Prairie Pest Monitoring Network Weekly Updates – June 15-22, 2012

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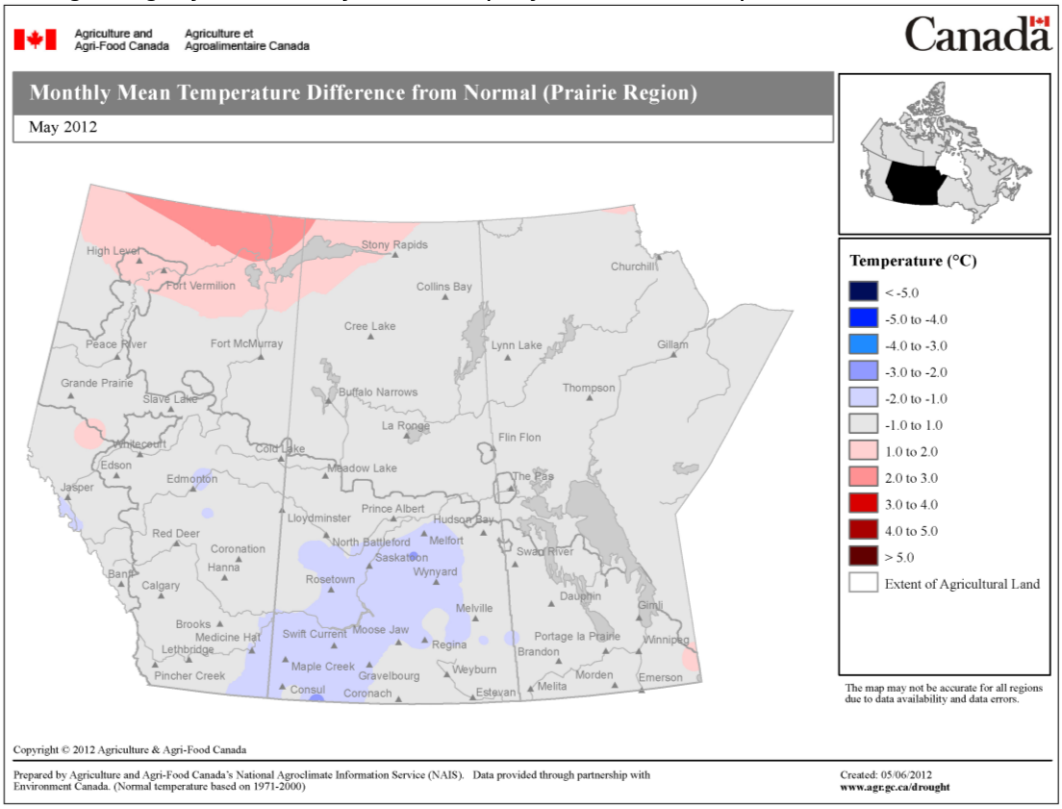
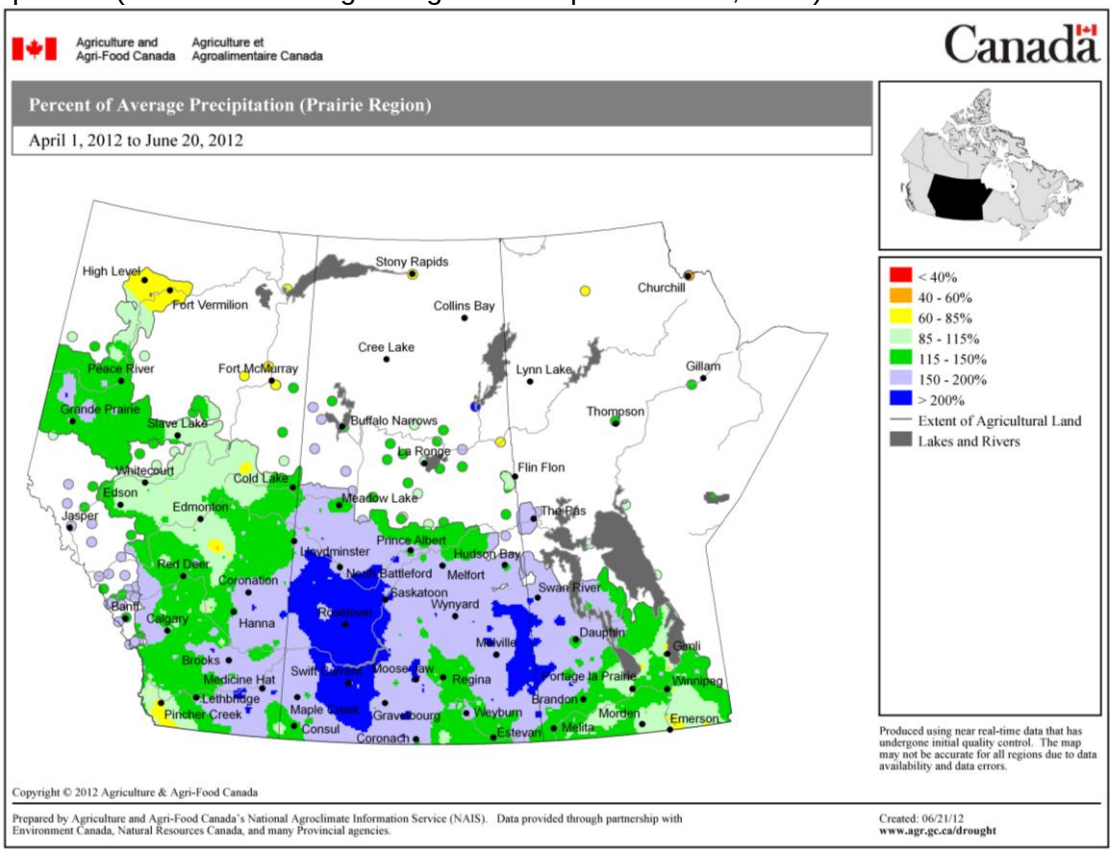
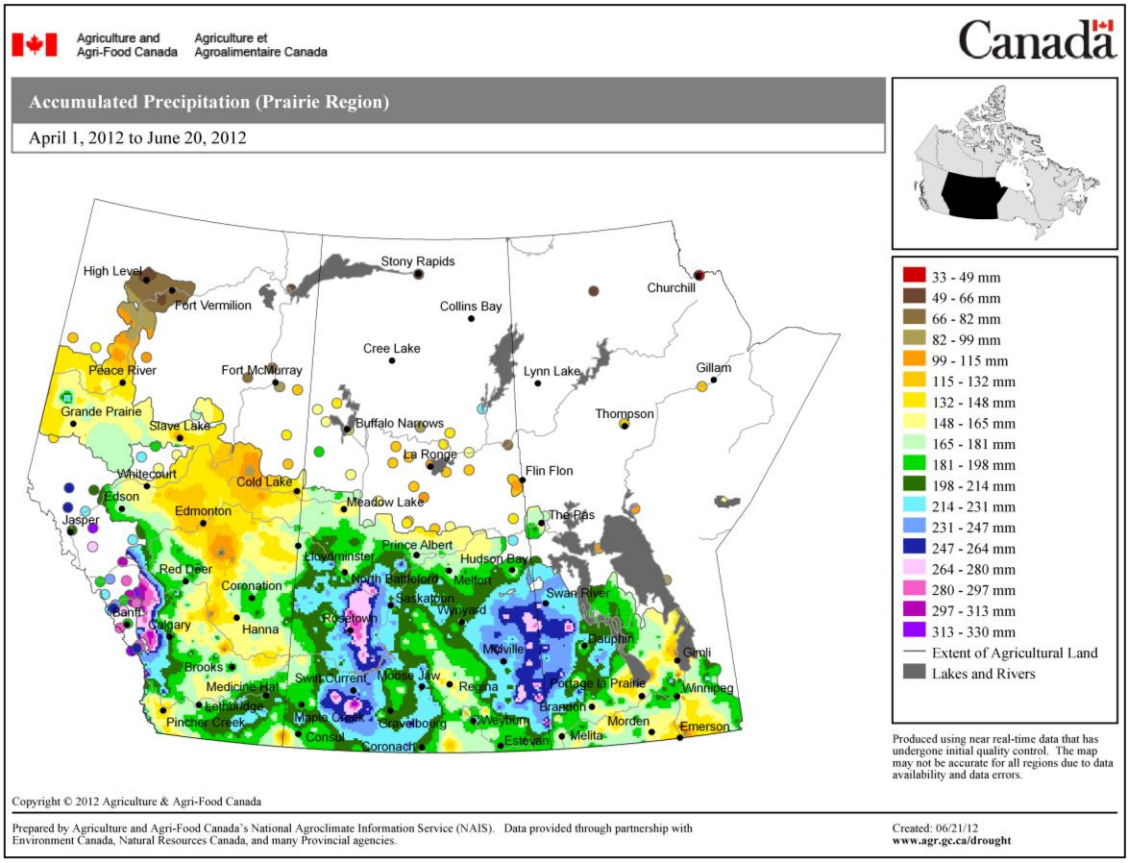
1. Weather synopsis – Summer officially began on June 21st so it seems appropriate to offer some additional weather data. In terms of temperature, here's the **monthly mean temperature differences from normal** for the prairies reflecting a slightly cooler May for 2012 (stay tuned for June):



