Prairie Pest Monitoring Network Weekly Updates – July 21-27, 2012

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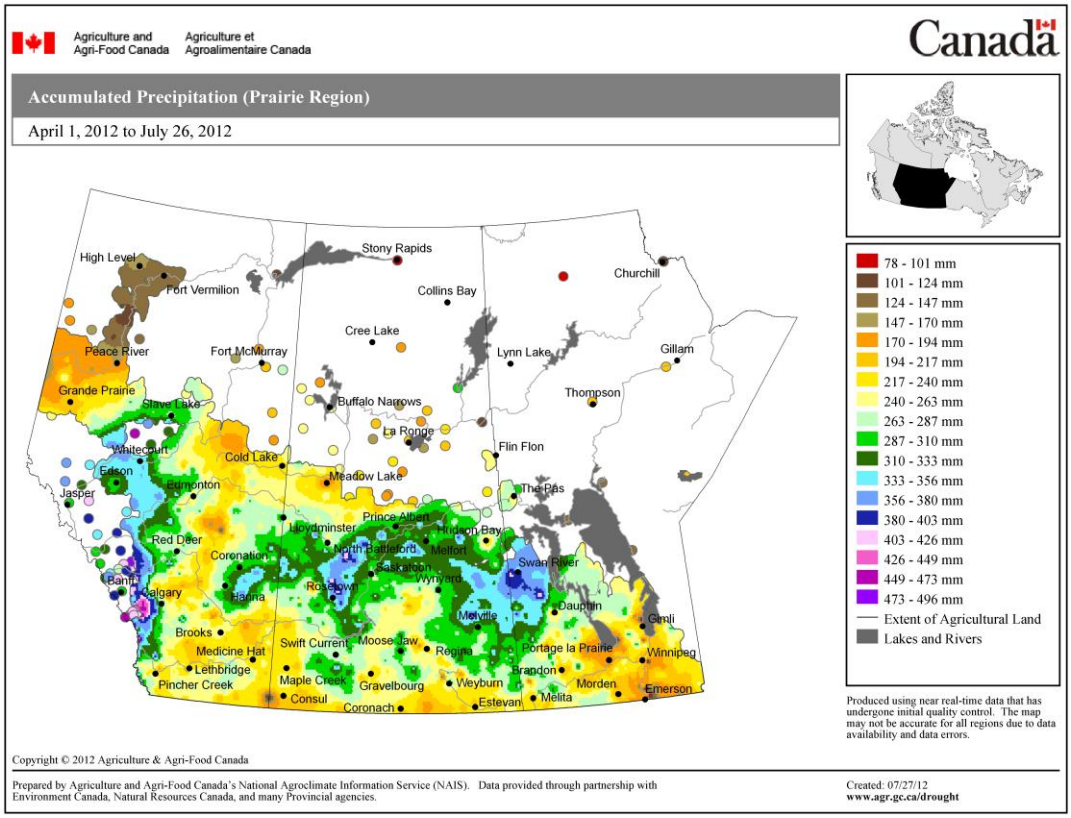
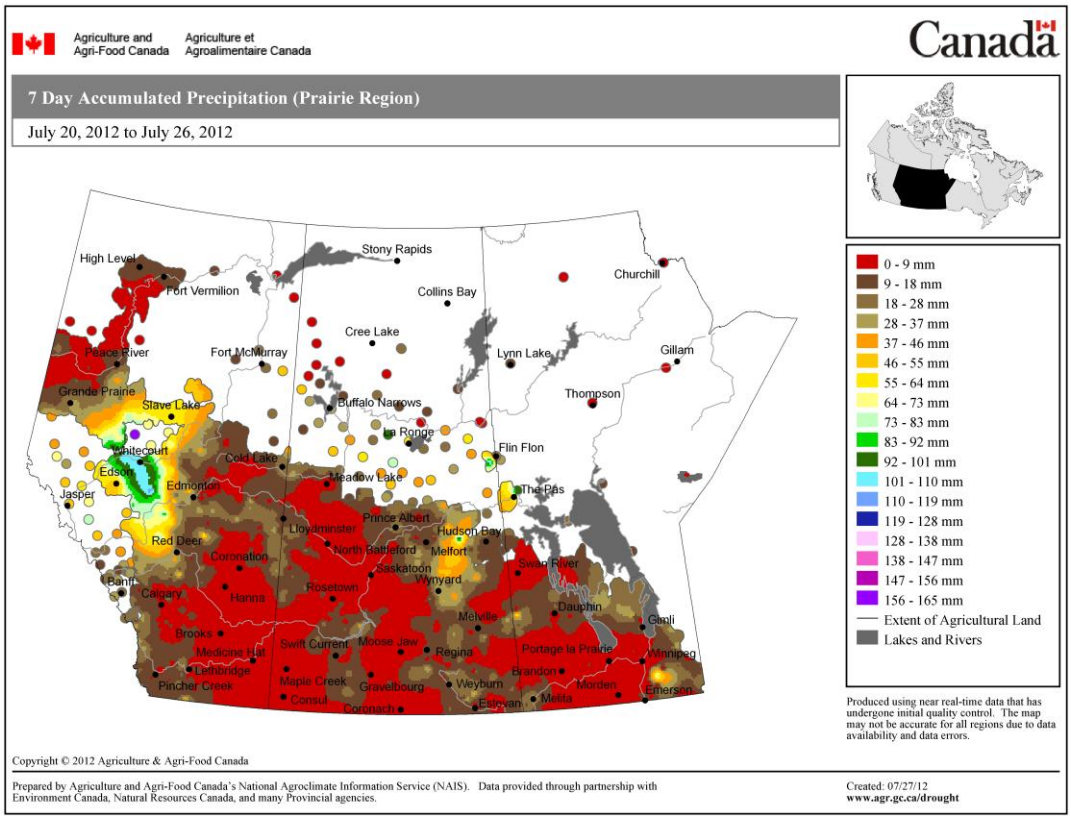
1. Weather synopsis – Here is the **accumulated precipitation for the growing season** (i.e., **April 1-July 26, 2012**):

