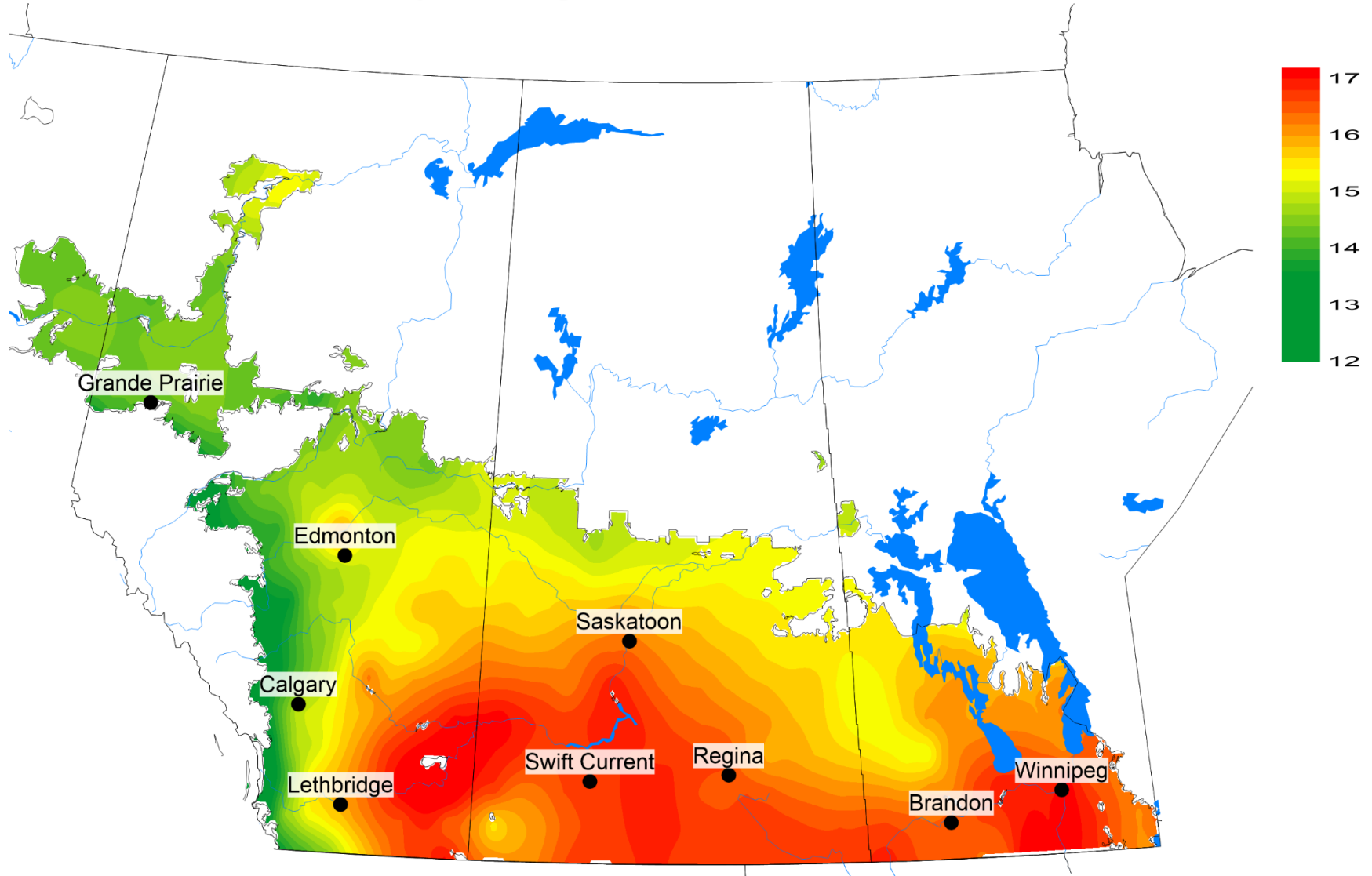
Data provided through partnership with:

- Alberta Agriculture, Forestry and Rural Economic Development
- Saskatchewan Ministry of Agriculture
- Manitoba Agriculture
- 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

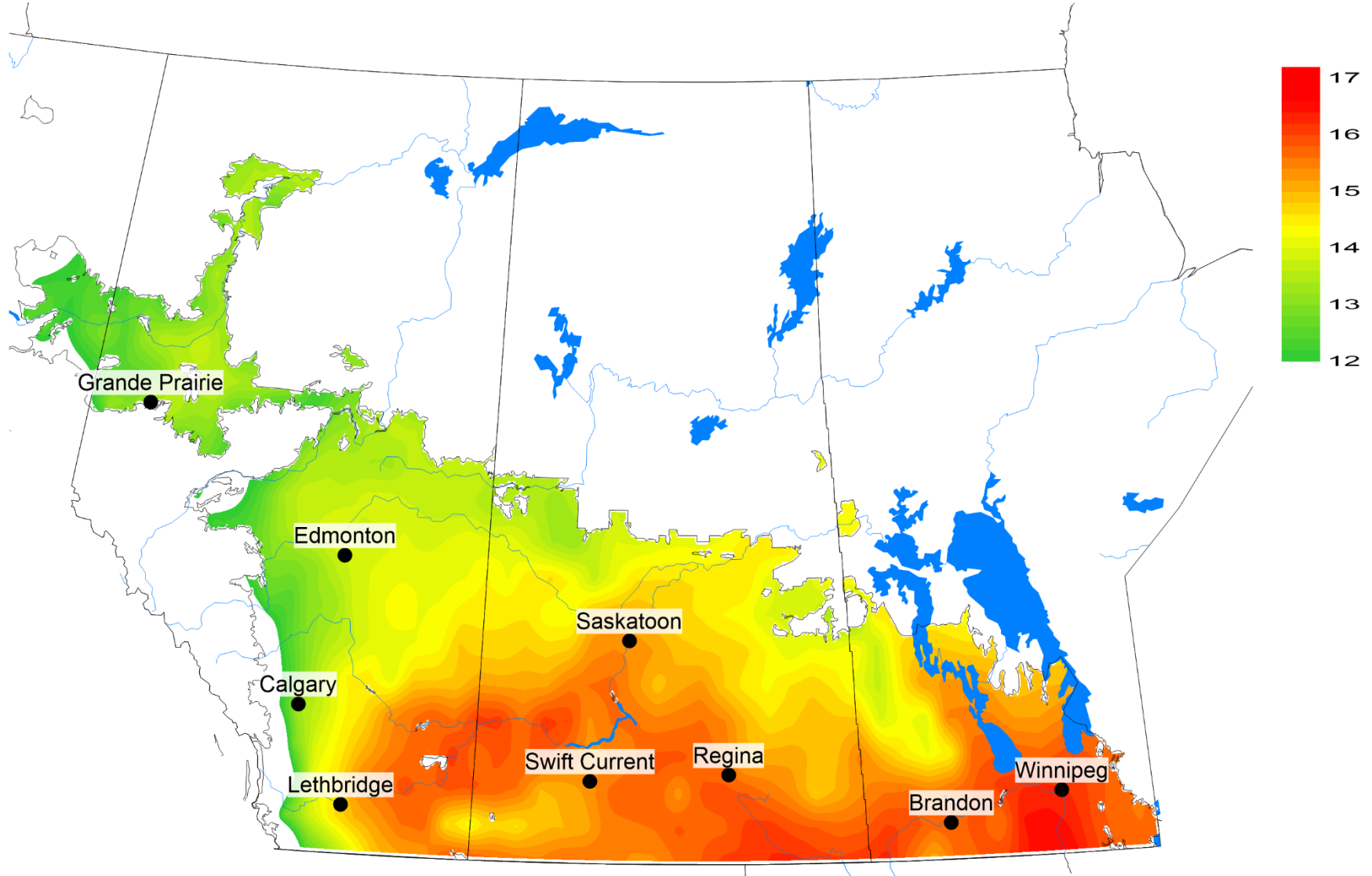
Maps prepared by David Giffen, Ross Weiss, and Shane Hladun (Agriculture and Agri-Food Canada – Saskatoon Research and Development Centre).



Growing season average temperature (C) Observed (Avg= 15.3 °C) May 1 - August 31, 2022

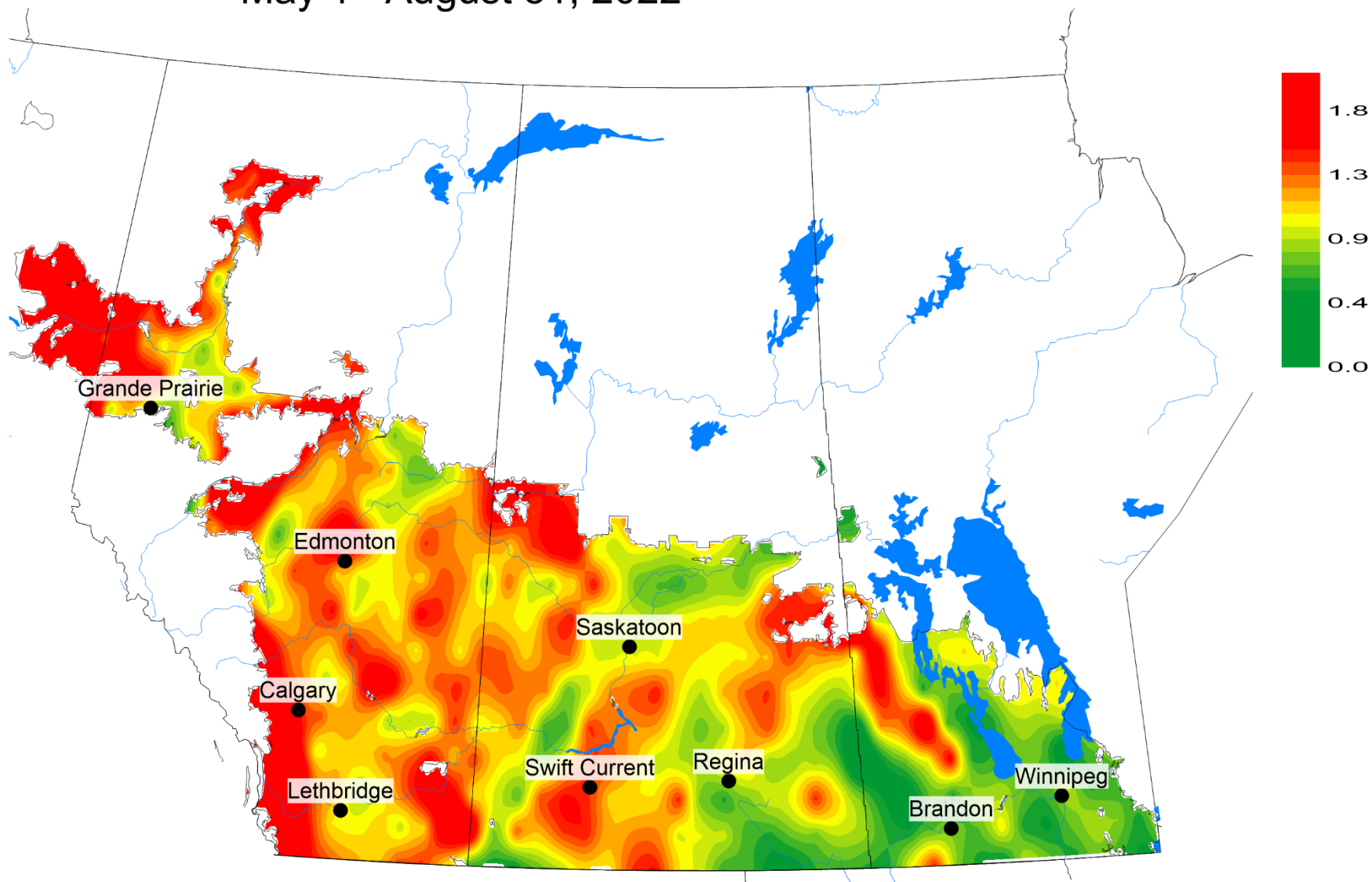


Growing season average temperature (C) Long term normal (Avg=13.9 C) May 1 - August 31