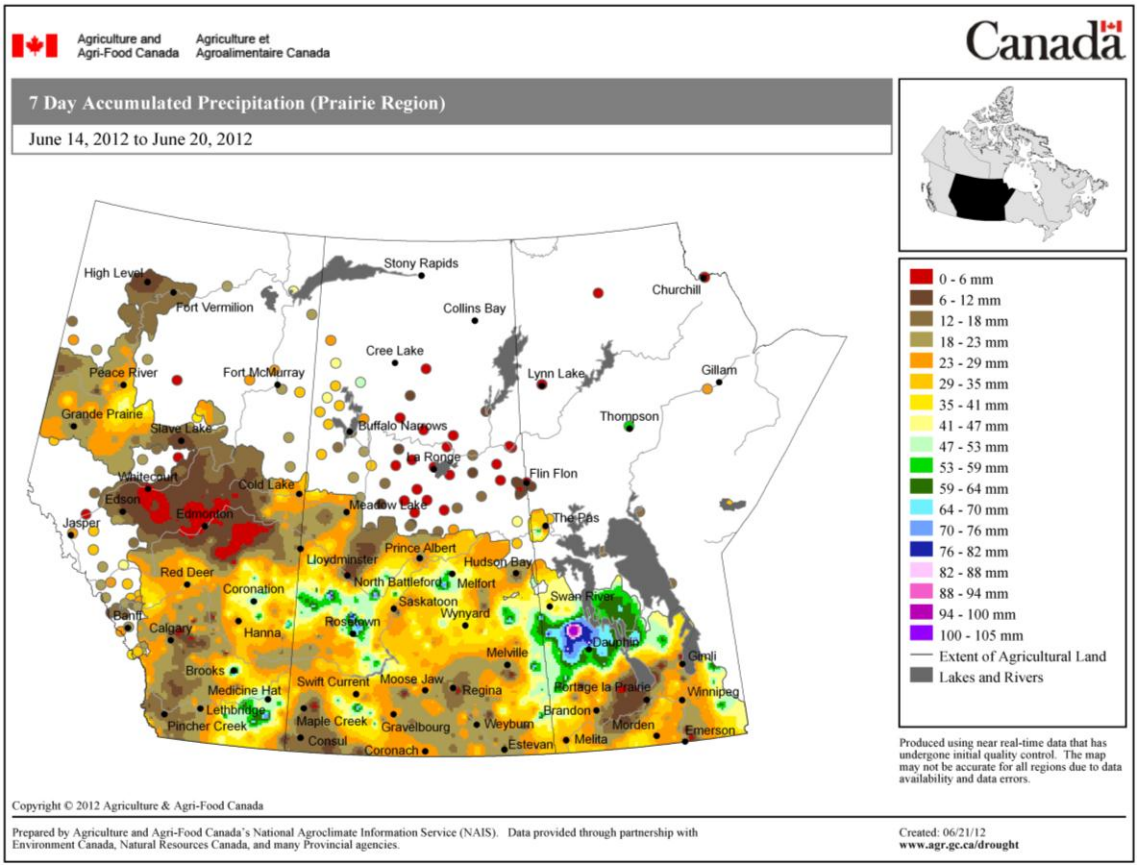
Below is the **percent of average precipitation** indicating the majority of the prairies received 100-150% of its average precipitation (recorded for the growing season up to June 20, 2012):



