



Jonathon Williams, AAFC



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

With funding and support from:



26 March 2019








Prairie Insect Monitoring Team

Maps prepared by Agriculture and Agri-Food Canada – Saskatoon Research and Development Centre. Data provided through partnership with:

- Alberta Agriculture and Forestry
- 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 Flax Development Commission
- Peace Region Forage Seed Association
- Saskatchewan Crop Insurance Corporation
- Saskatchewan Wheat Development Commission
- Canola Council of Canada
- Alberta Canola Producers Commission



Numbers of Insect Survey Stops - 2018

 Bertha Armyworm	635	 Grasshopper	3047
 Cabbage Seedpod Weevil	597	 Pea Leaf Weevil	471
 Diamondback Moth	179	 Wheat Midge	733
		 Wheat Stem Sawfly	102

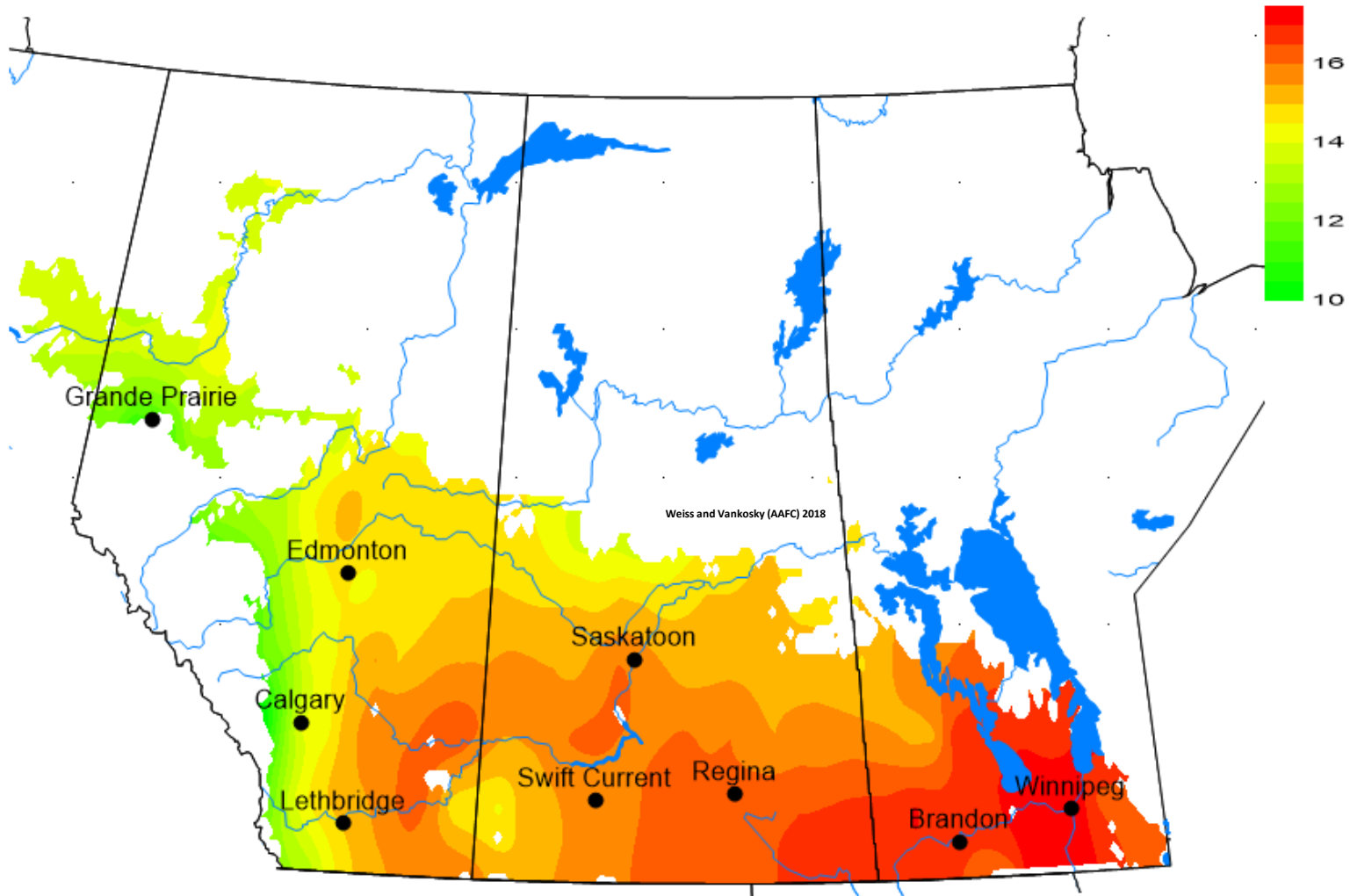