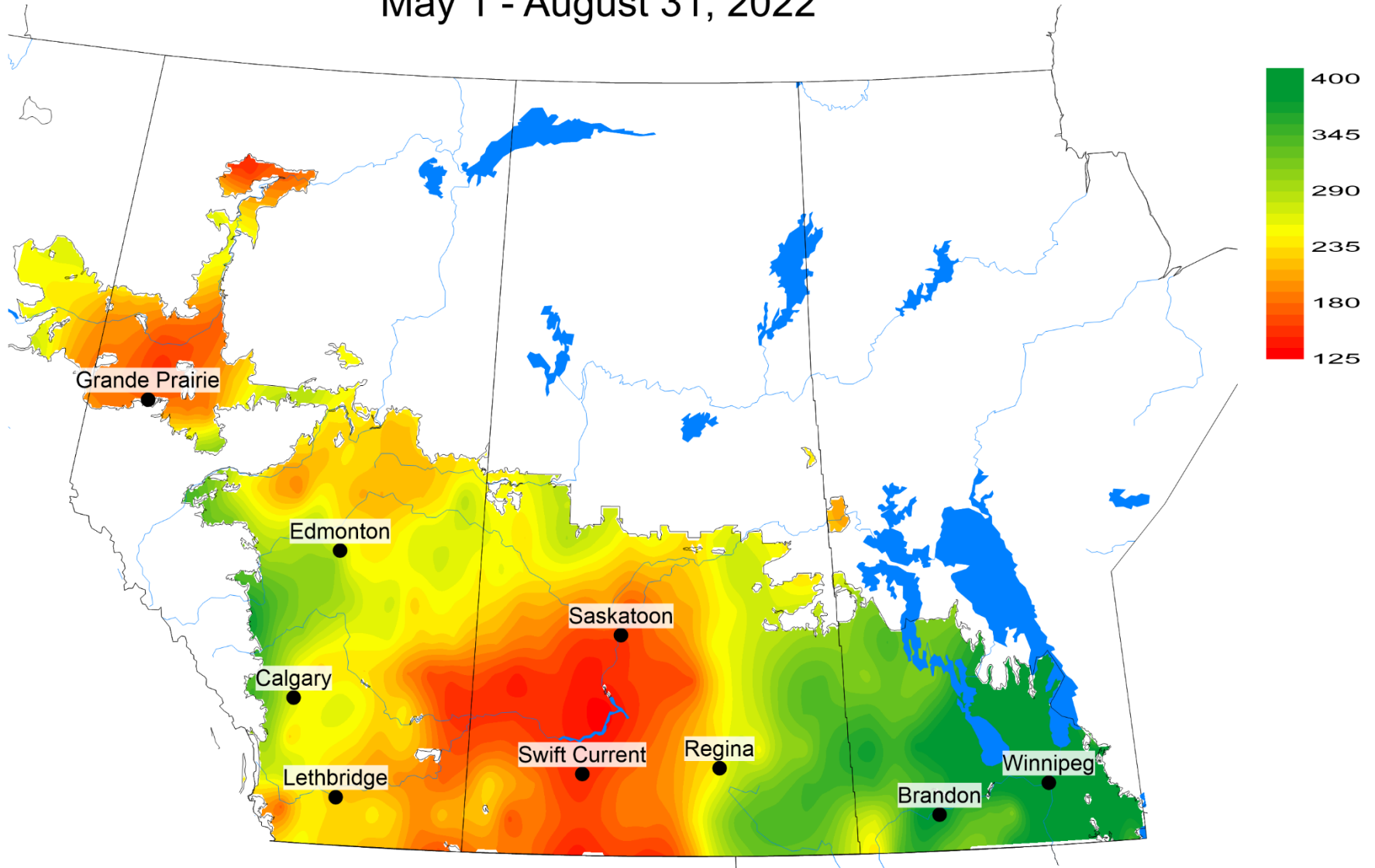


Growing season temperature difference from normal (°C)

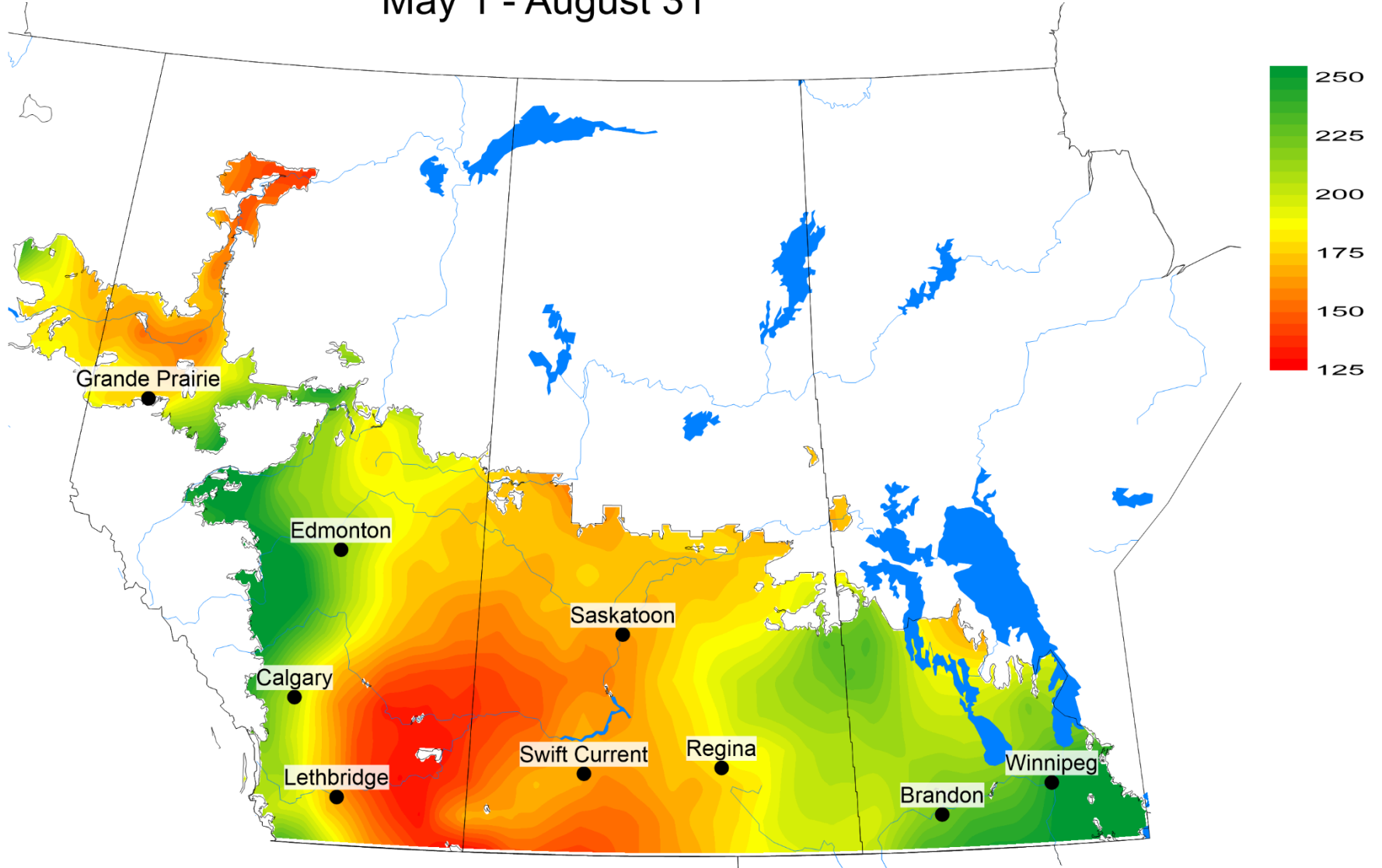
Average = 1.3 °C
May 1 - August 31, 2022



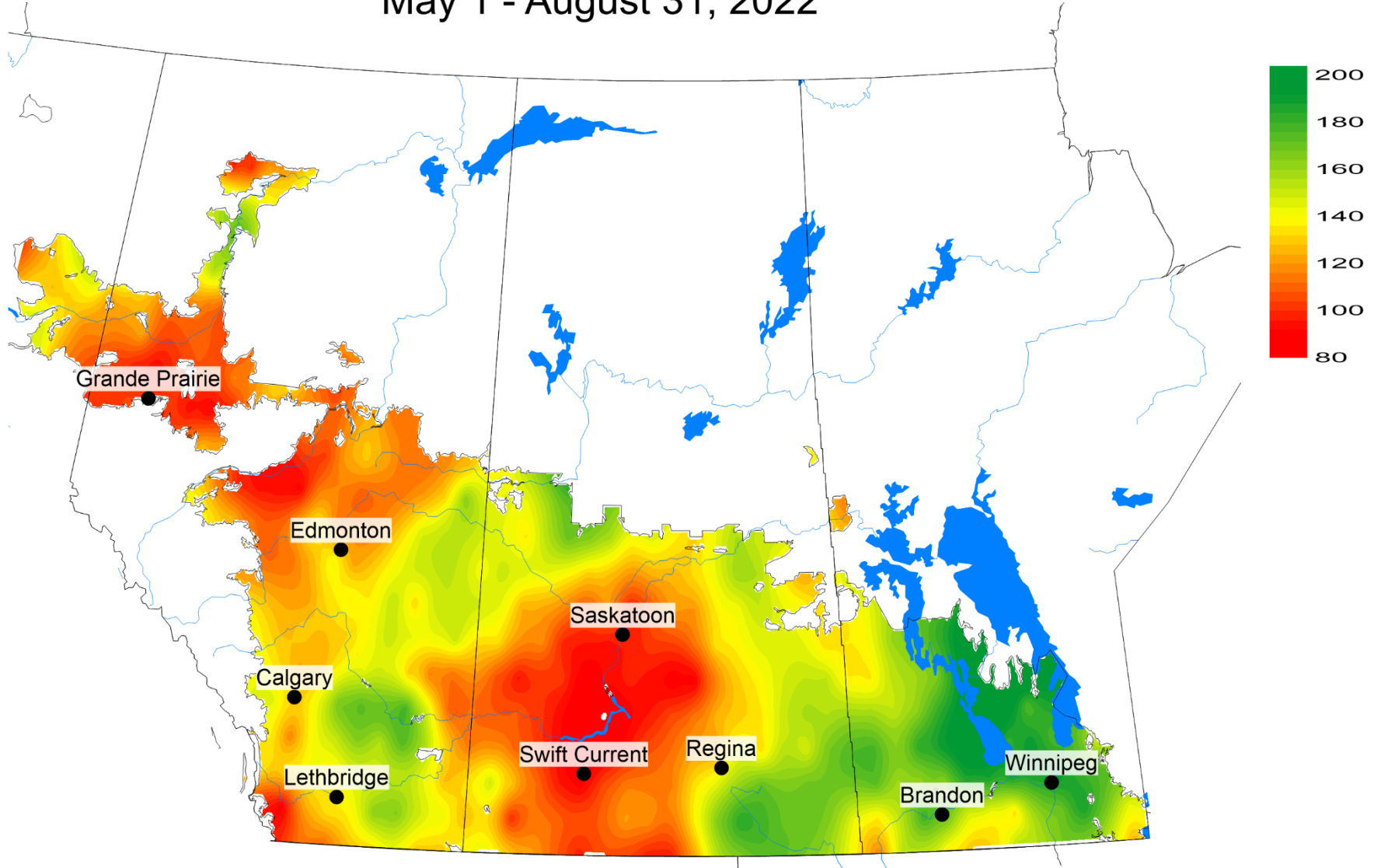
Growing Season cumulative rain (mm) Observed (Avg= 259 mm) May 1 - August 31, 2022