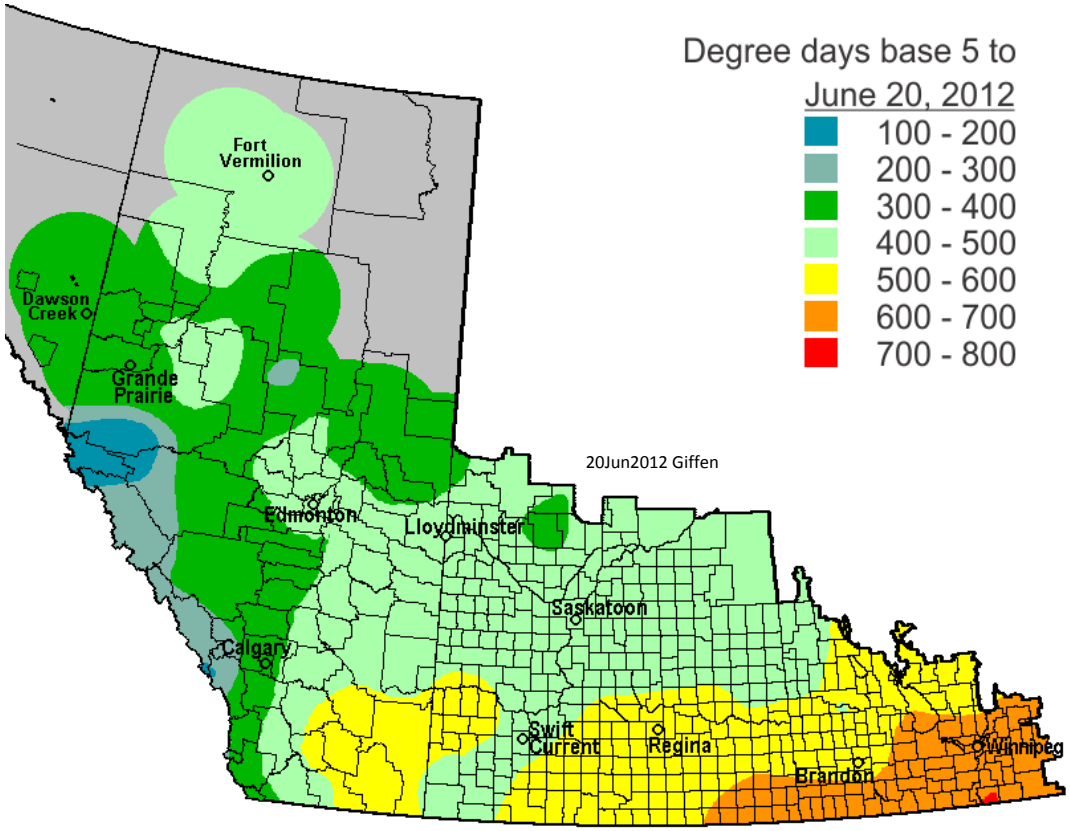
Here is the **accumulated precipitation for the growing season** (i.e., **April 1-June 20, 2012**):



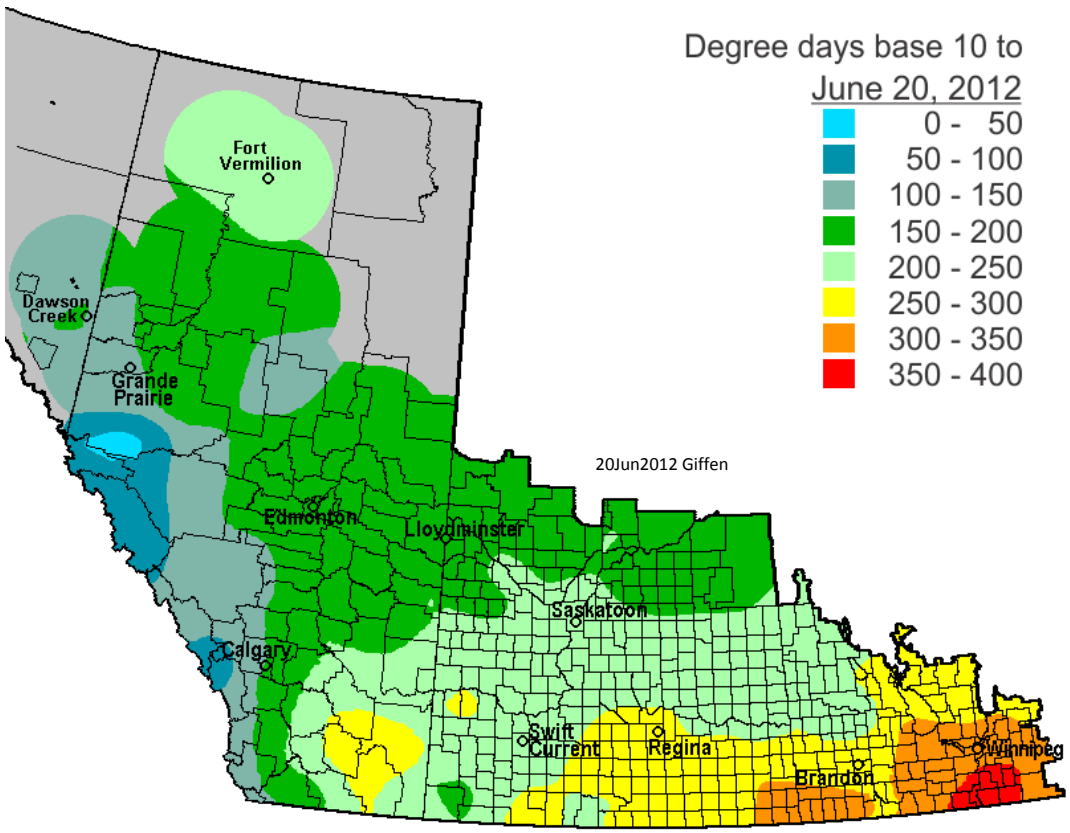
While below is the **accumulated precipitation the past 7 days** (i.e., **June 14-20, 2012**):