Total = 5,764



Agriculture and
Agri-Food Canada

Agriculture et
Agroalimentaire Canada

Average temperature (C) May 1 - August 31, 2018



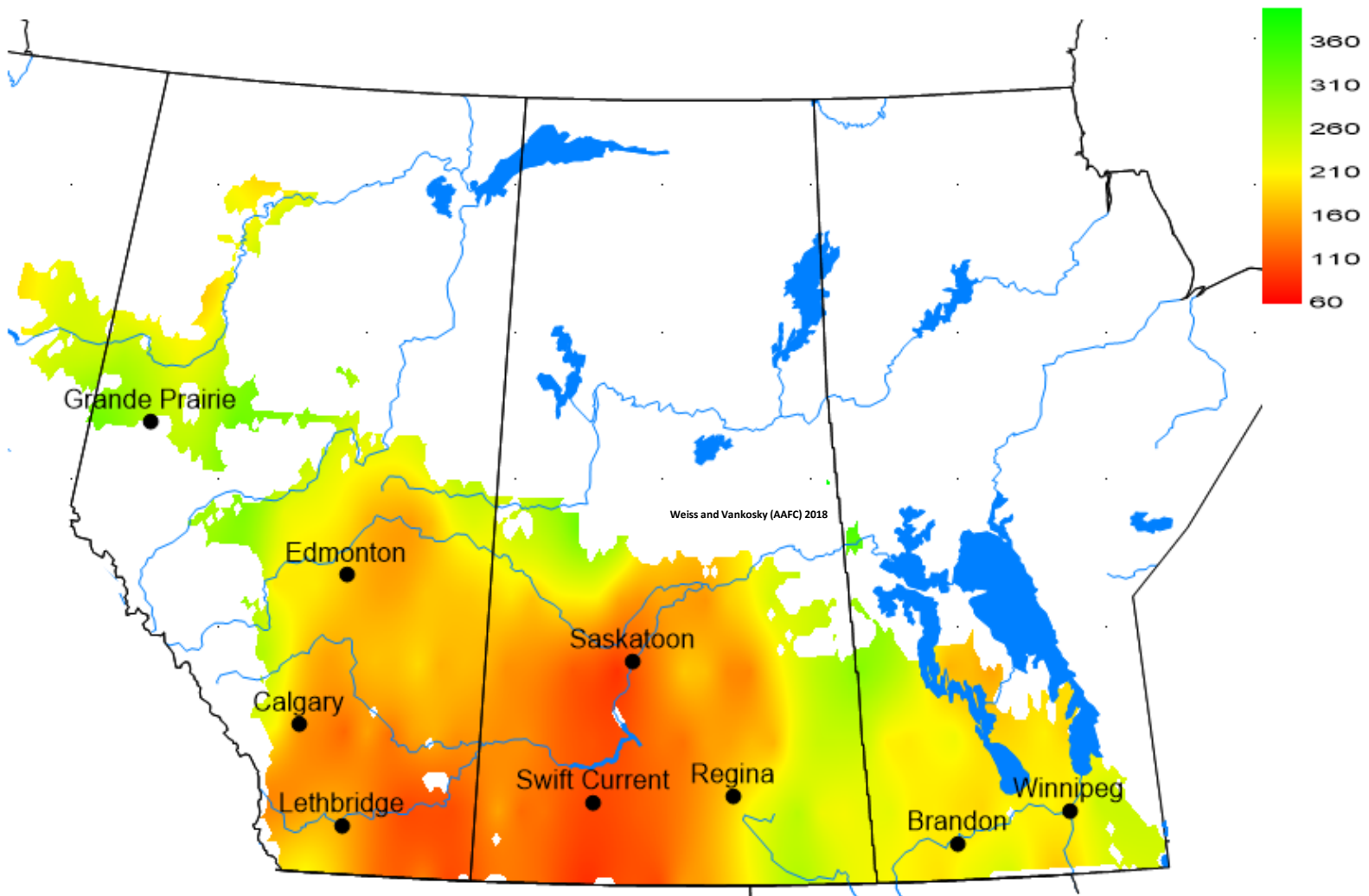
Weiss and Vankosky (AAFC) 2018



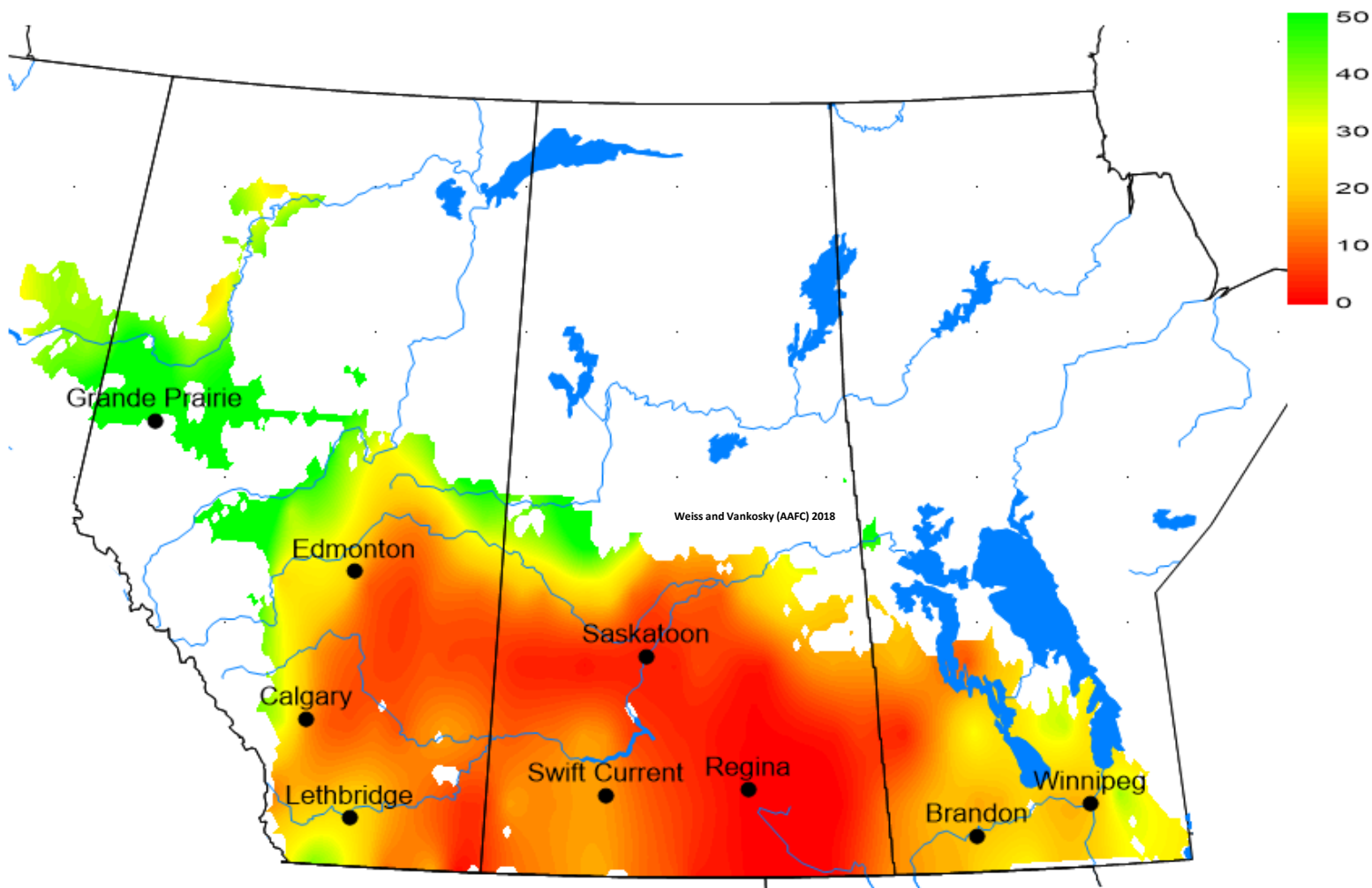
Agriculture and
Agri-Food Canada

Agriculture et
Agroalimentaire Canada

GS cumulative rain (mm) May 1 - August 31, 2018



Modelled soil moisture (%) August 31, 2018



Weiss and Vankosky (AAFC) 2018



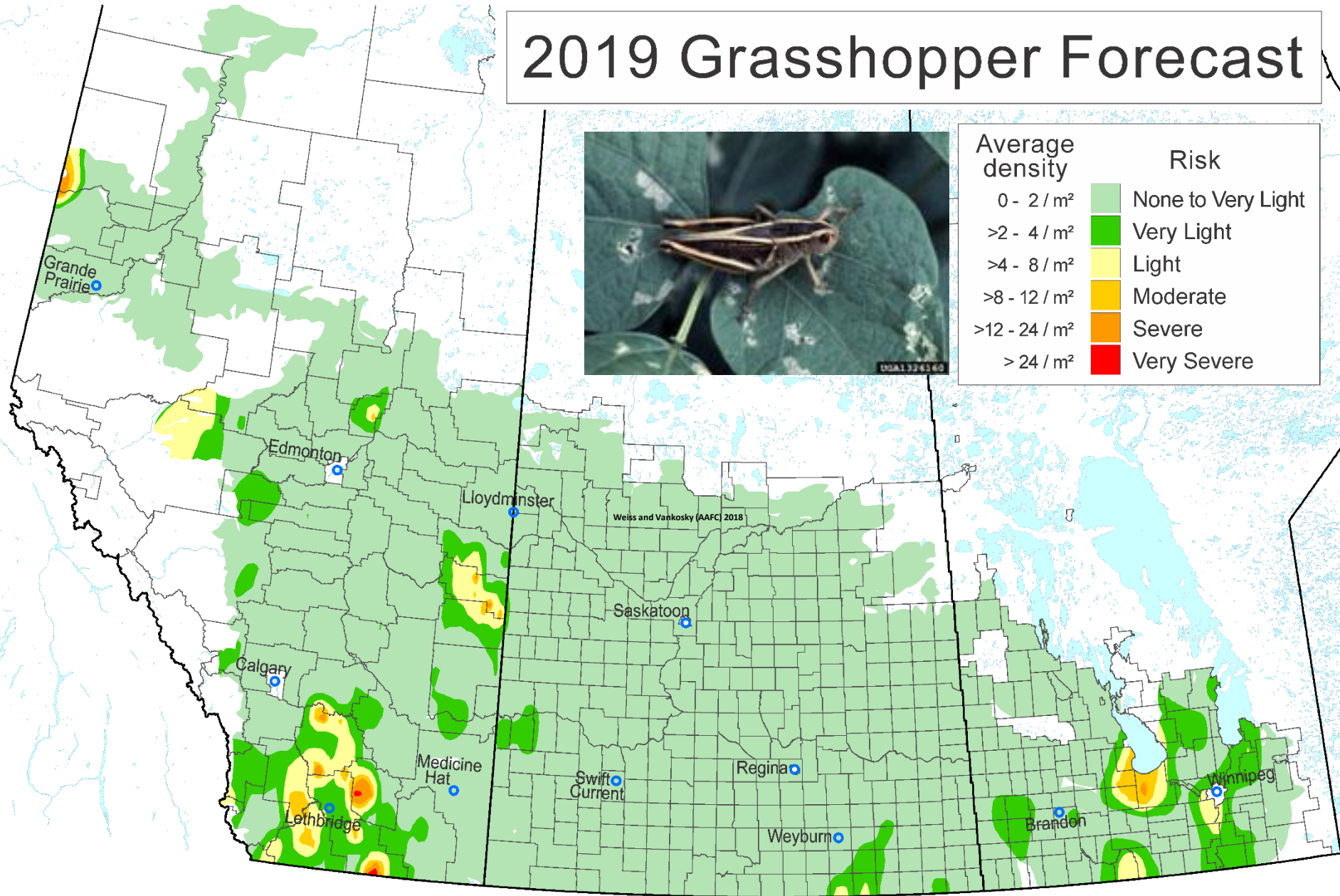
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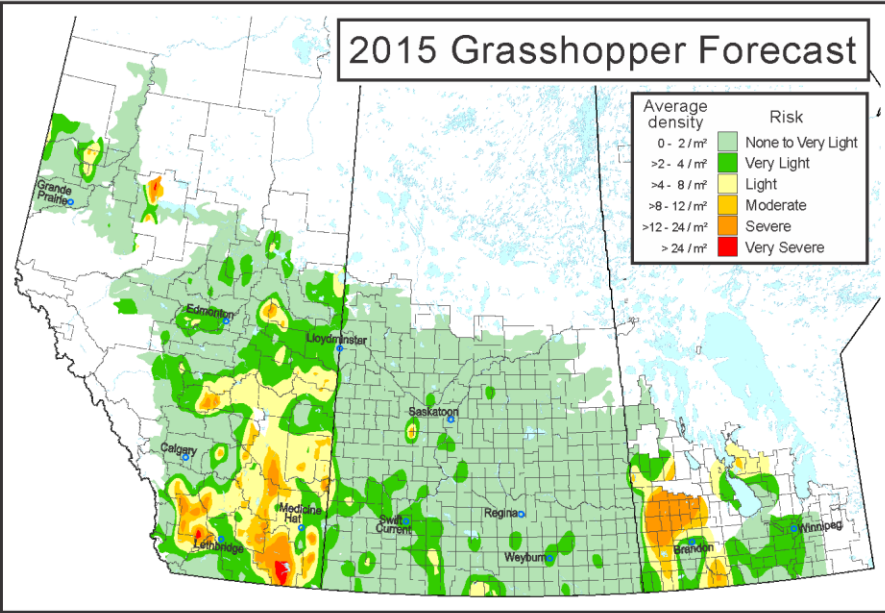
2019 Grasshopper Forecast



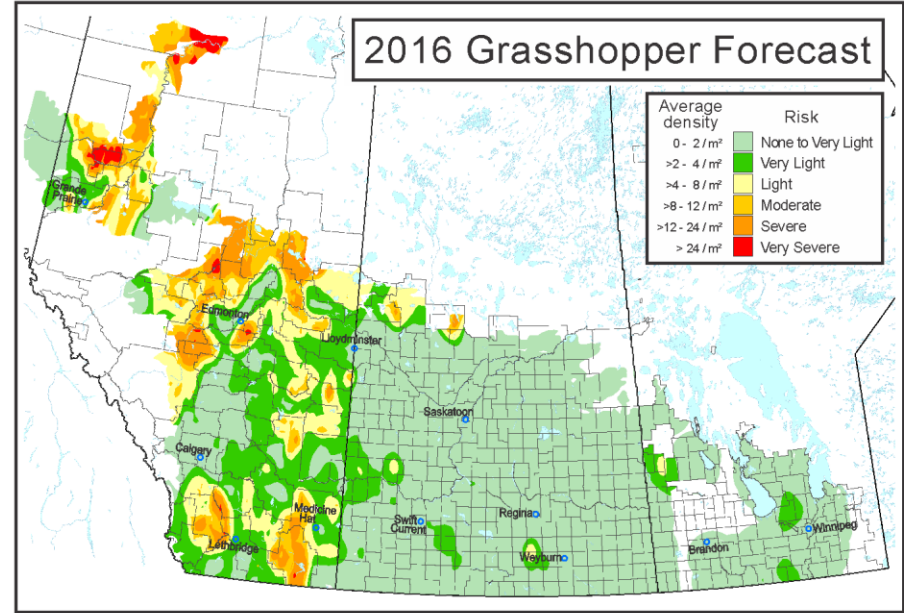
Average density	Risk
0 - 2 / m ²	None to Very Light
>2 - 4 / m ²	Very Light
>4 - 8 / m ²	Light
>8 - 12 / m ²	Moderate
>12 - 24 / m ²	Severe
> 24 / m ²	Very Severe