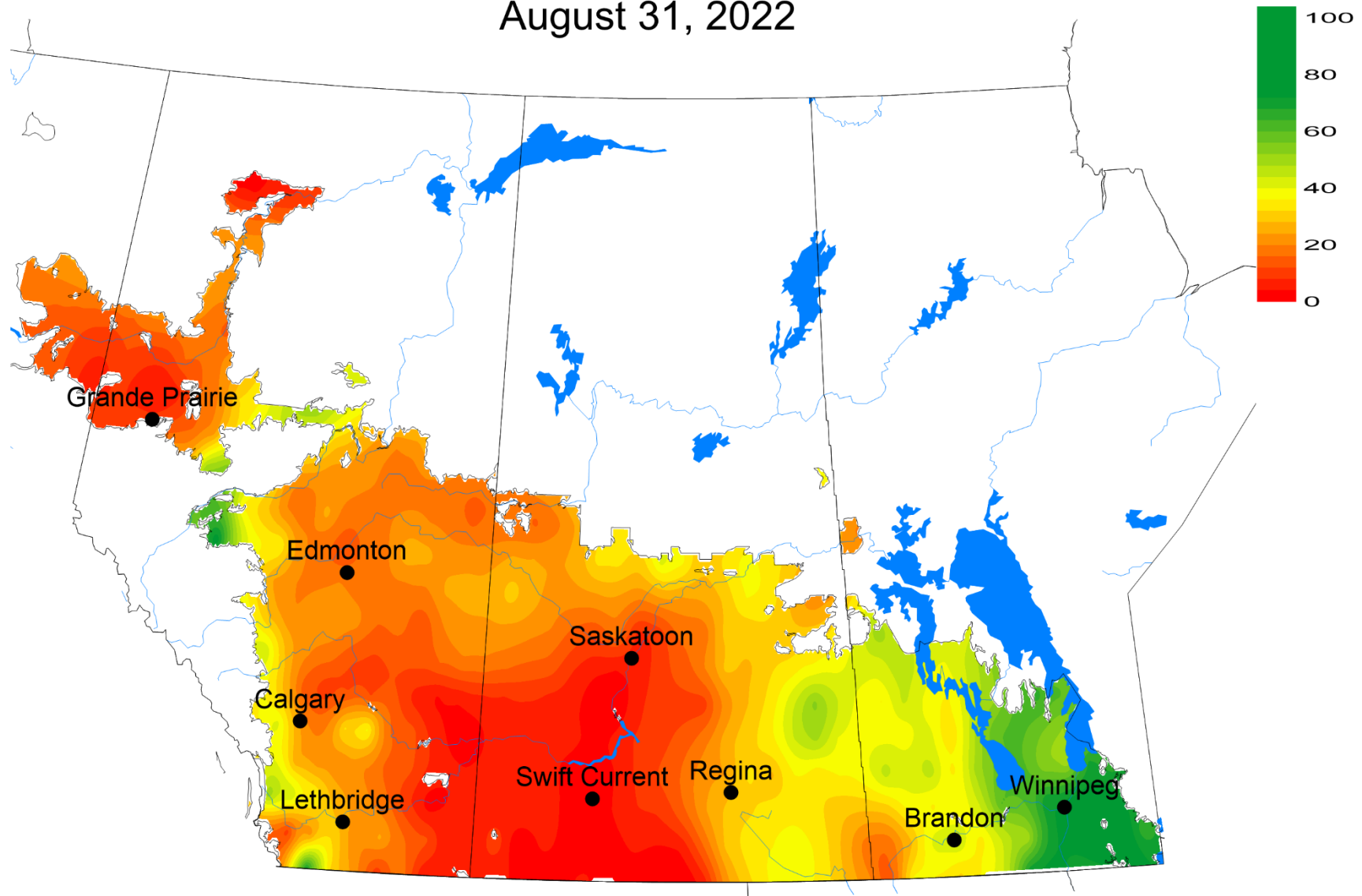
Growing Season cumulative rain (mm) Climate normals (Avg=190 mm) May 1 - August 31



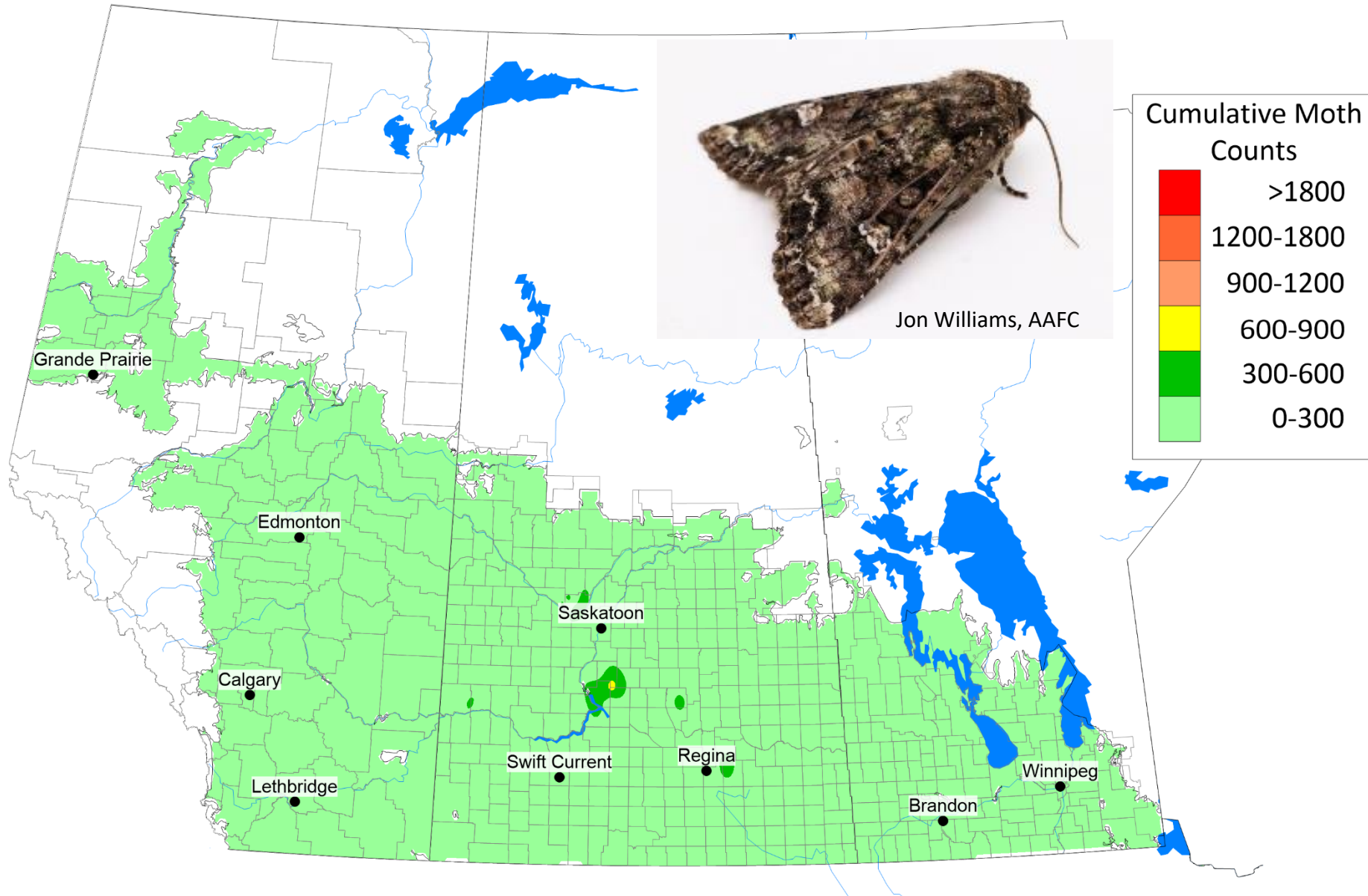
Growing Season cumulative rain (%) Percent of climate normal (136 %) May 1 - August 31, 2022