This is an update on the growing season in terms of **heat units**. Here are the maps for across the prairies starting with **Degree Days, Base 5°C** (**April 1 – June 20, 2012**):



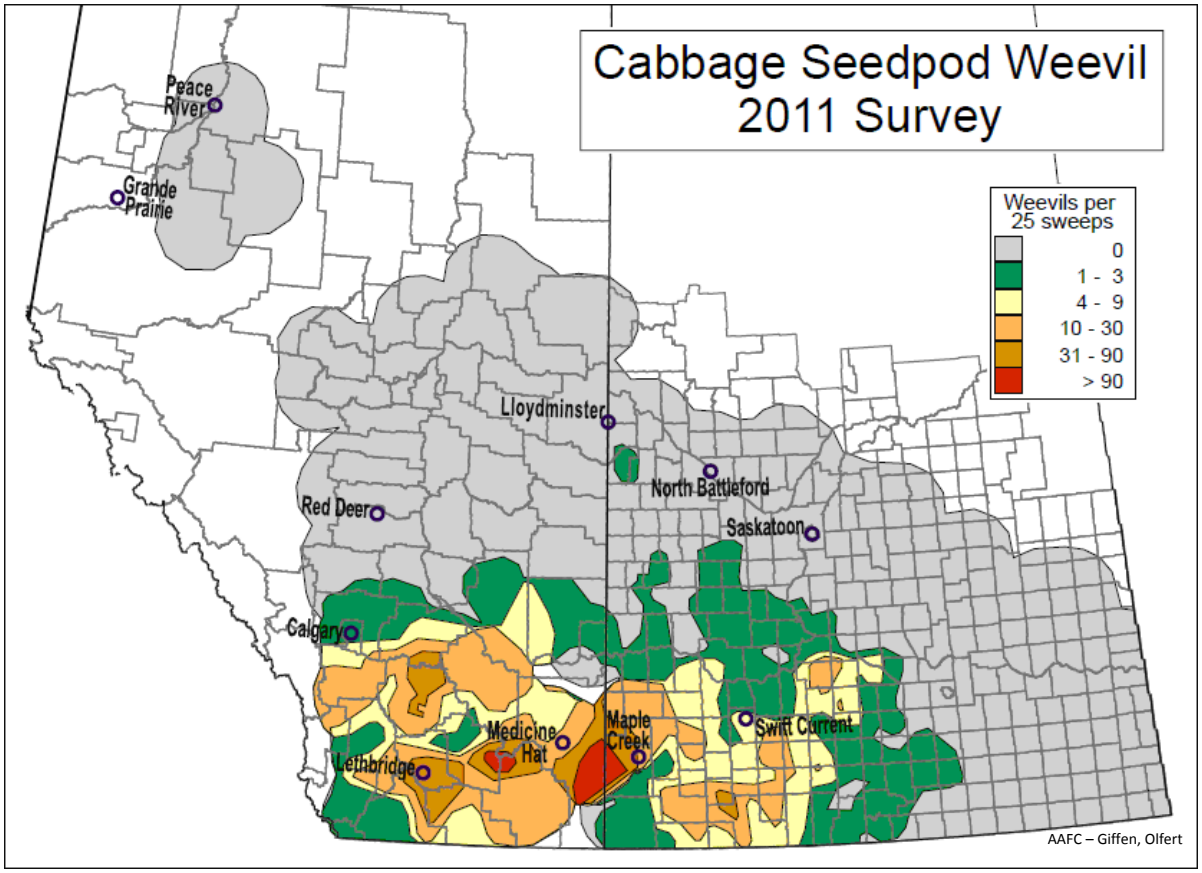
….and for **Degree Days, Base 10°C (April 1 – June 20, 2012**):