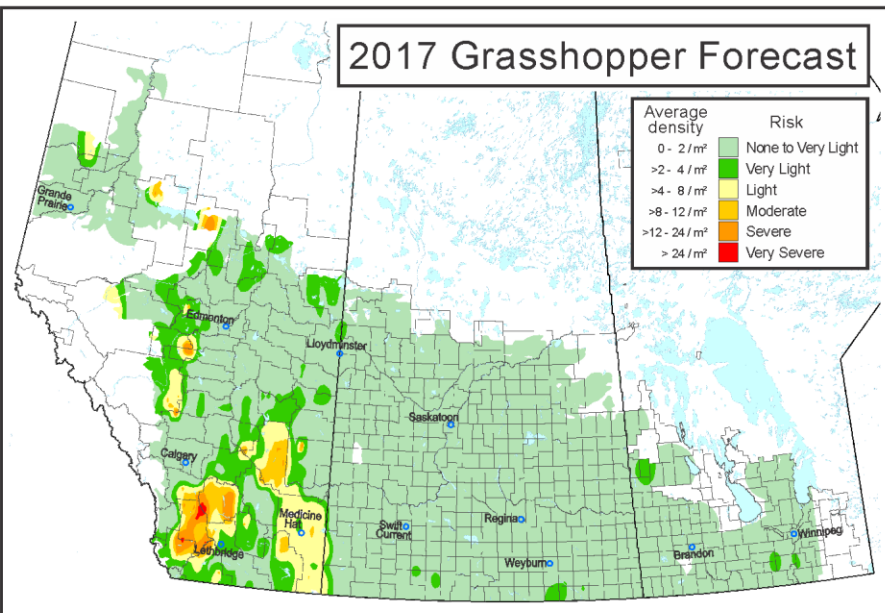
2015 Grasshopper Forecast



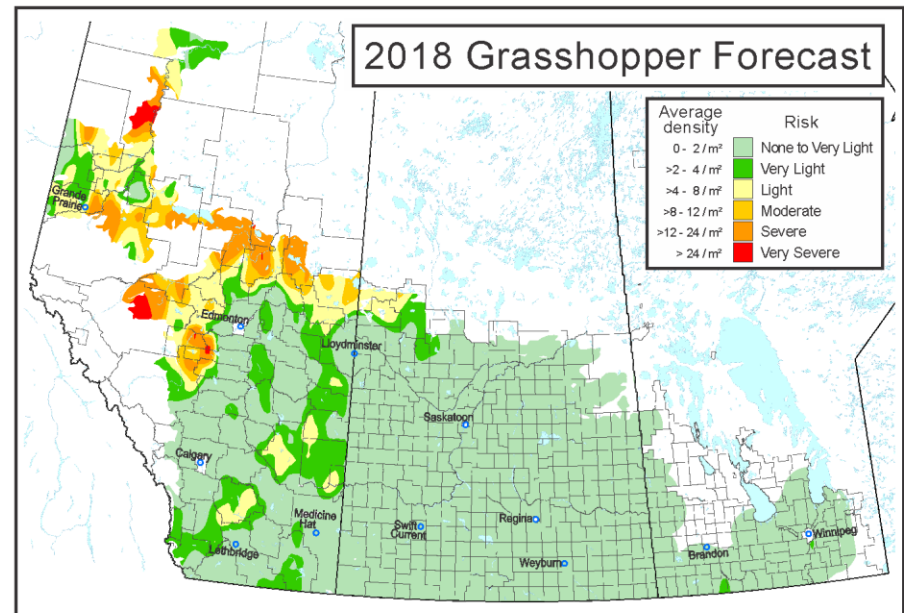
2016 Grasshopper Forecast



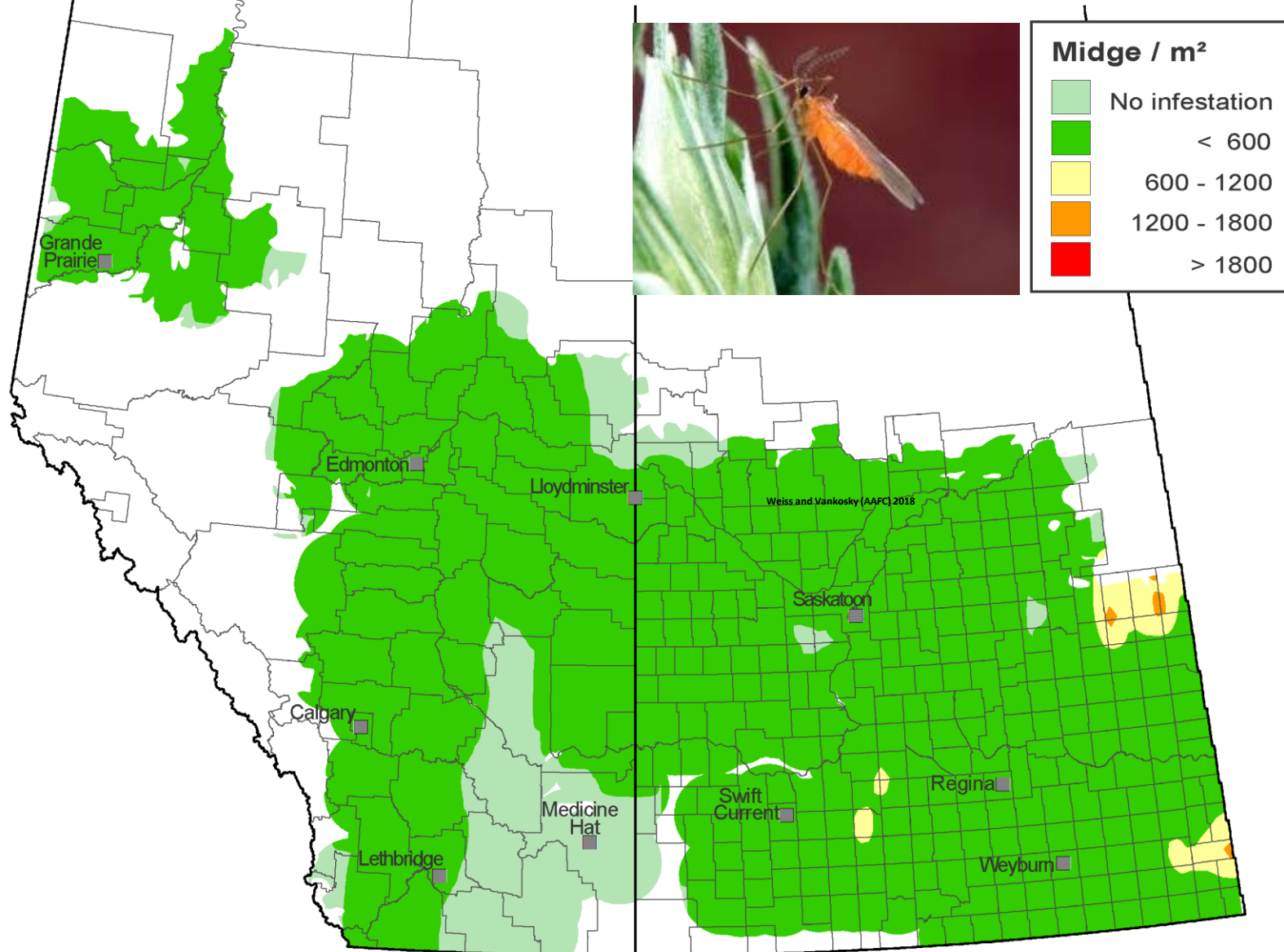
2017 Grasshopper Forecast

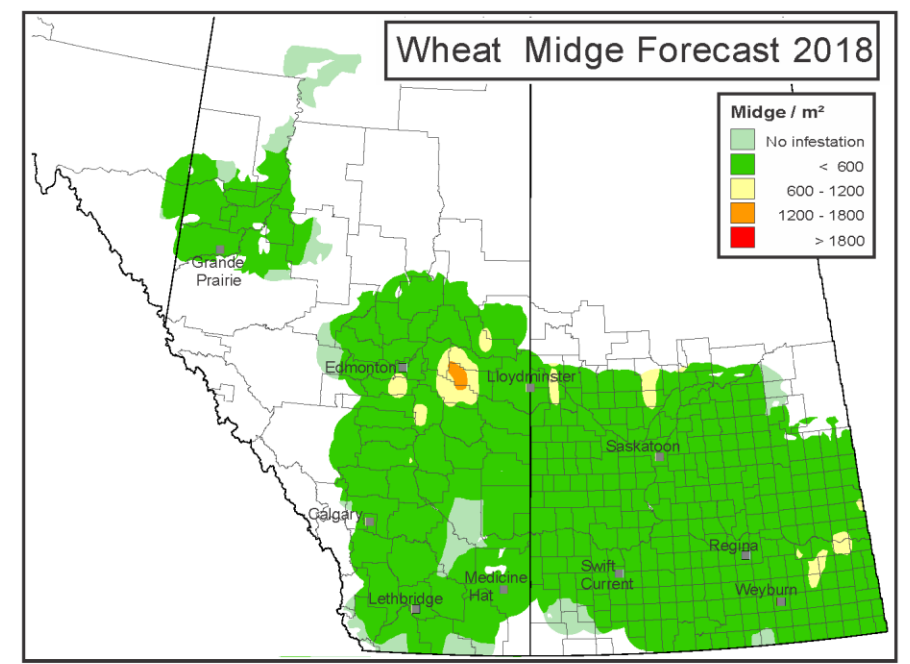
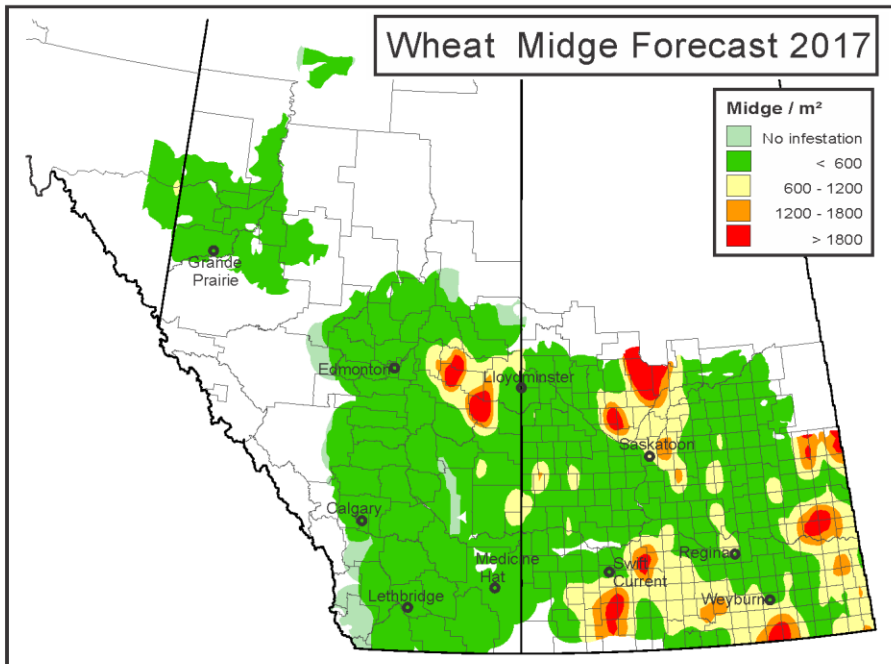
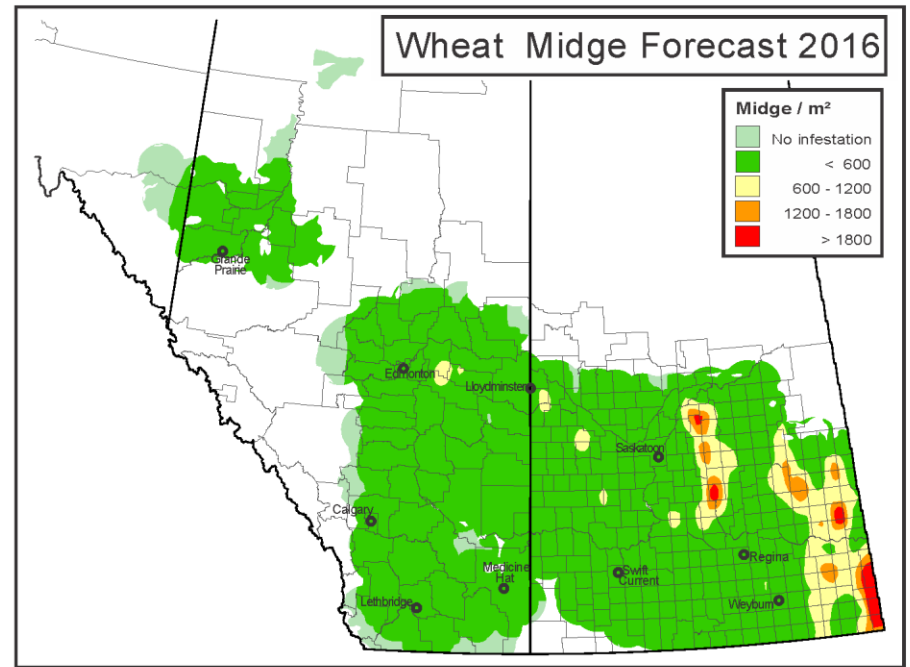
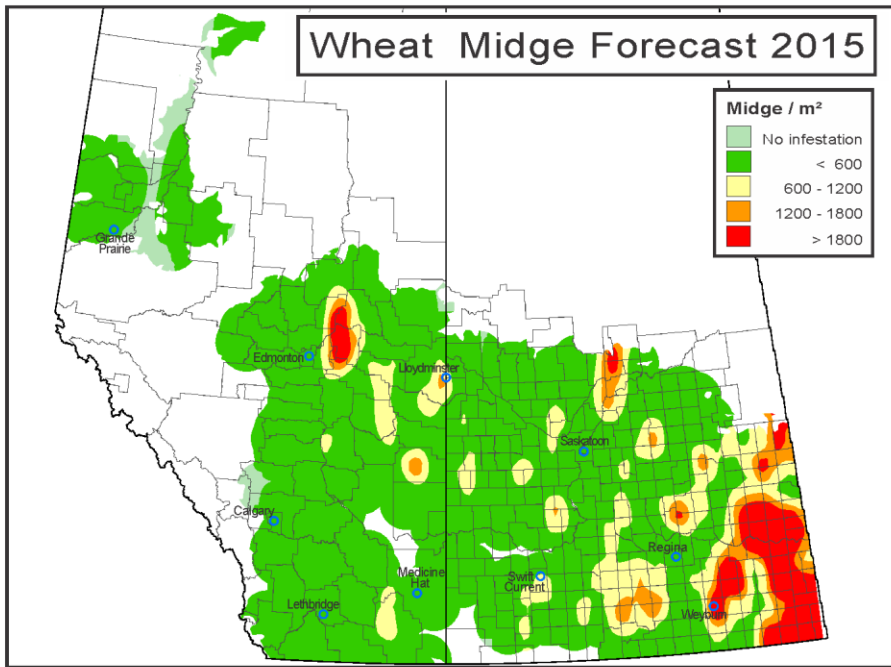