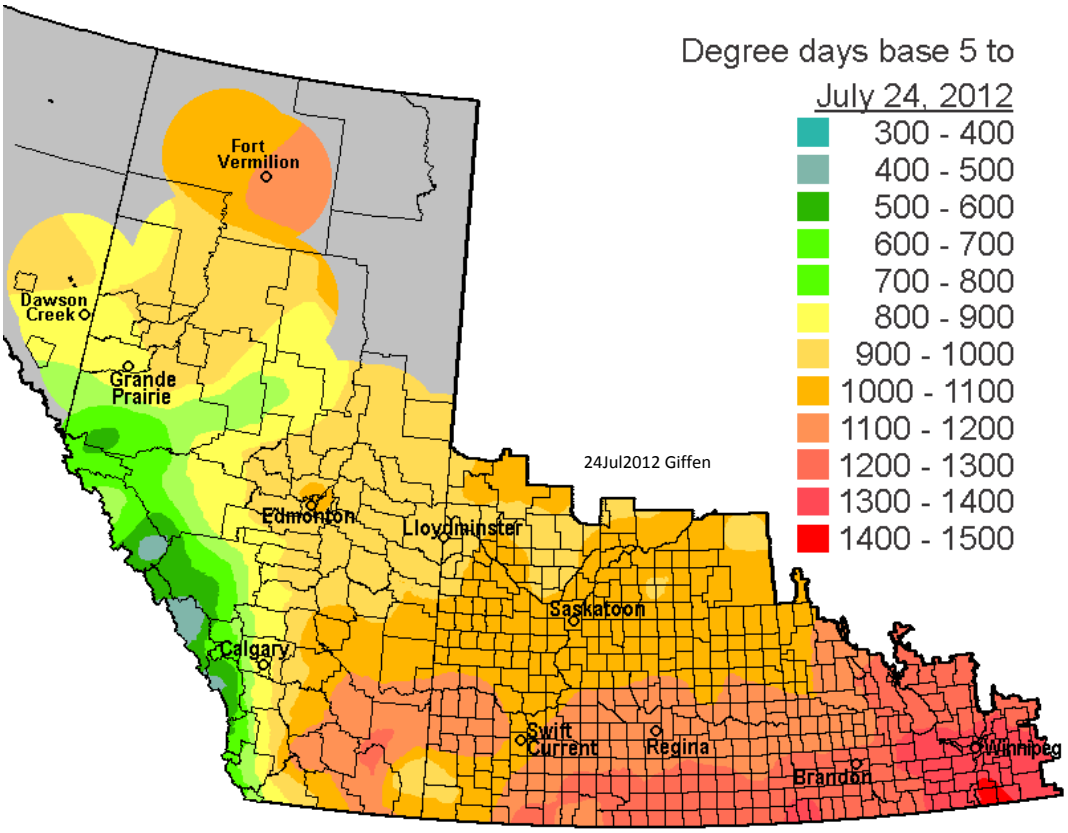


While below is the **accumulated precipitation the past 7 days** (i.e., **July 20-26, 2012**):

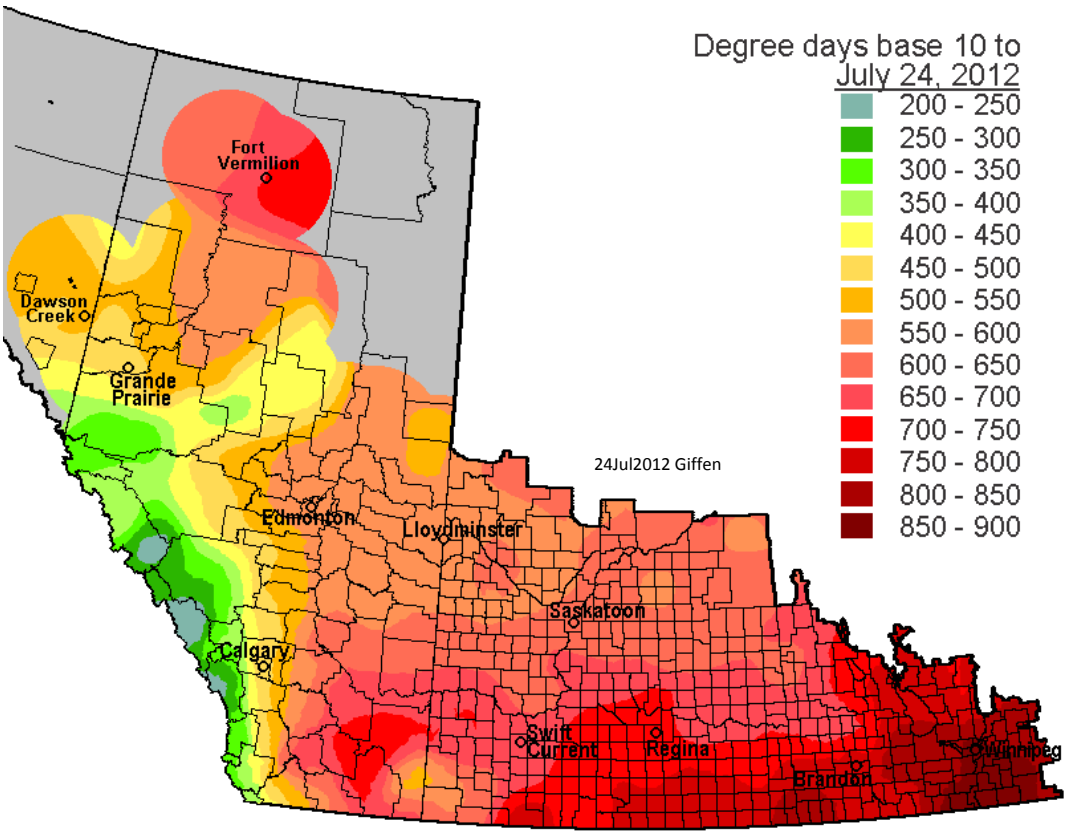


This is an update on the growing season in terms of **heat units**. David Giffen (AAFC-Saskatoon) now utilizes Science and Technology Branch (formerly Agri-Environment Services Branch or AESB) data plus the "Earth Networks Weather Data Feed for AAFC". The following maps utilized data from 672 reporting stations.