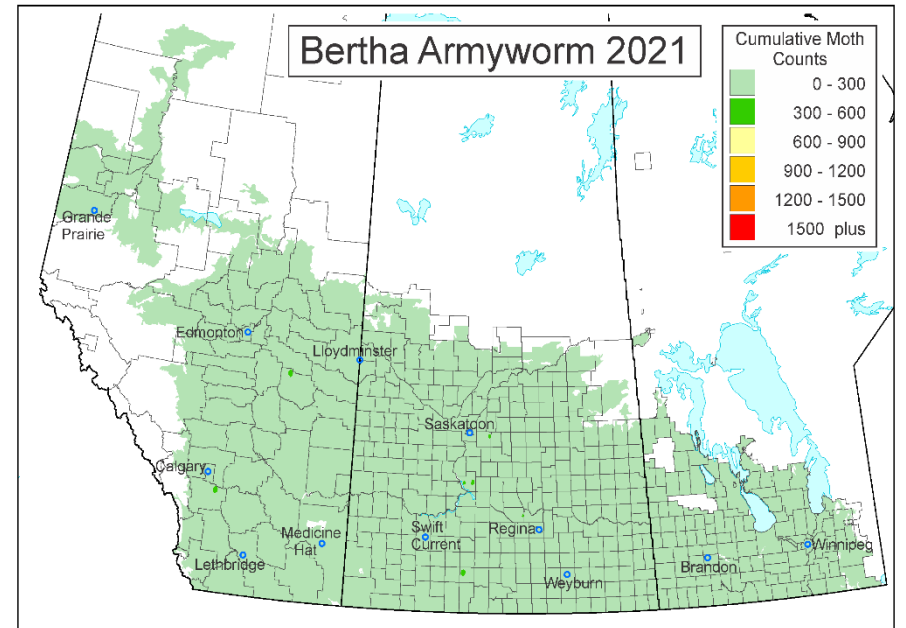
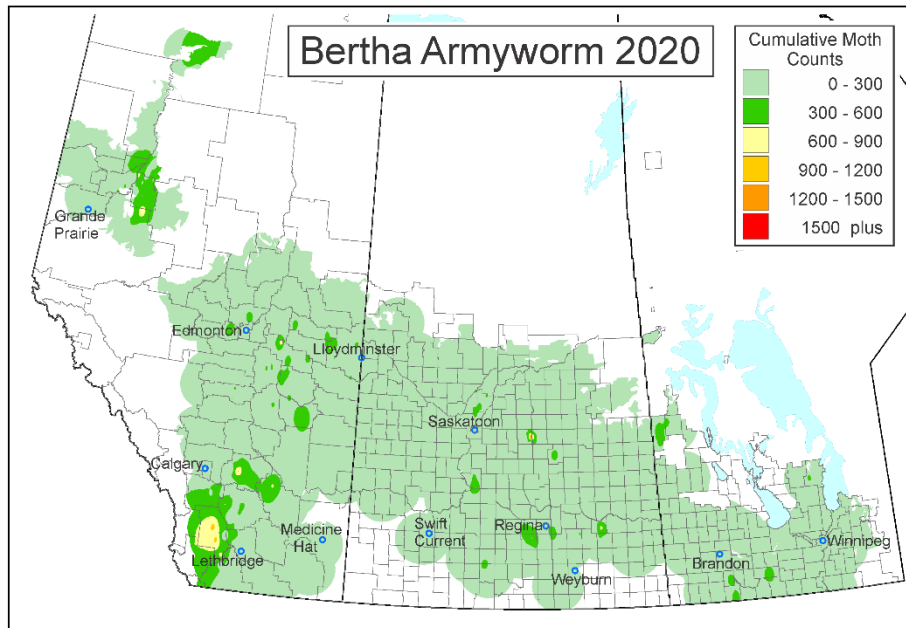
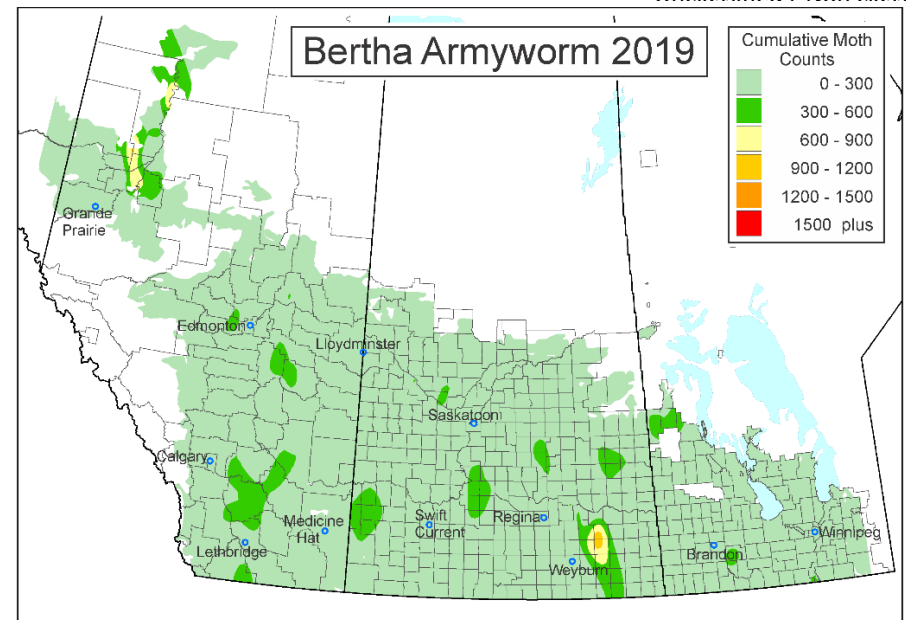
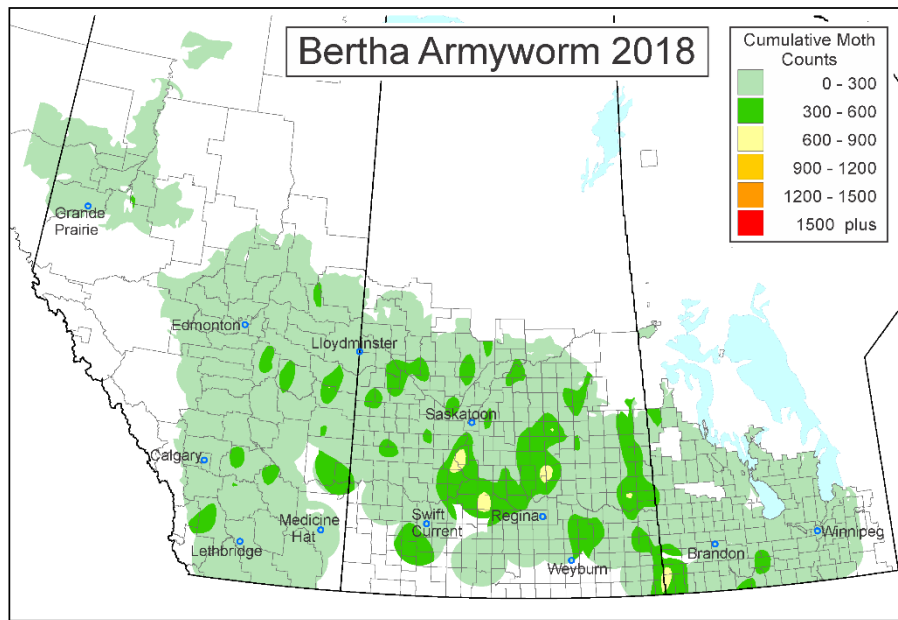