2018 Grasshopper Forecast

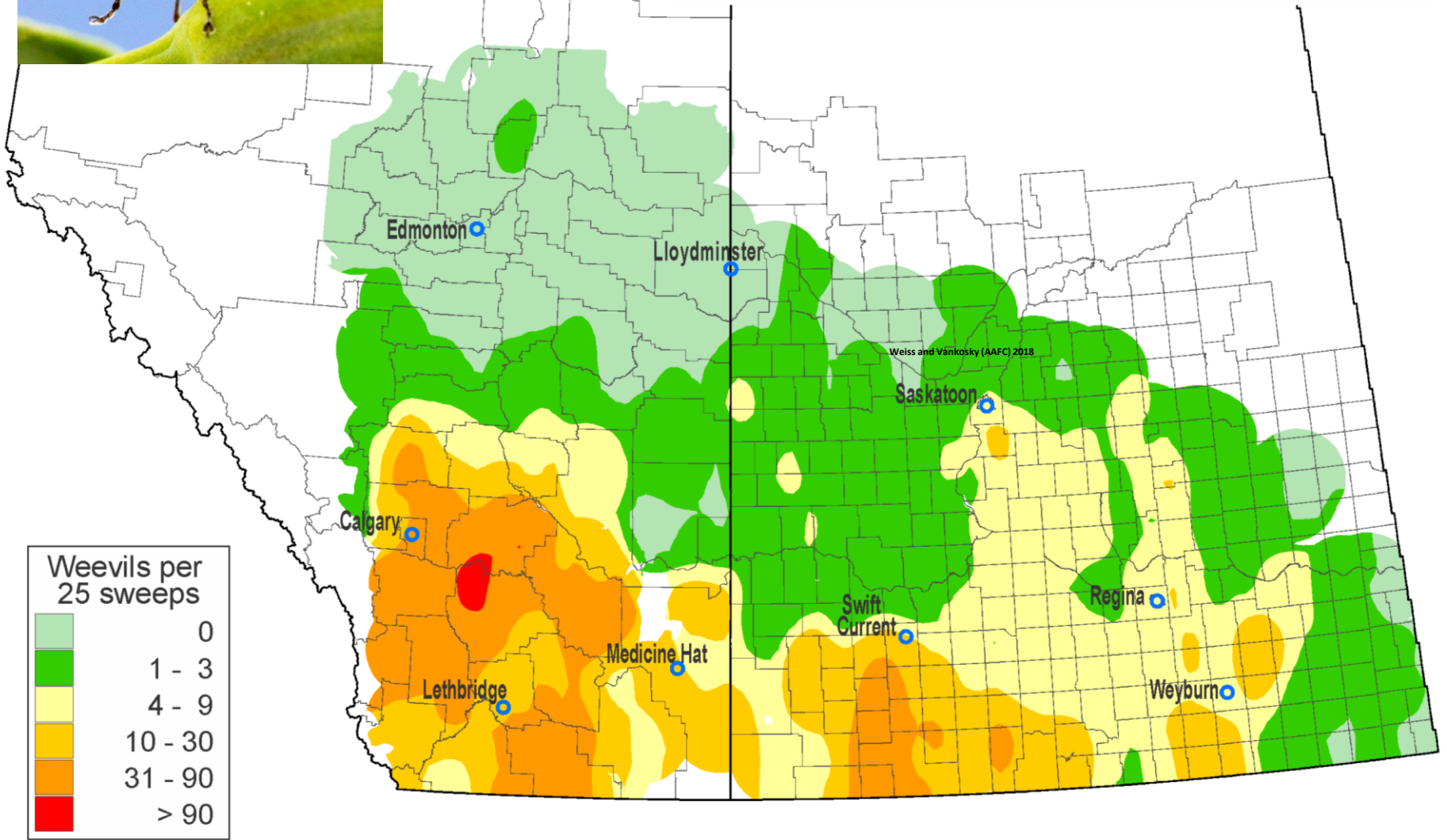


Wheat Midge Forecast 2019

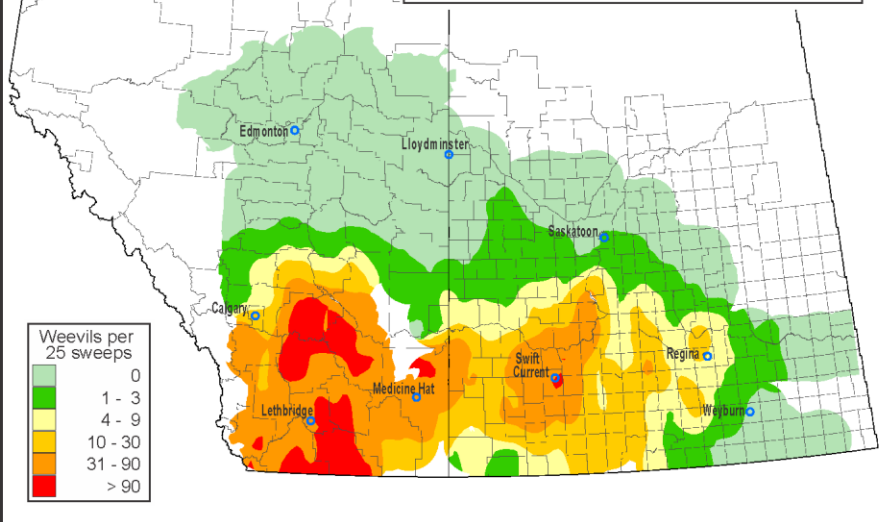




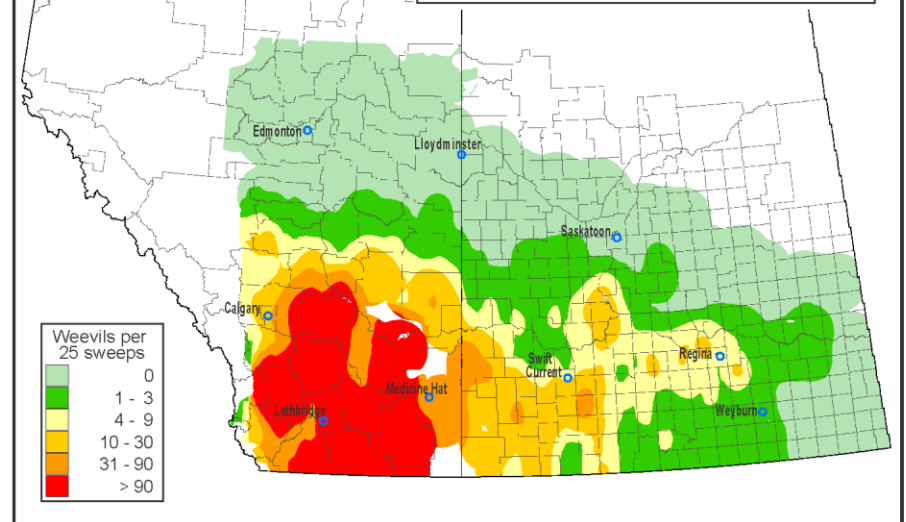
Cabbage Seedpod Weevil 2018 Survey



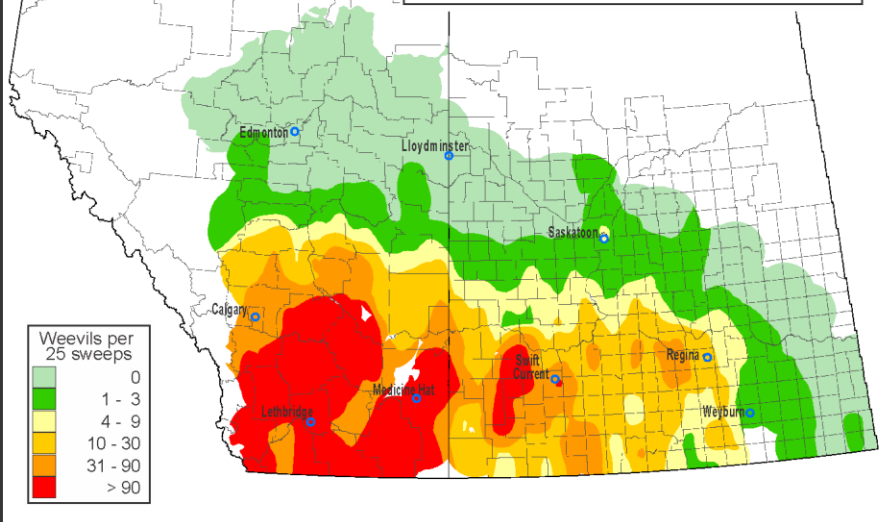
**Cabbage Seedpod Weevil
2014 Survey**



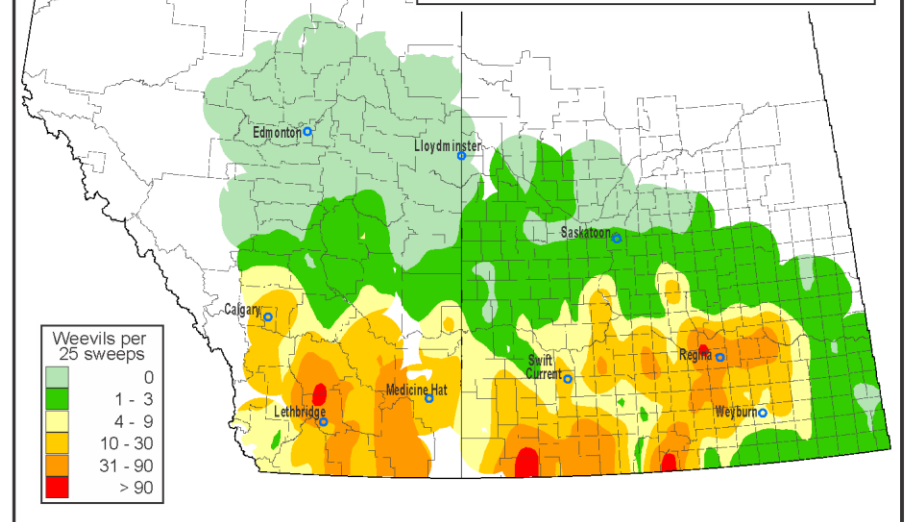