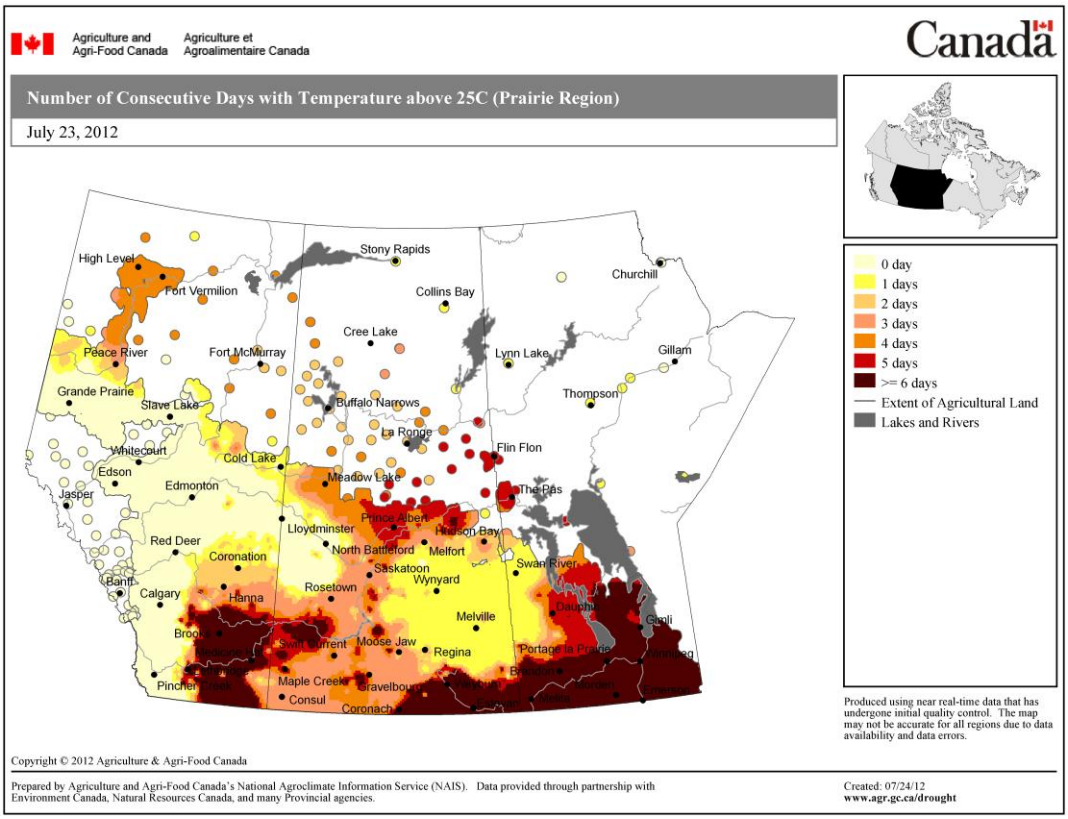
Here are the maps for across the prairies starting with **Degree Days, Base 5°C** (**March 1 – July 24, 2012**):



….and showing **Degree Days, Base 10°C (March 1 – July 24, 2012**):



And just in case you were wondering how hot it's been so far, here's the number of consecutive days ≥25°C for the prairies….



2. Cabbage seedpod weevil (*Ceutorhynchus obstrictus*) – Surveying is completed and processing continues. For those of you in the Peace River region, zero *C. obstrictus* were observed in 168 field surveyed at early to mid-flower stages (i.e., sweep-net sampled July 6-11, 2012).