Modelled soil moisture (%) Observed (Avg= 27%) August 31, 2022

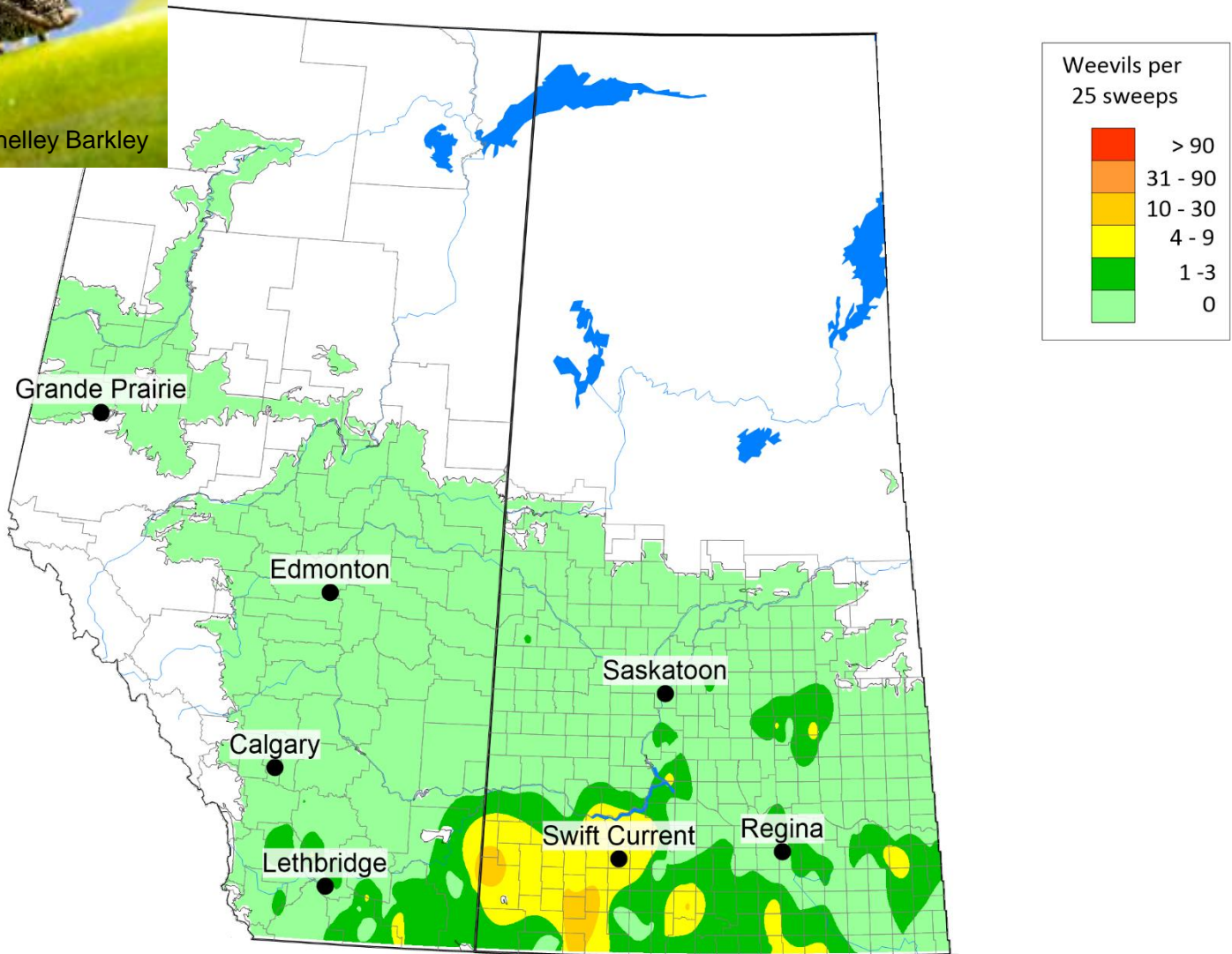


Bertha armyworm 2022 Survey

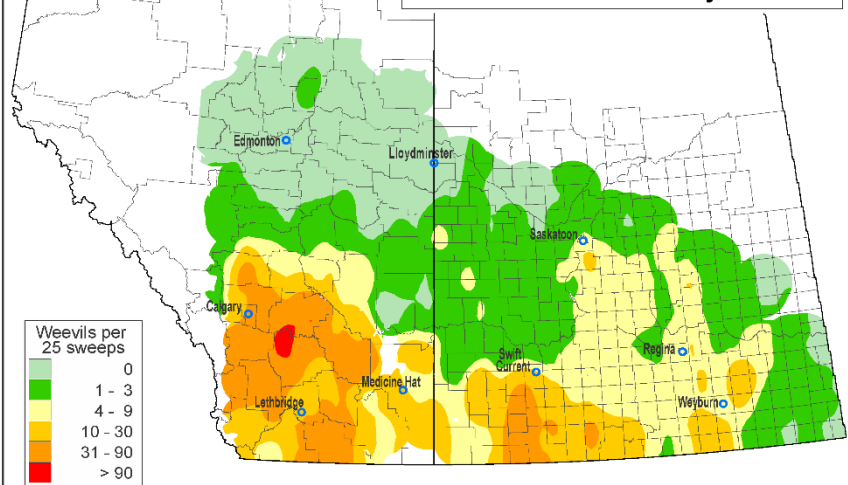




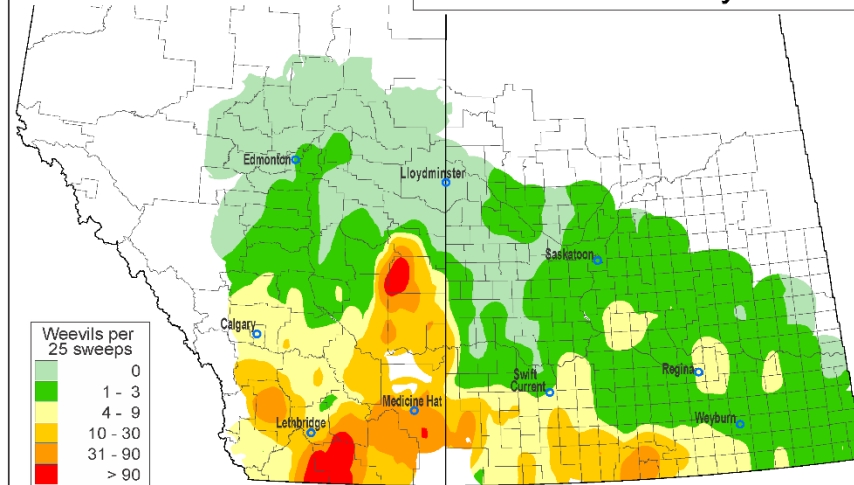
Cabbage Seedpod Weevil 2022 Survey



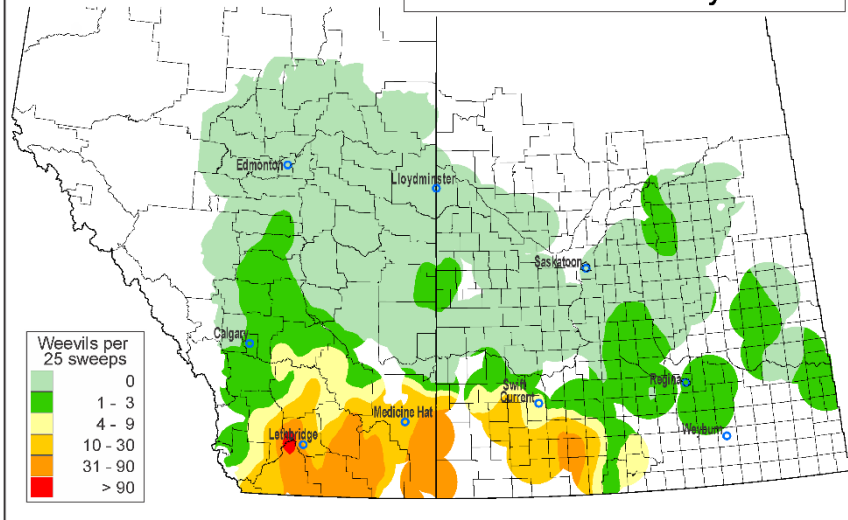
**Cabbage Seedpod Weevil
2018 Survey**



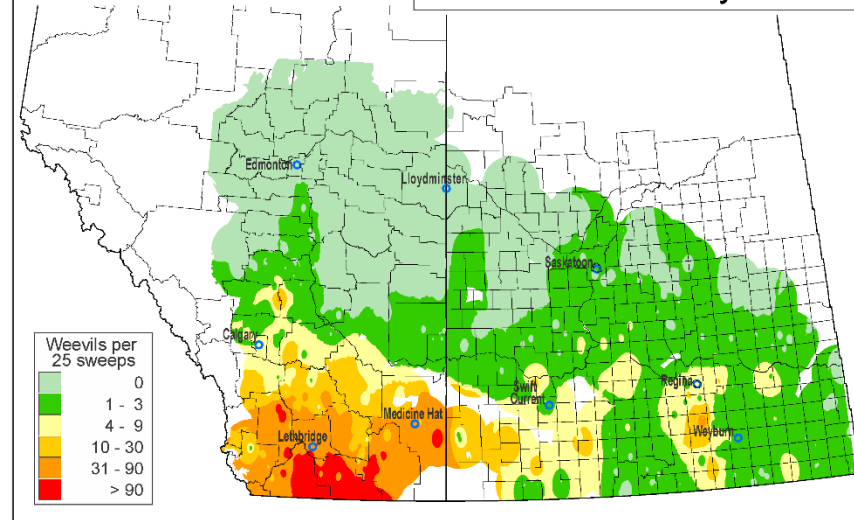
**Cabbage Seedpod Weevil
2019 Survey**



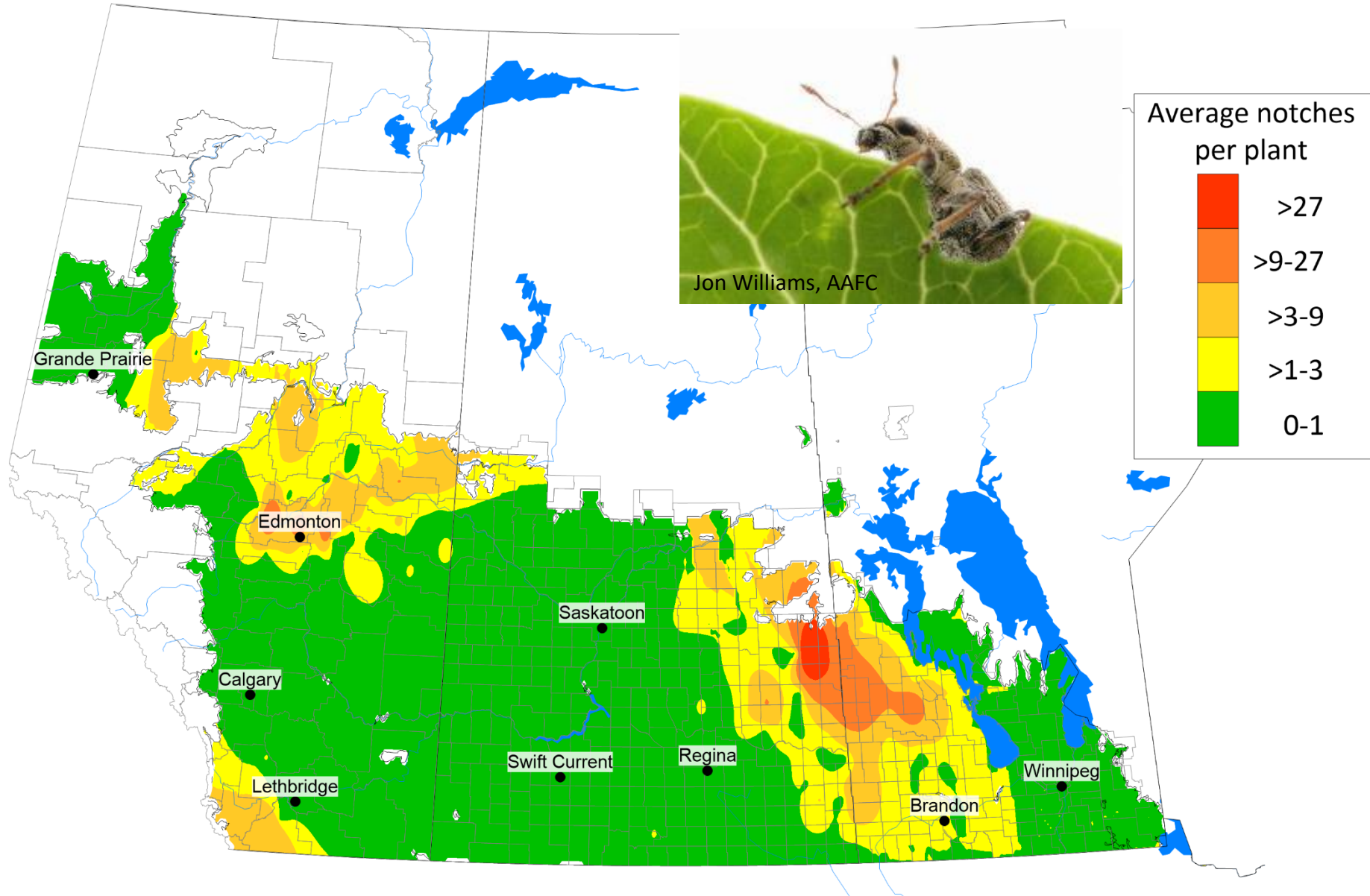
**Cabbage Seedpod Weevil
2020 Survey**

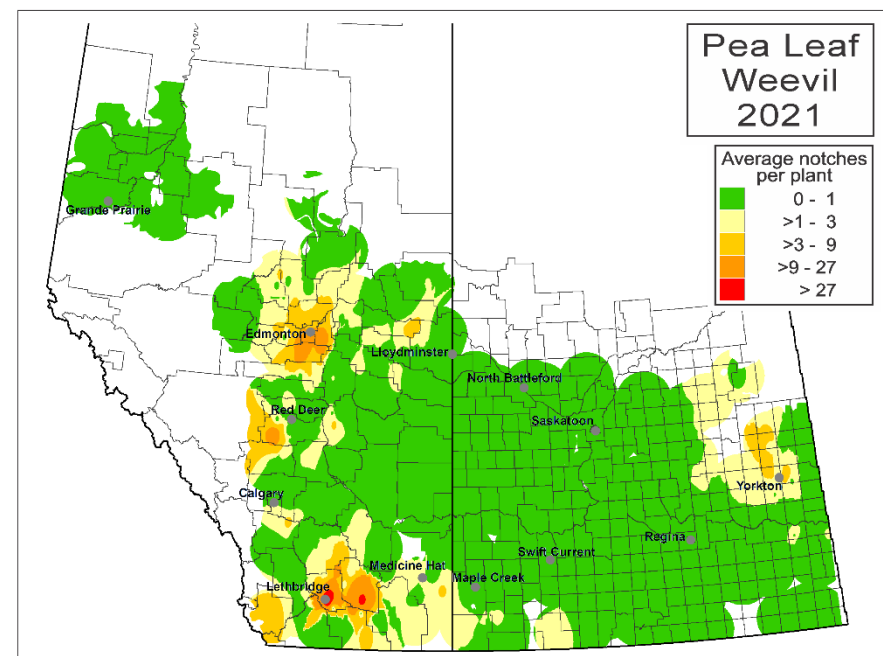
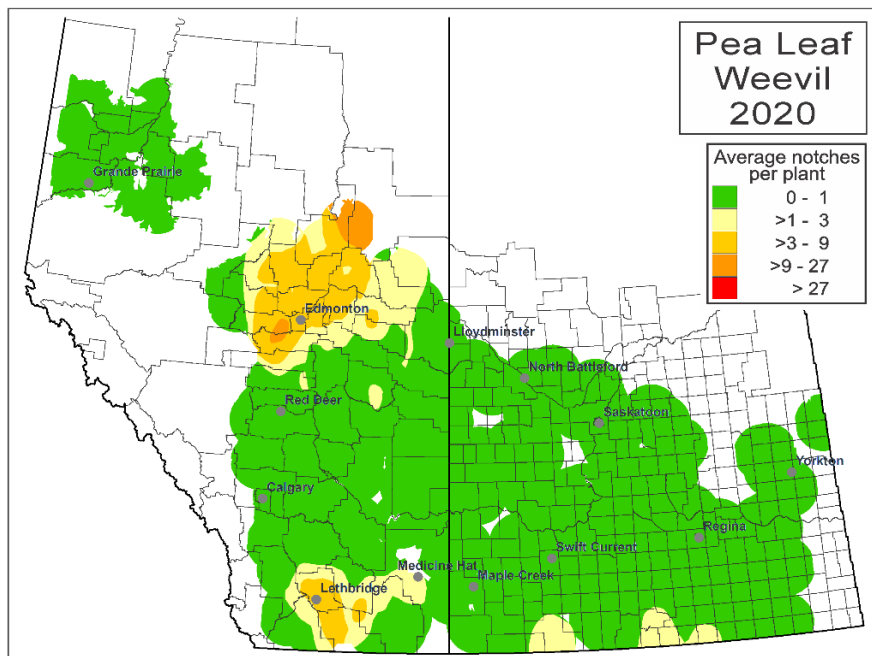
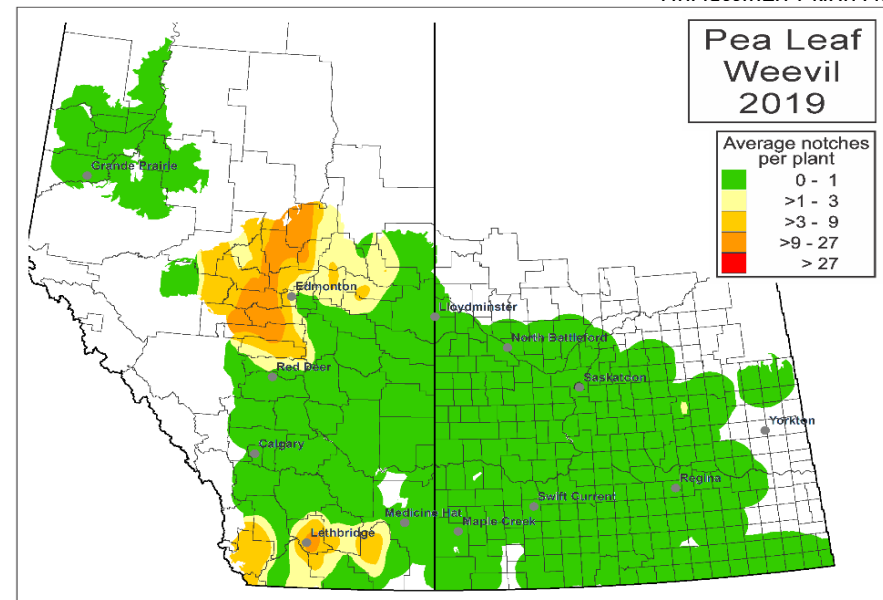
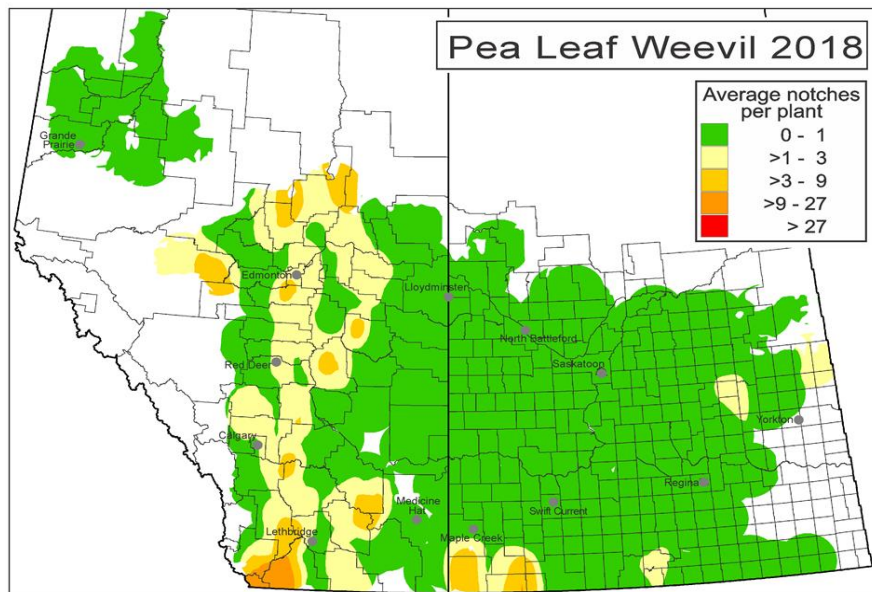