2. Wind trajectories and Diamondback Moth (DBM) – Reports of larval feeding occurred again in Manitoba (insecticides applied near Stonewall, Teulon, and Arborg), Saskatchewan, southern and central Alberta and now in the Peace River region (insecticides applied near High Prairie AB). Scott Meers additionally observed second-generation DBM moths now flying in southern Alberta fields and this refers to within-field larvae pupating into adults.

By all accounts, 2012's DBM are earlier than recent years based on initial pheromone trap catches AND these early populations are comparatively higher in early-staged canola than observed the past few years. **Diamondback moth scouting will remain critical until the pod stage in canola.**

3. Cabbage seedpod weevil (*Ceutorhynchus obstrictus*) – The first report of weevil presence in bolting-early flowering canola occurred in southern Alberta this week near Lethbridge. Sweep-net monitoring during early flowering stages is advised. Here's the 2011 CSPW monitoring map to help assess relative risk in your region:



In Alberta, the province's online cabbage seedpod weevil reporting tool can linked by clicking here so sweep-net data can be uploaded for immediate **mapping**.

4. Grasshopper (*Melanoplus sanguinipes*) simulation model output – No simulation maps are available this week. The brief model update as of June 19, 2012 is: (i) *M. sanguinipes* hatch is predicted to be complete throughout most of the prairies, and (ii) *M. sanguinipes* populations are developing at rates similar to long term averages.

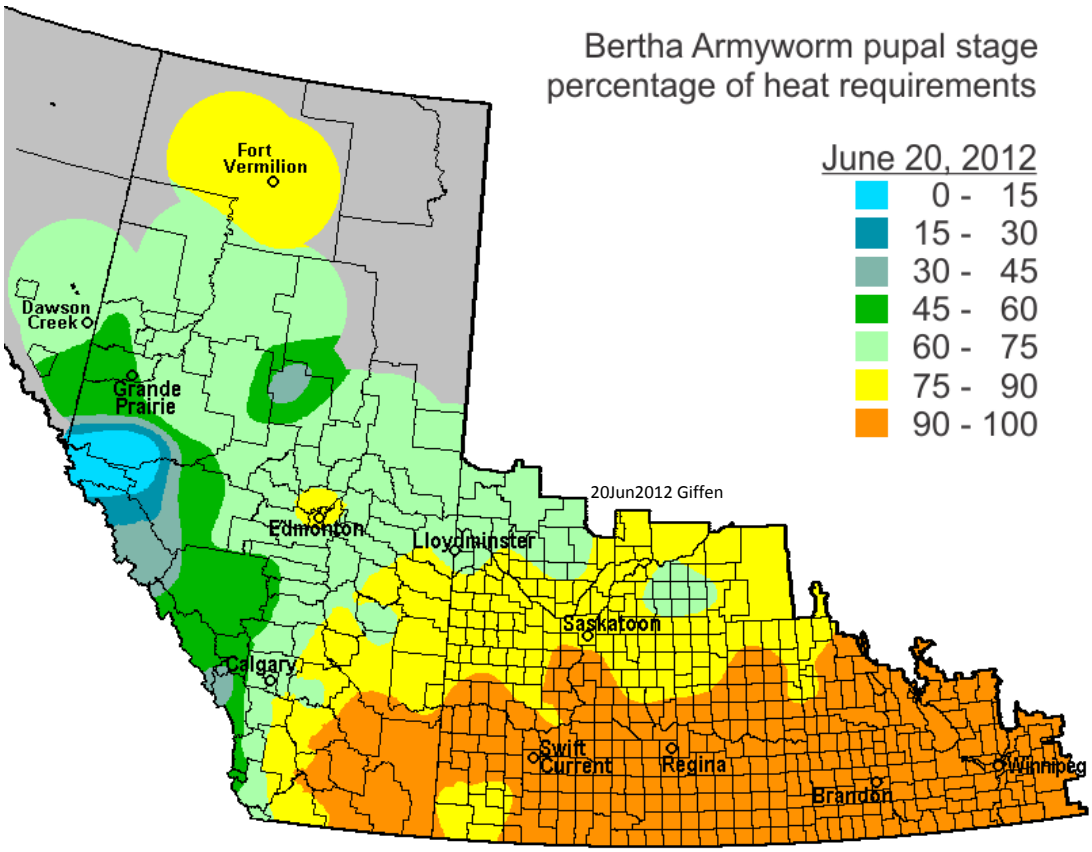
Additional grasshopper biology and monitoring information can be located by clicking **here** or linking to your provincial fact sheet (Manitoba, Saskatchewan, Alberta, British Columbia).