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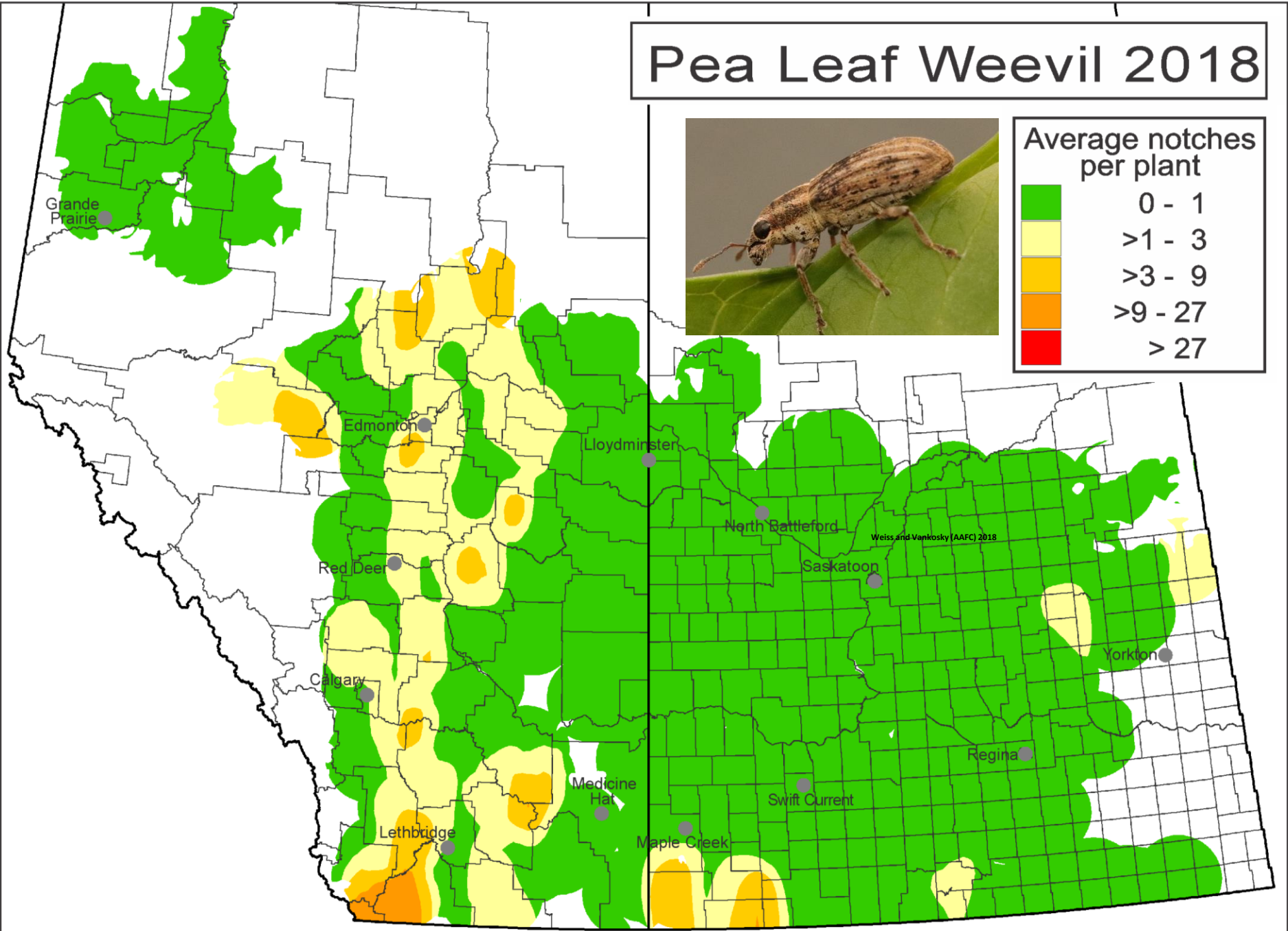
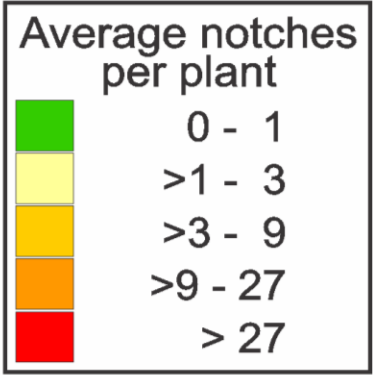
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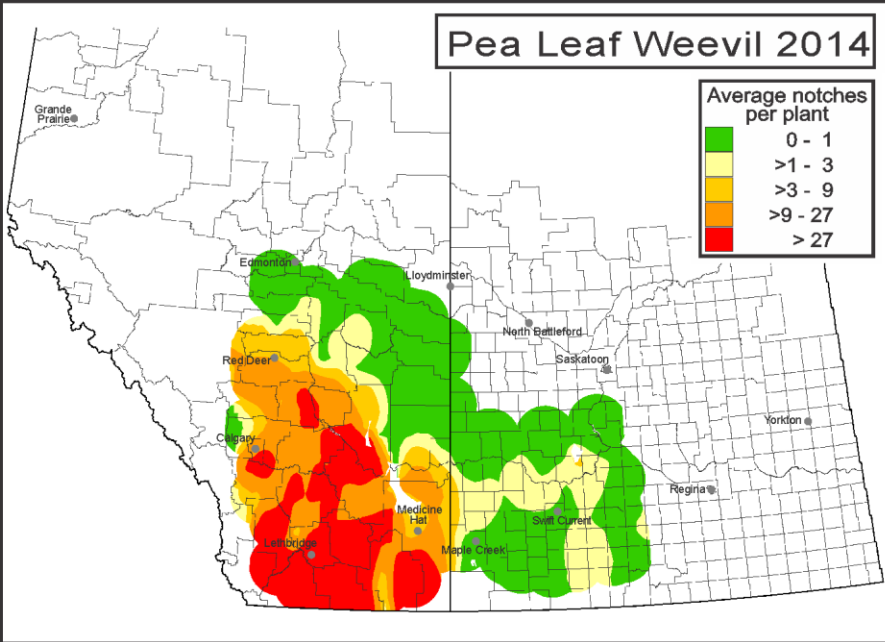
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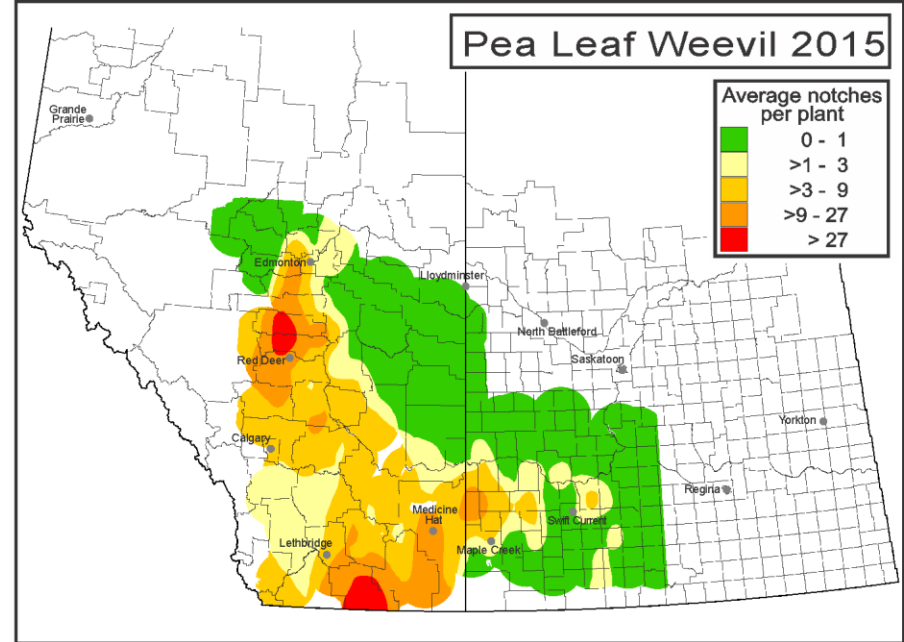
Pea Leaf Weevil 2018