**Cabbage Seedpod Weevil
2021 Survey**

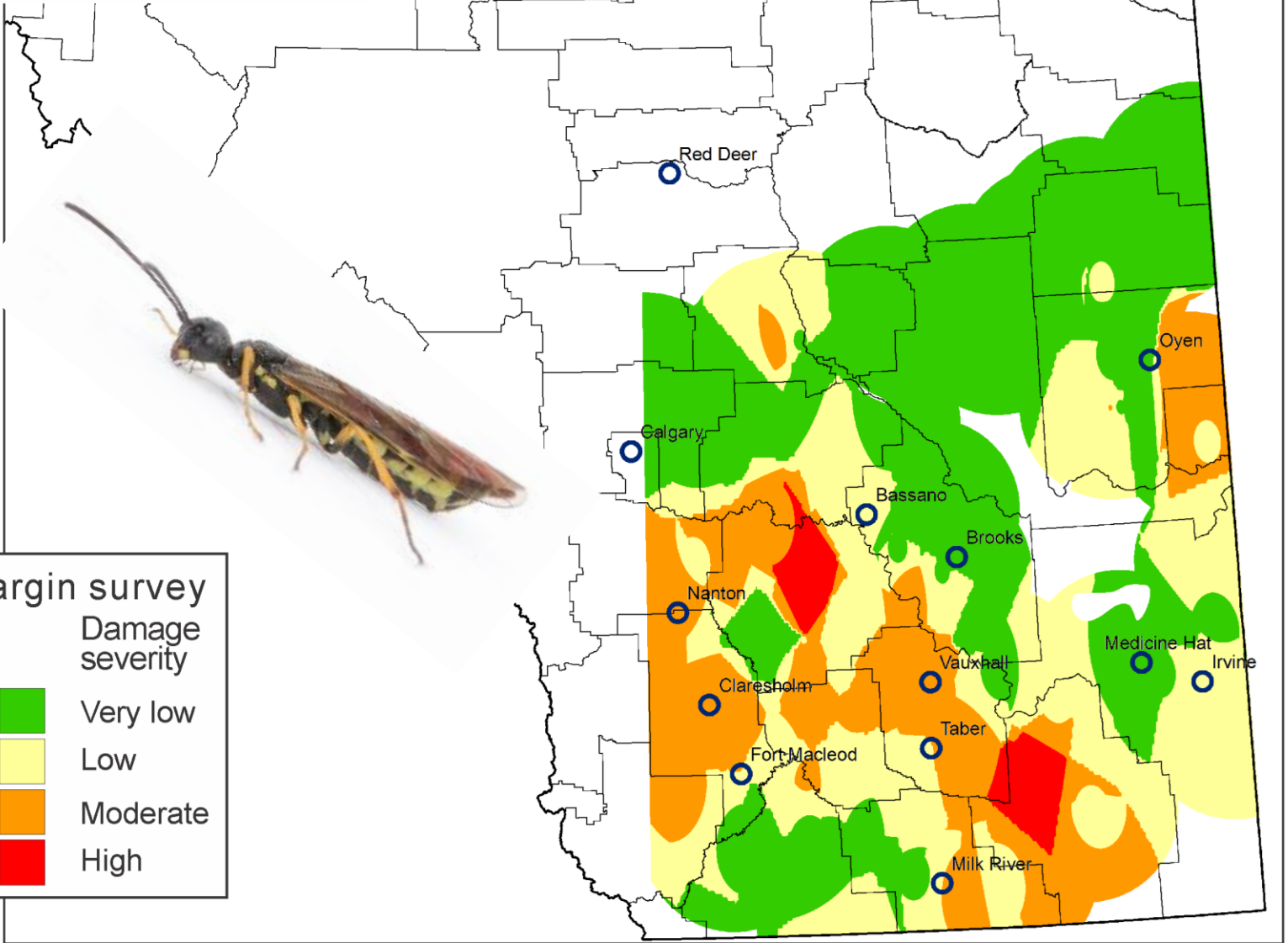


Pea Leaf Weevil 2022 Survey





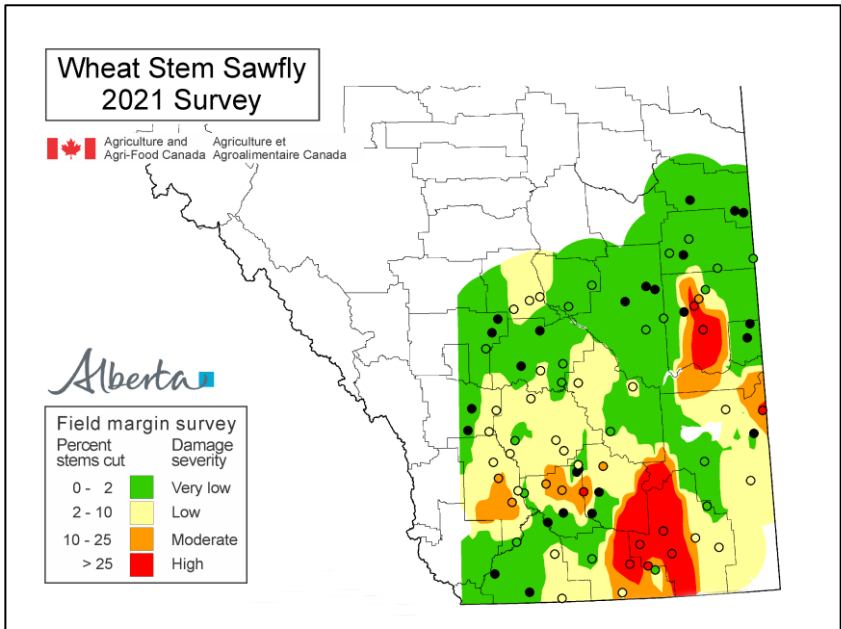
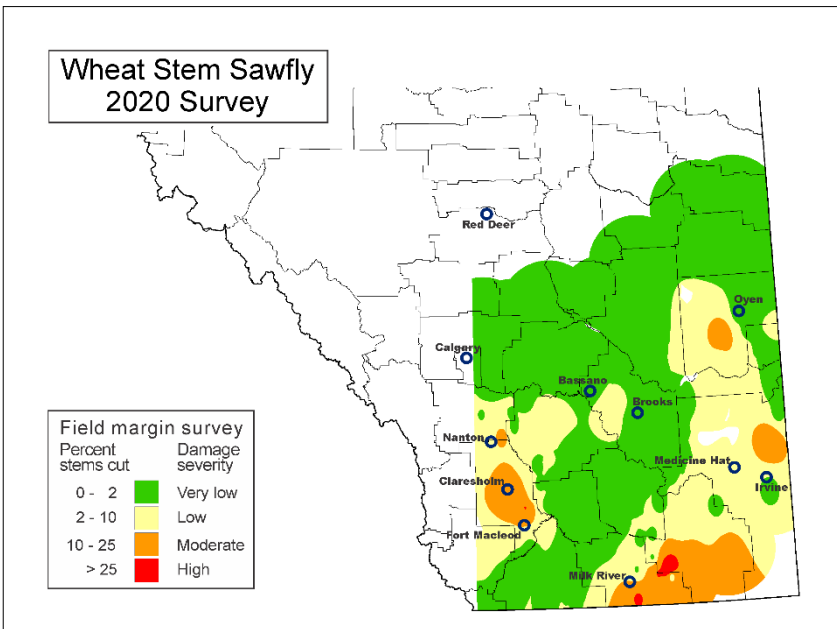
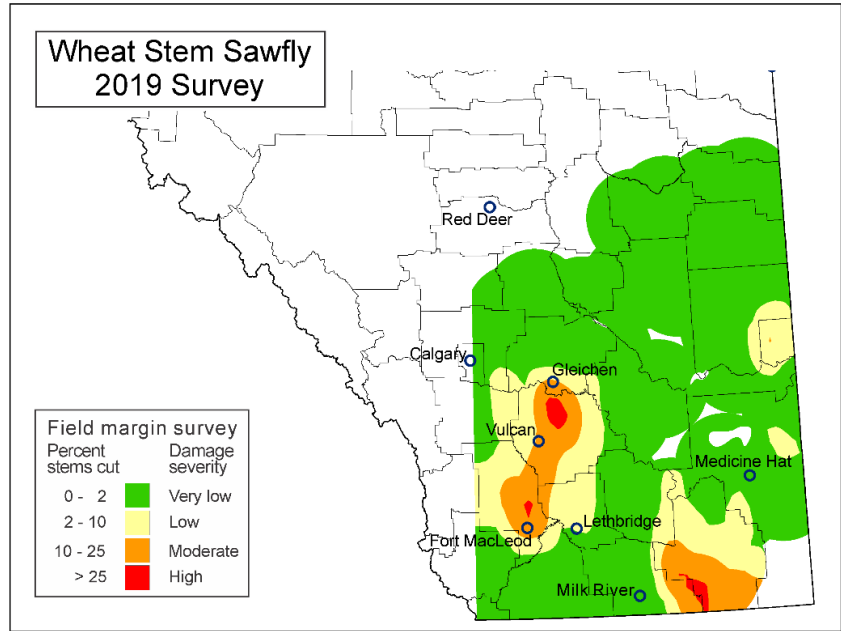
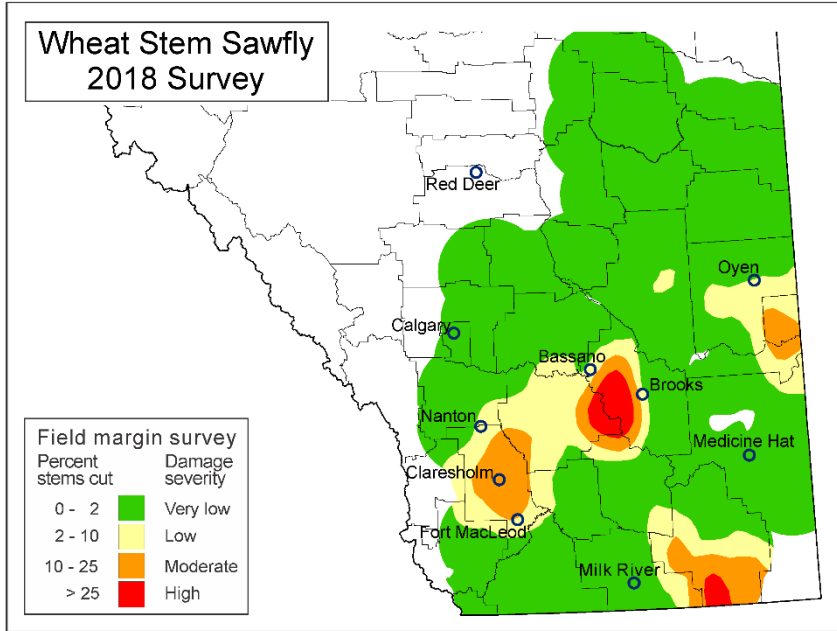
Wheat Stem Sawfly 2022 Survey