5. Leafhoppers – Earlier this spring leafhoppers were reported in Saskatchewan. This week reports came from central Alberta of leafhoppers and *Labops* sp. on pasture mixes. Check the contents of your sweep-nets for Aster leafhoppers (*Macrolestes quadrilineatus*) and also watch for the disease they vector, Aster Yellows

which is caused by a phytoplasma. More leafhopper biology plus a collection protocol supporting ongoing research is located here .

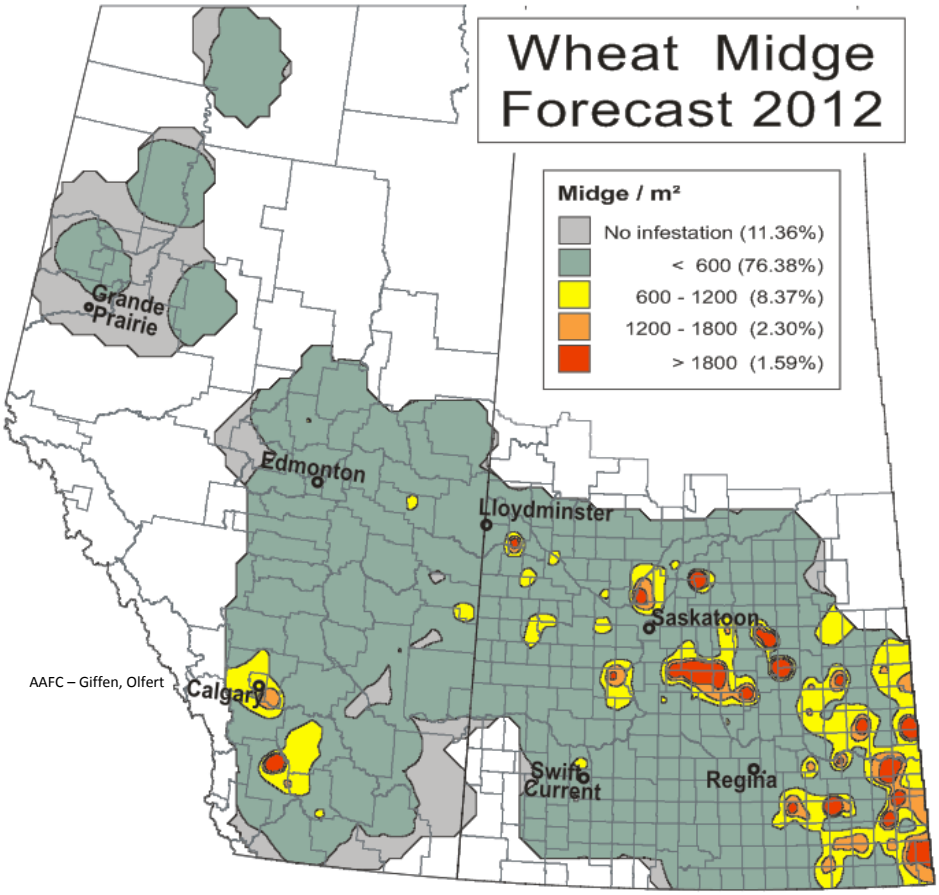
Adult Aster or Six-spotted leafhopper (3.5-4.0mm long) is light green to yellowish-green, has six black spots arranged in three rows on the front of the head, and holds its wings roof-like over the abdomen (AAFC-Olivier).

6. Bertha armyworm –The updated **map below indicates the percentage of heat requirements acquired for pupation** (e.g., moth emergence occurs at 100% of heat requirements). Areas highlighted in orange and yellow are predicted to collect moths in pheromone traps this week.