3. Swede Midge (*Contarinia nasturtii*) – From Dr. Julie Soroka: "Ron Lukash with Cargill, brought in a canola raceme from Codette SK that had abnormal pod development and discoloured flowers. When I opened a flower, out popped two creamy yellow Cecidomyiidae larvae. Although I can't tell species from larval characters, one of the larvae "jumped" when prodded."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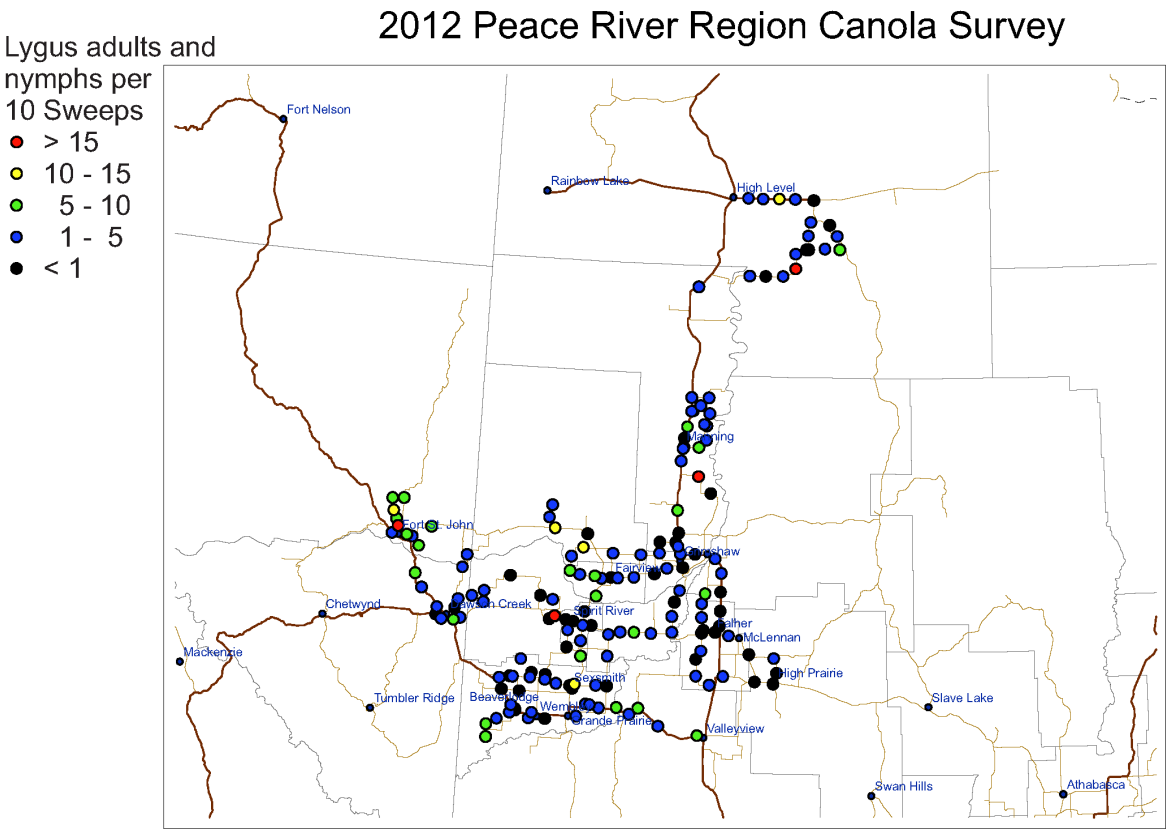
The above description and photos suggest swede midge likely has a physical presence in canola fields in Saskatchewan whereas the prior record was only adults in pheromone traps. The incidence associated with the above report suggests less than 1% of flowering racemes were infested but the damage might be fairly widespread in the (very wet) region. Additional surveying is planned as a follow-up.