Field margin survey

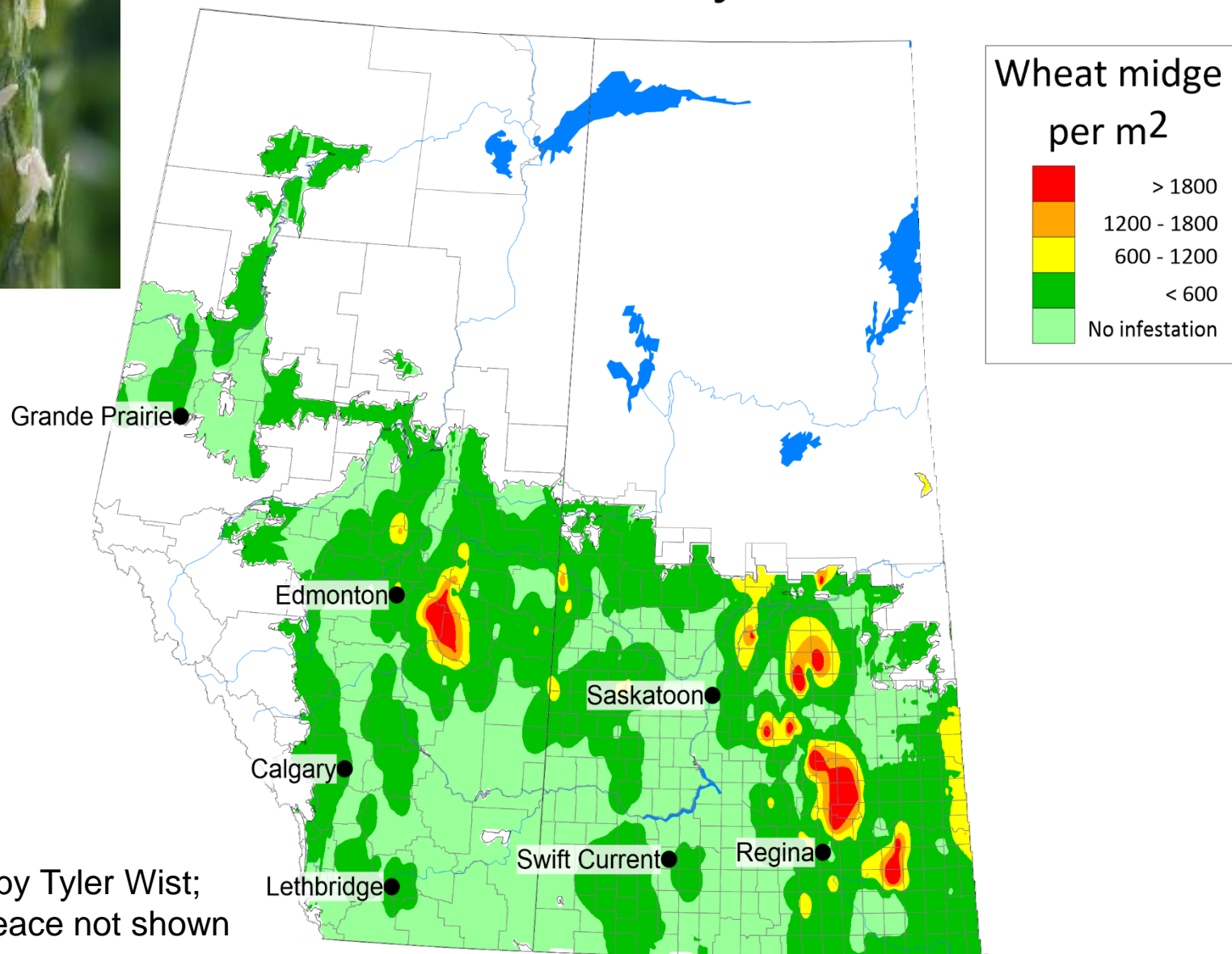
Percent stems cut		Damage severity
0 - 2	Green	Very low
2 - 10	Yellow	Low
10 - 25	Orange	Moderate
> 25	Red	High

Map by David Giffen; Image by Dylan Sjolie



Maps by David Giffen (AAFC-Saskatoon)

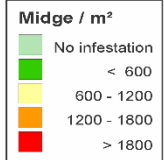
Wheat midge 2022 Survey



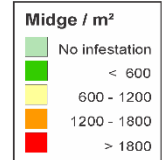
Midge picture by Tyler Wist;
Data from BC Peace not shown