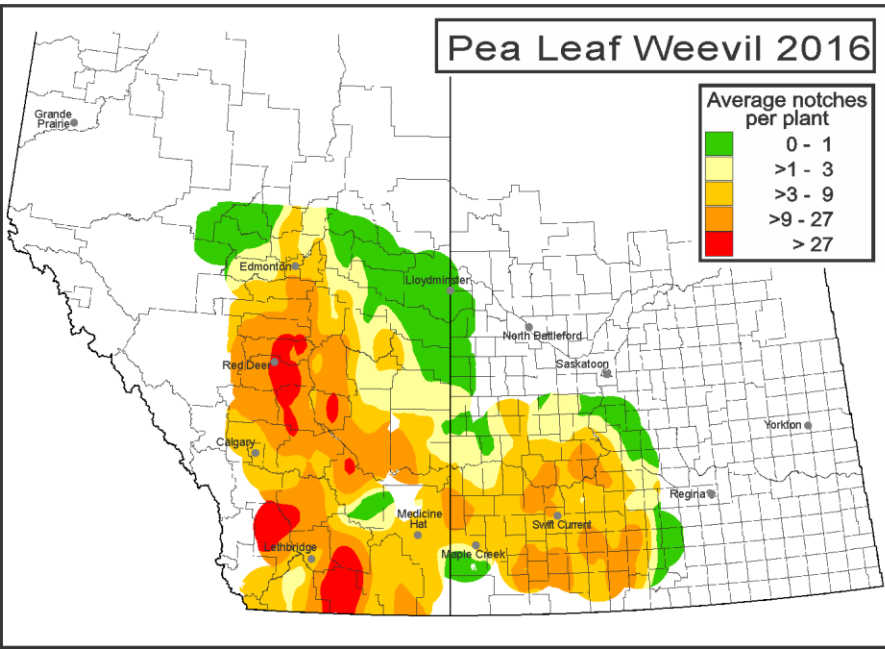
Pea Leaf Weevil 2014



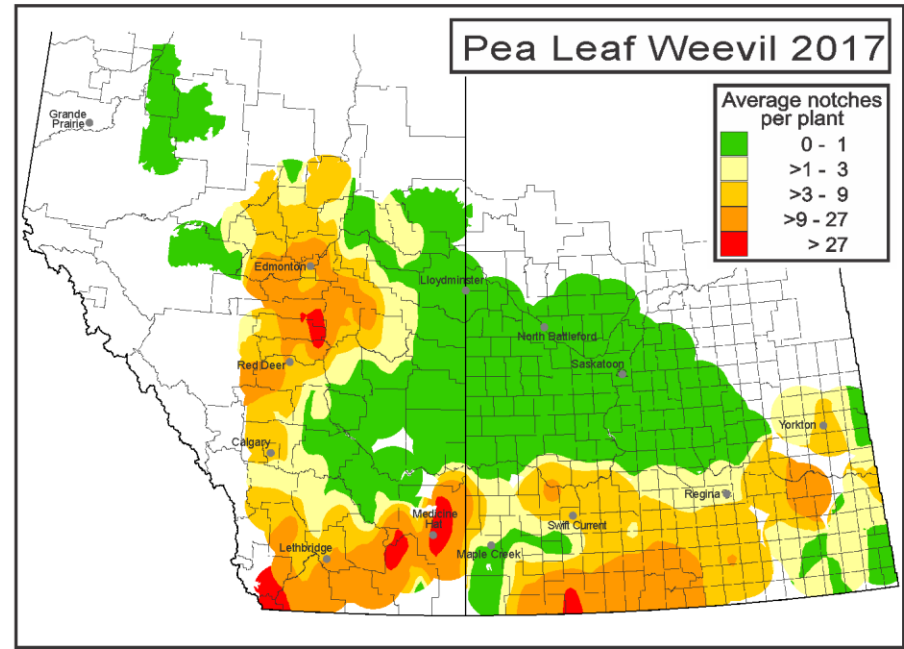
Pea Leaf Weevil 2015



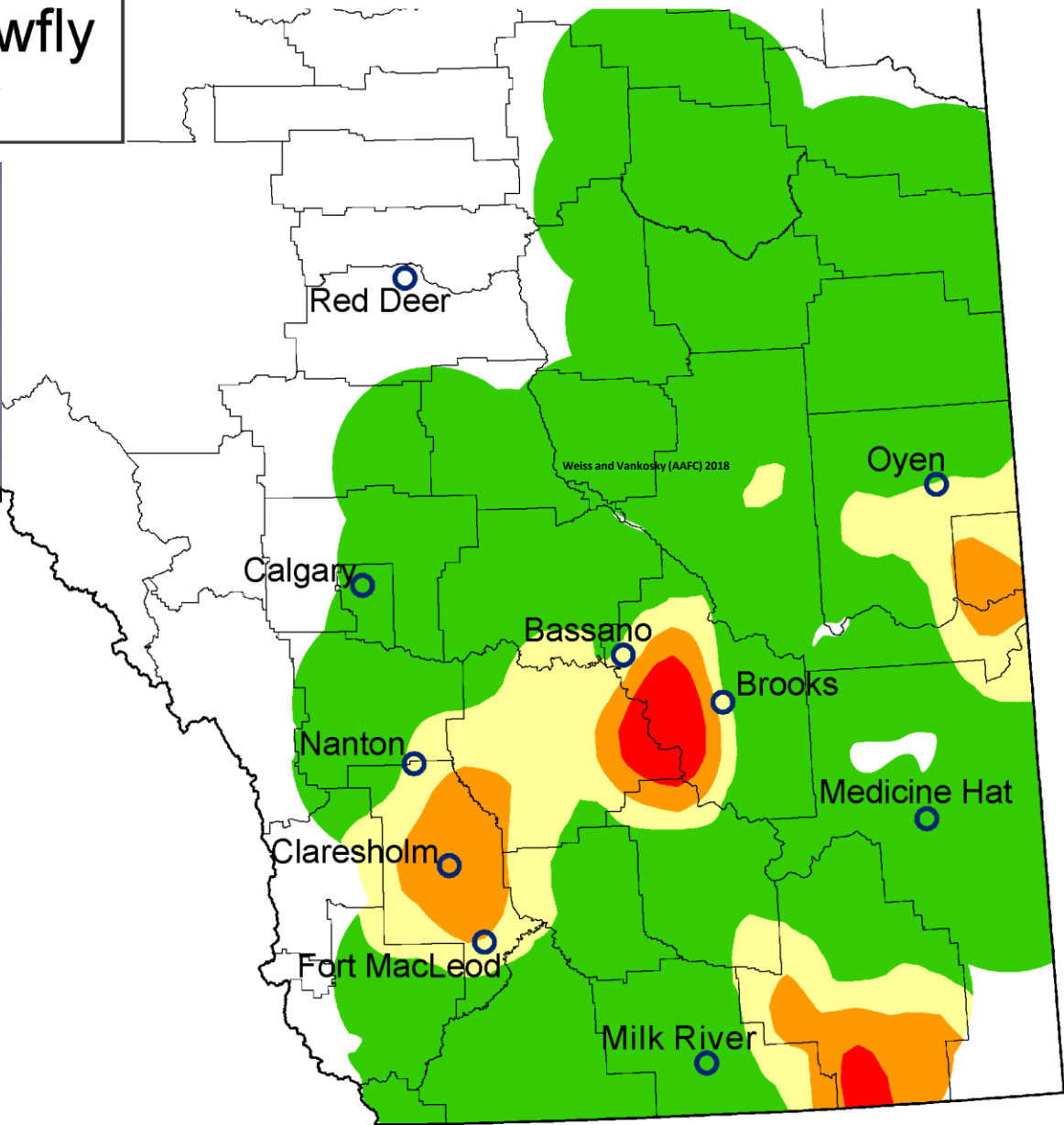
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Pea Leaf Weevil 2017