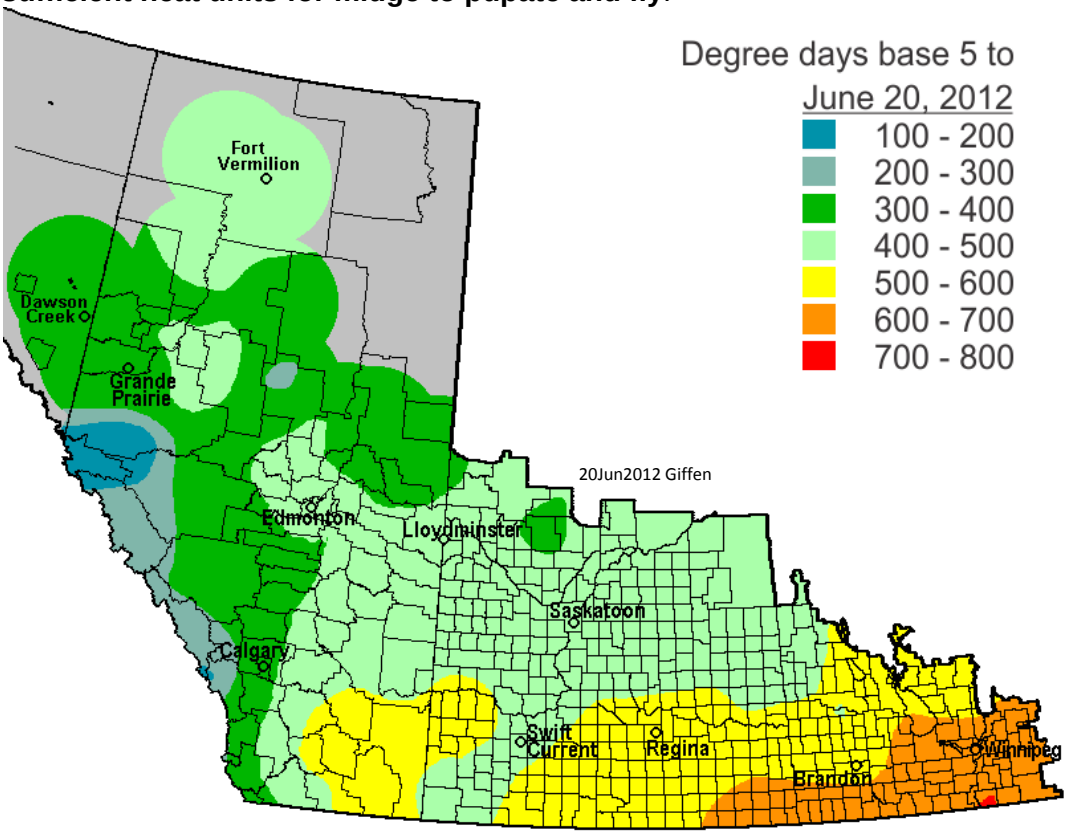


Model simulation output maps are not available this week. Briefly, the model predicted that the first BAW larvae are expected to begin to hatch over the next few days in the most advanced populations of BAW located in Manitoba, southern Saskatchewan and southern Alberta.

7. Wheat midge (*Sitodiplosis mosellana*) - Here's the **2012Wheat Midge Forecast Map** as a reminder of predicted risk across the prairies (note that wheat midge is now in the Peace River region):



Remember that 10%, 50% and 90% emergence of adult wheat midge should occur after **693, 784 and 874** degree-days (base 5°C), respectively. Based on the current map below, **areas marked in red have now accumulated sufficient heat units for midge to pupate and fly**.



When monitoring wheat fields, be particularly watchful for the synchrony between flying midge and anthesis. Additional wheat midge biology and monitoring information can be located by clicking here or linking to your provincial fact sheet. The most current publication related to wheat midge on the Canadian prairies was published by Elliott, Olfert, and Hartley in 2011.

8. Previous and current Weekly Updates are posted to the web and can be perused by clicking Weekly Updates. Last week a user reported problems loading the latest Weekly Update. If an old Weekly Update you previously viewed loads rather than the new edition, try emptying your cache or hitting the reload button several times. Internet Explorer users may encounter this issue whereas Google Chrome users seem to be immune. We are trying to make modifications to the webpage – please bear with us.