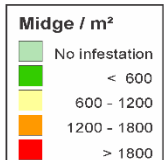
Wheat Midge Forecast 2019



Wheat Midge Forecast 2020

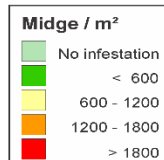


Wheat Midge Forecast 2021



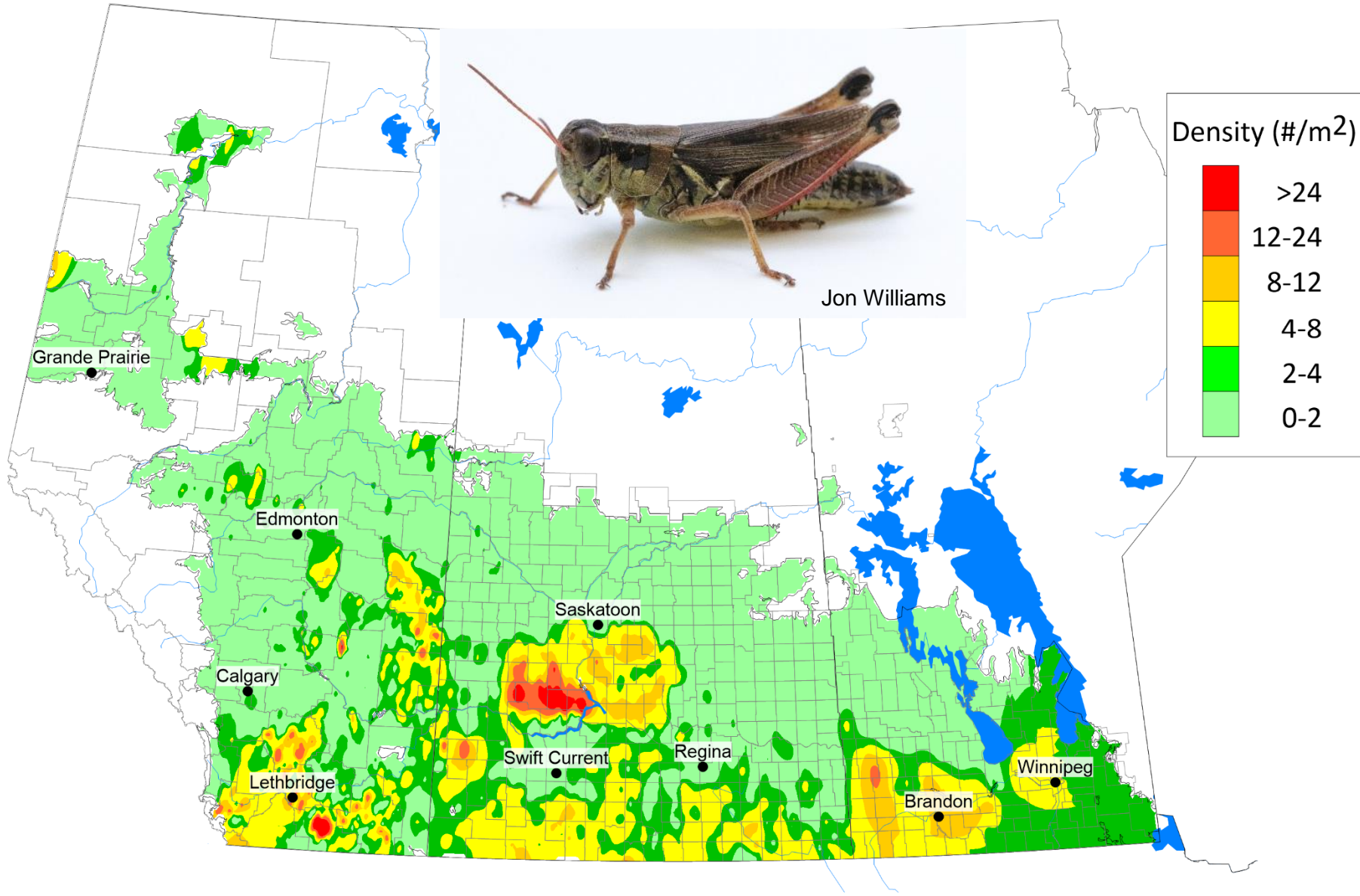
Wheat Midge Survey 2021

= 2022 Forecast

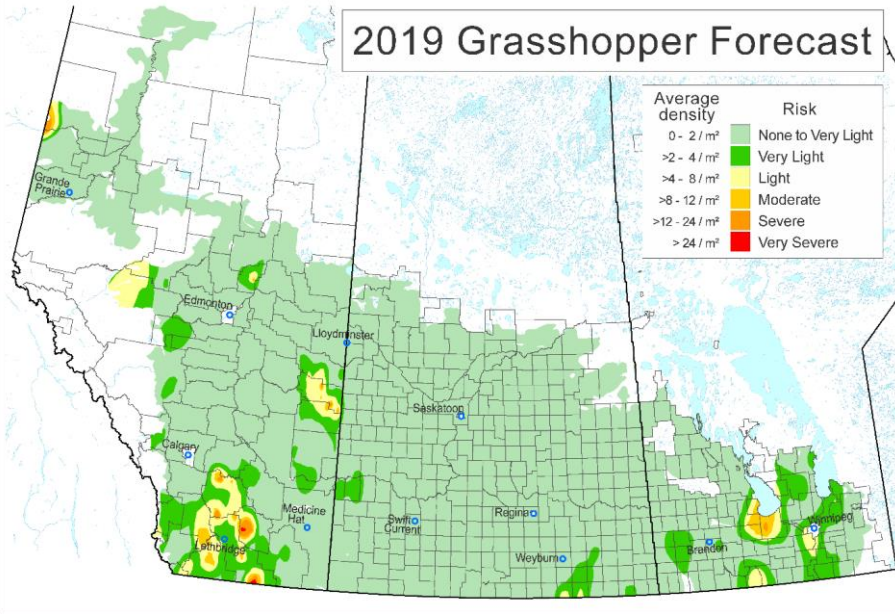


Maps by David Giffen (AAFC-Saskatoon); Data from BC Peace not shown

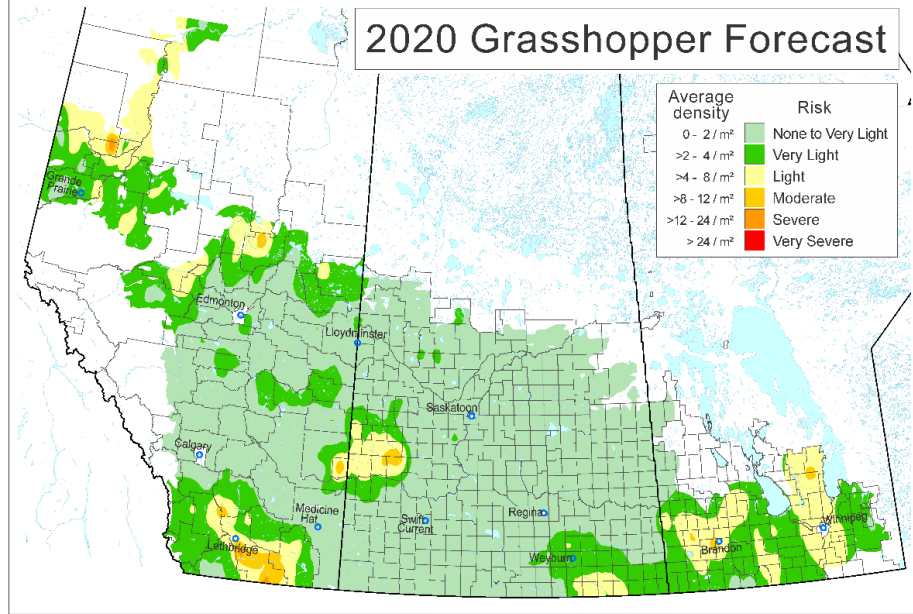
Grasshoppers 2022 Survey



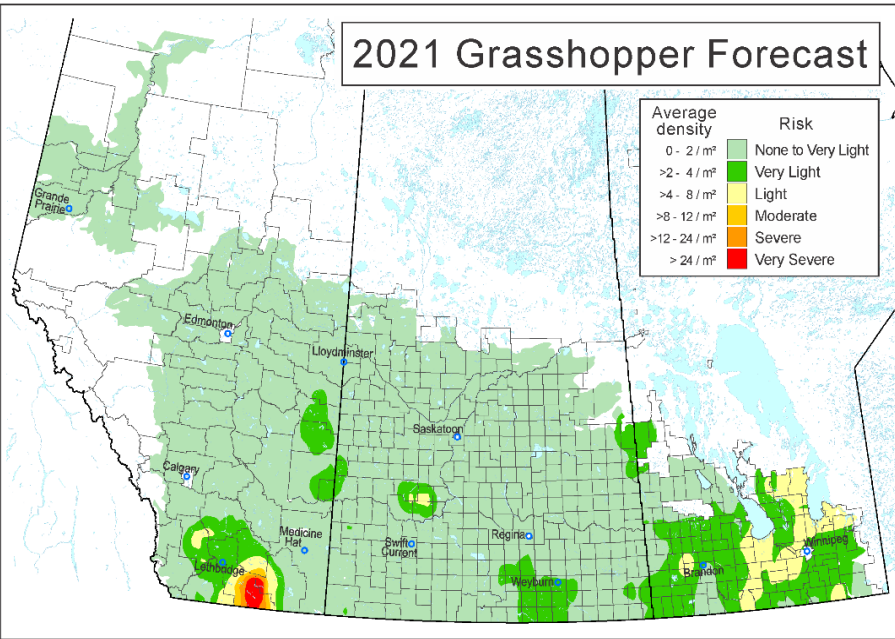
2019 Grasshopper Forecast



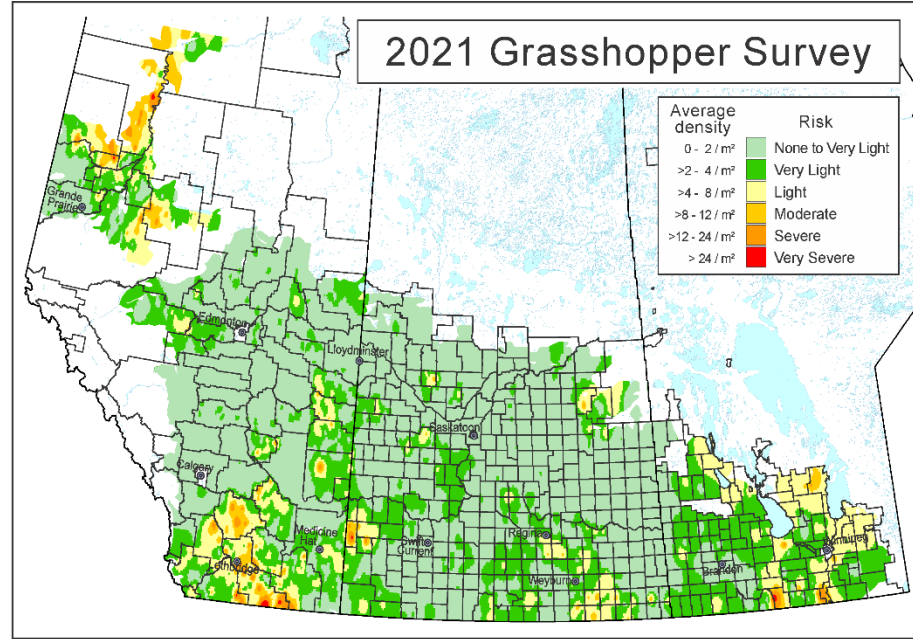
2020 Grasshopper Forecast



2021 Grasshopper Forecast



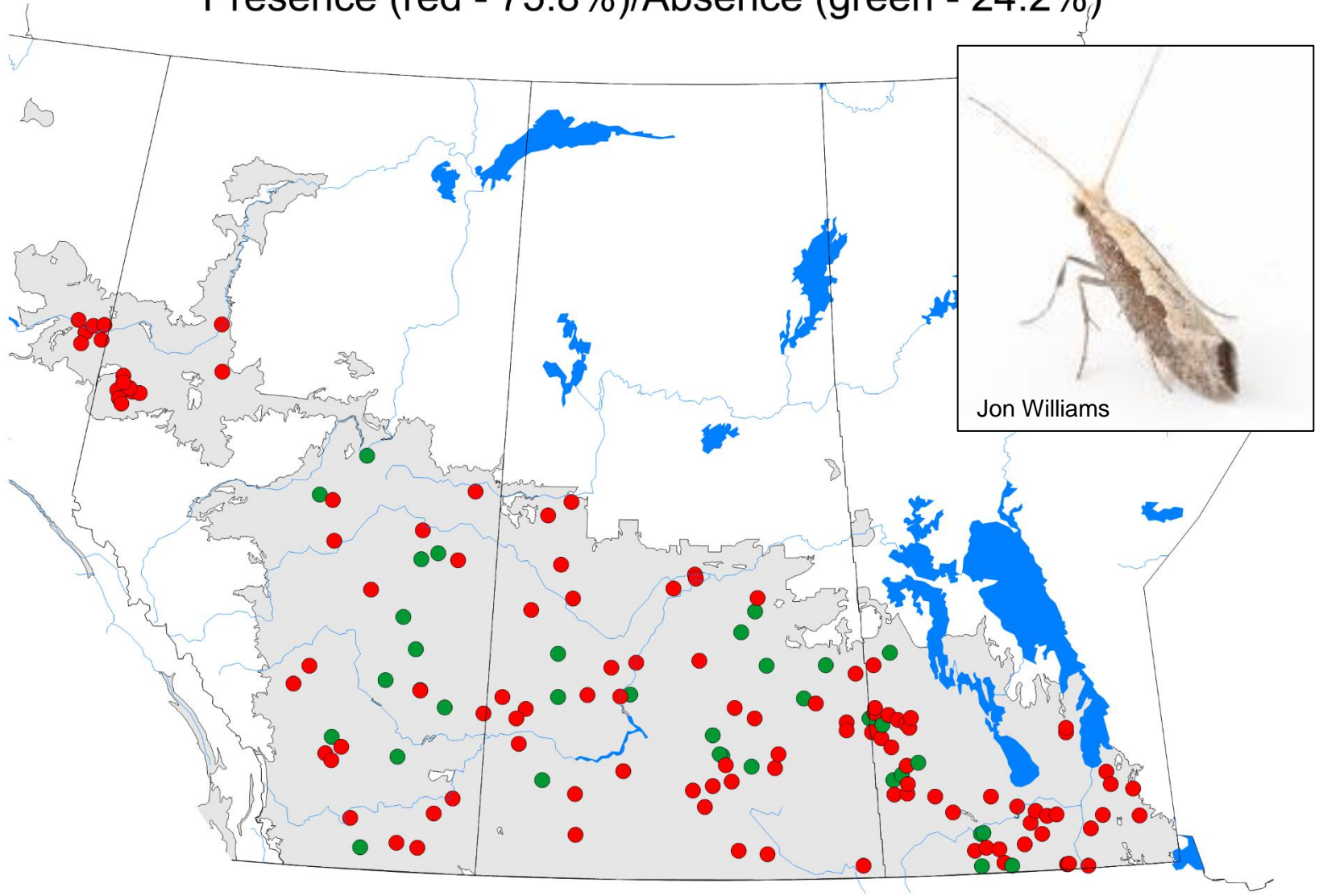
2021 Grasshopper Survey



Diamondback Moth

2022 Survey

Presence (red - 75.8%)/Absence (green - 24.2%)



No swede midge were caught in pheromone traps in 2022.



Swede Midge Trap Locations
2006 - 2019



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