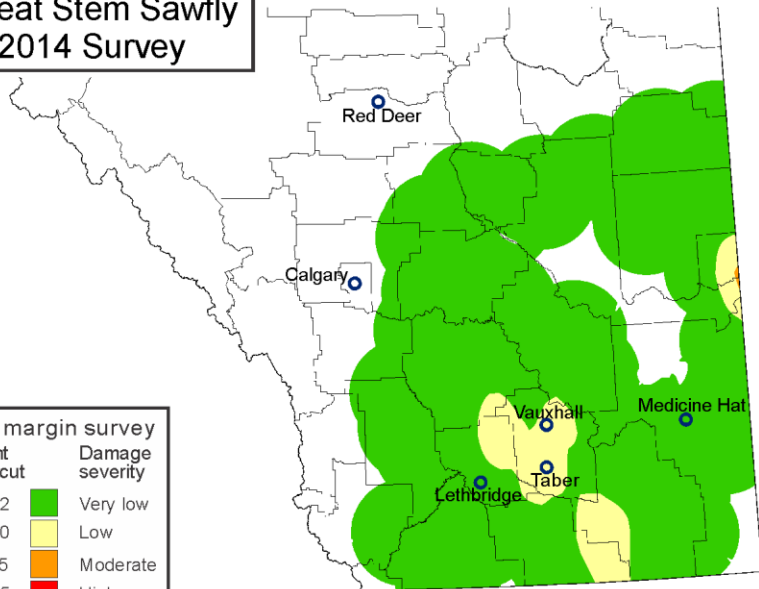
Wheat Stem Sawfly 2018 Survey



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

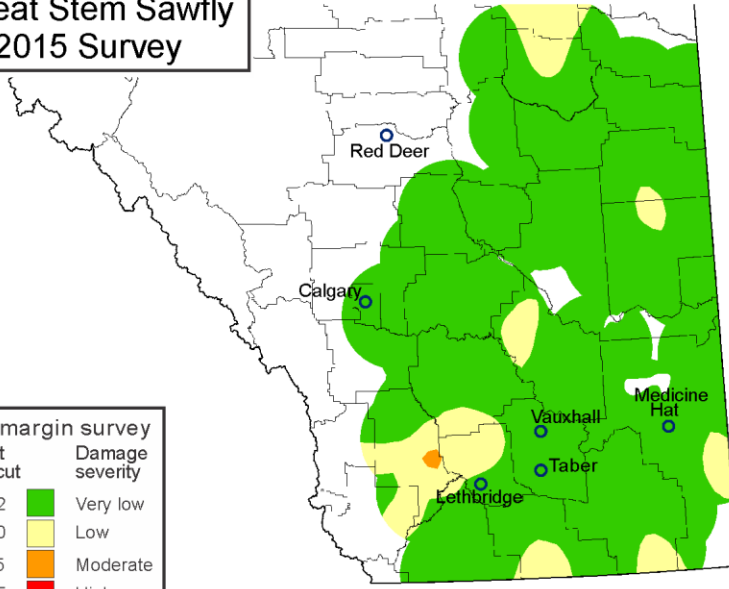


Wheat Stem Sawfly 2014 Survey



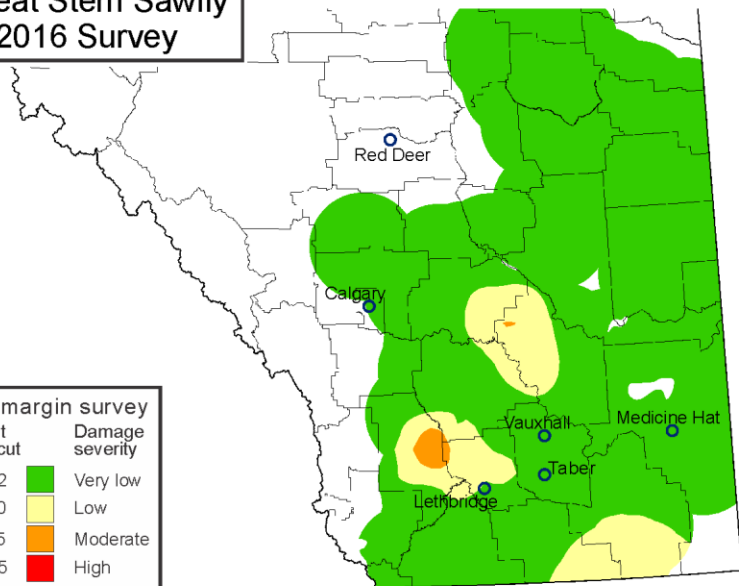
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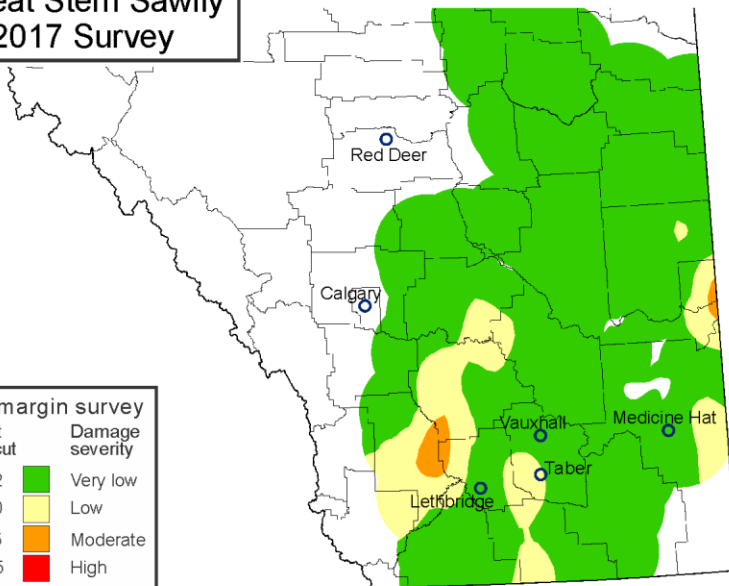
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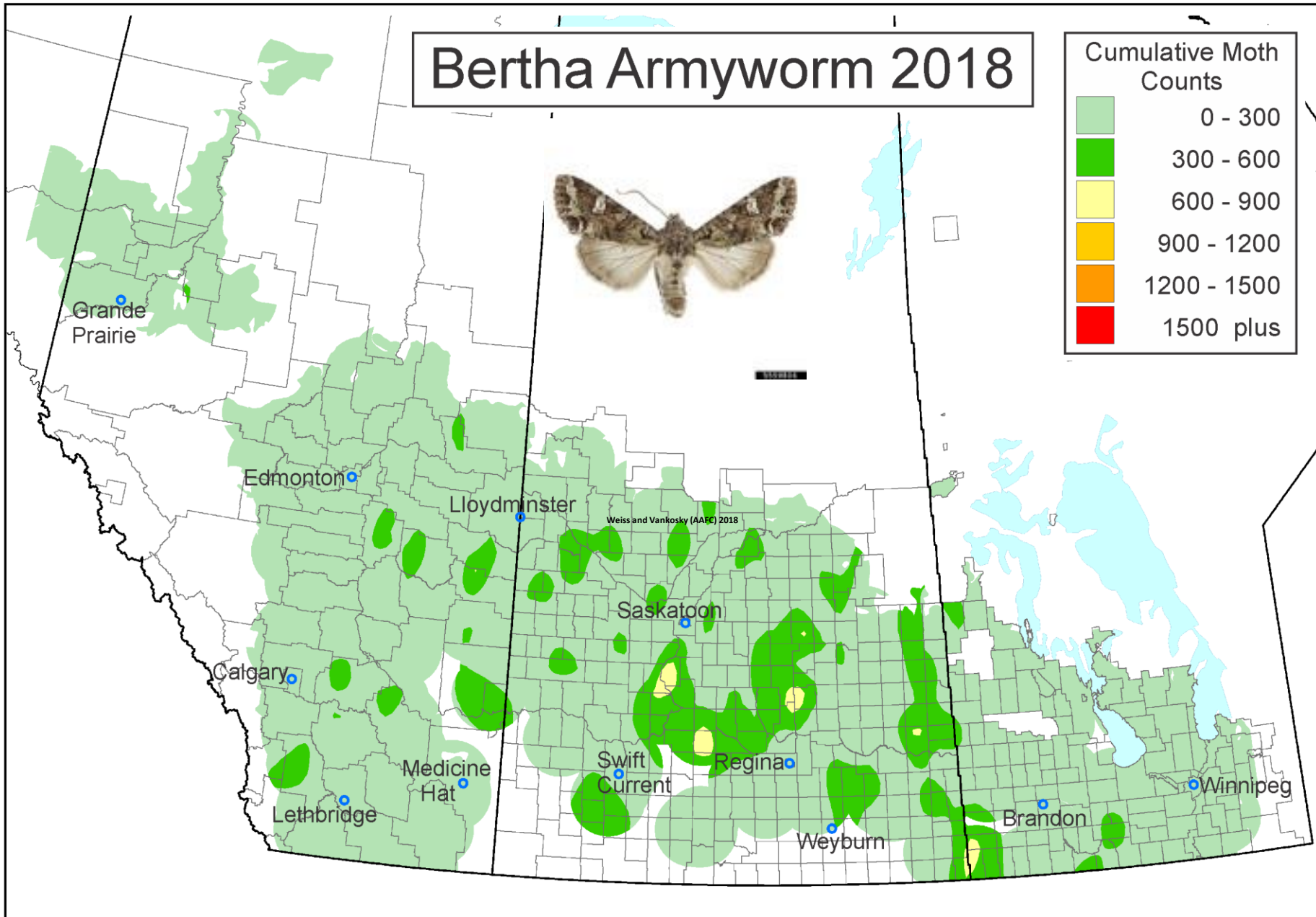
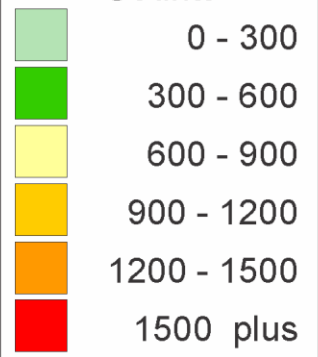
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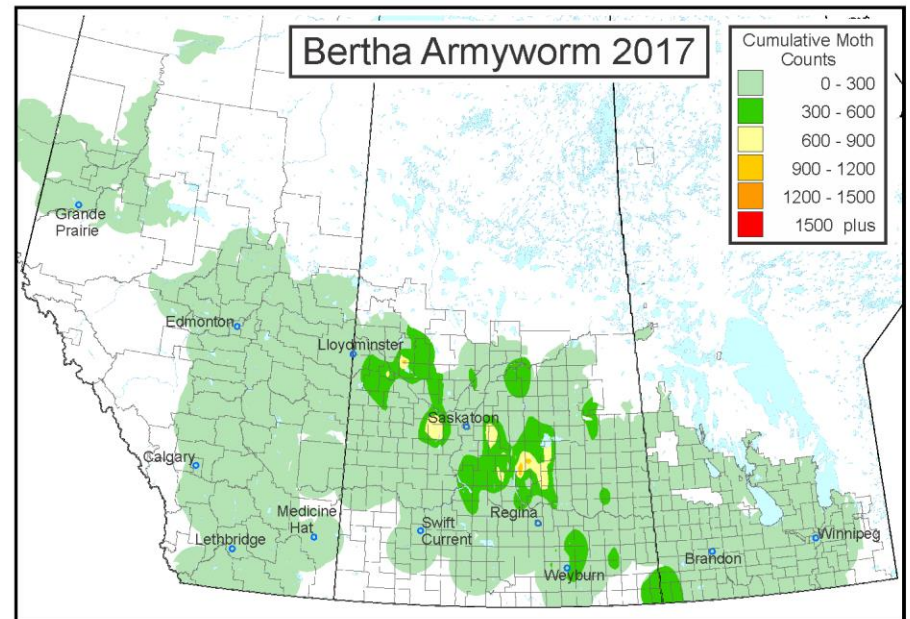
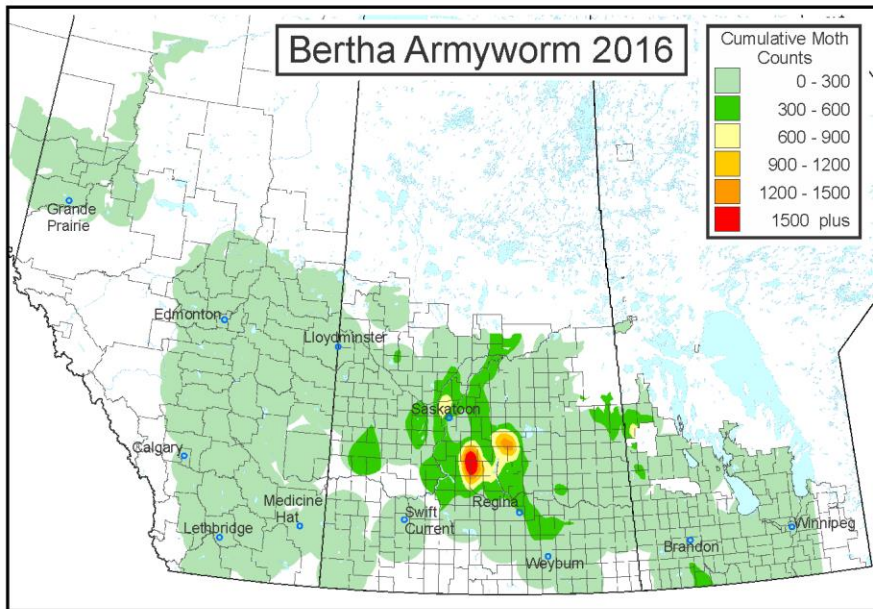
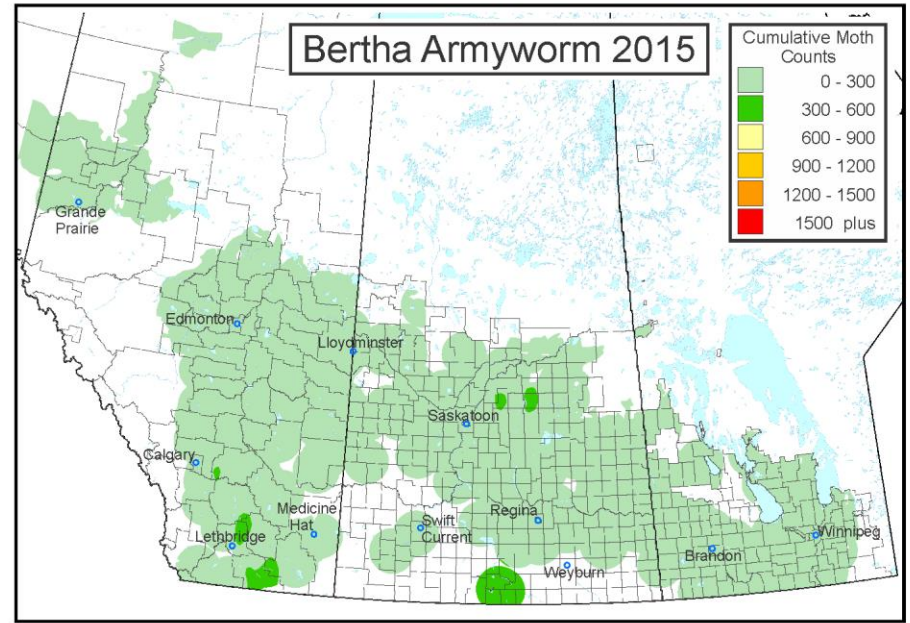
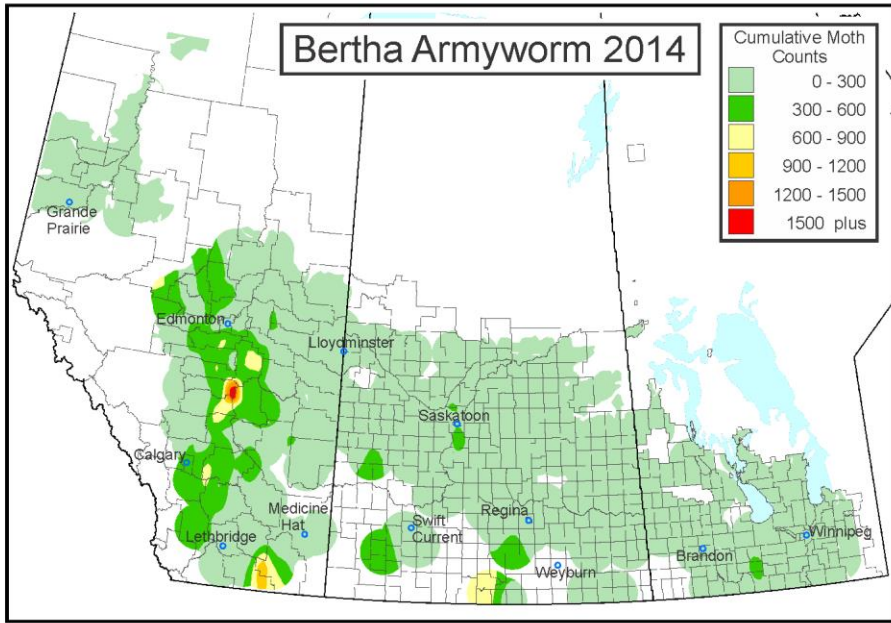


Bertha Armyworm 2018



Cumulative Moth Counts





Diamondback Moth 2018

Present ● Absent ●