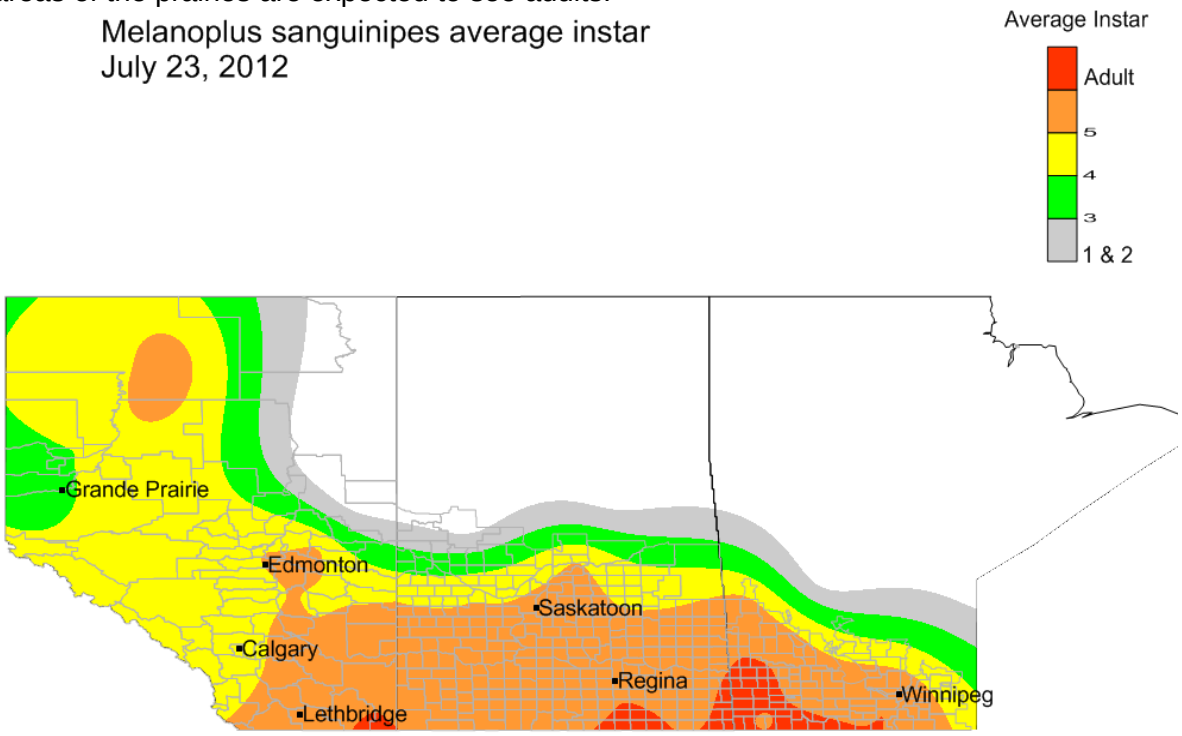
4. Lygus bugs (*Lygus* spp.) – The economic threshold for *Lygus* in canola is applied at late flower and early pod stages. Biological and monitoring information can be linked by clicking here or you can access the Manitoba, Alberta or British Columbia fact sheets.

The 2012 Peace River region annual canola survey is completed with samples from 168 fields processed. The survey, performed since 2003, includes the main objectives of (i) collecting canola insect pest data throughout the region and (ii) detecting introduction of the Cabbage seedpod weevil into the Peace River region. A total of 168 canola fields were surveyed throughout the BC and Alberta Peace during flowering with random sampling performed between July 6-11, 2012. Sweep-net sampling was conducted by performing 50 - 180° sweeps per canola field (N=1 *B. rapa* + 167 *B. napus*). A survey summary was generously posted by the Alberta Canola Producers Commission and can be accessed by clicking here. **Lygus bug** populations of ≥5 lygus bugs per 10 sweeps were observed in 32 fields surveyed. **A reminder that individual fields must be monitored into the early pod stages since *Lygus* bug populations can vary drastically.**

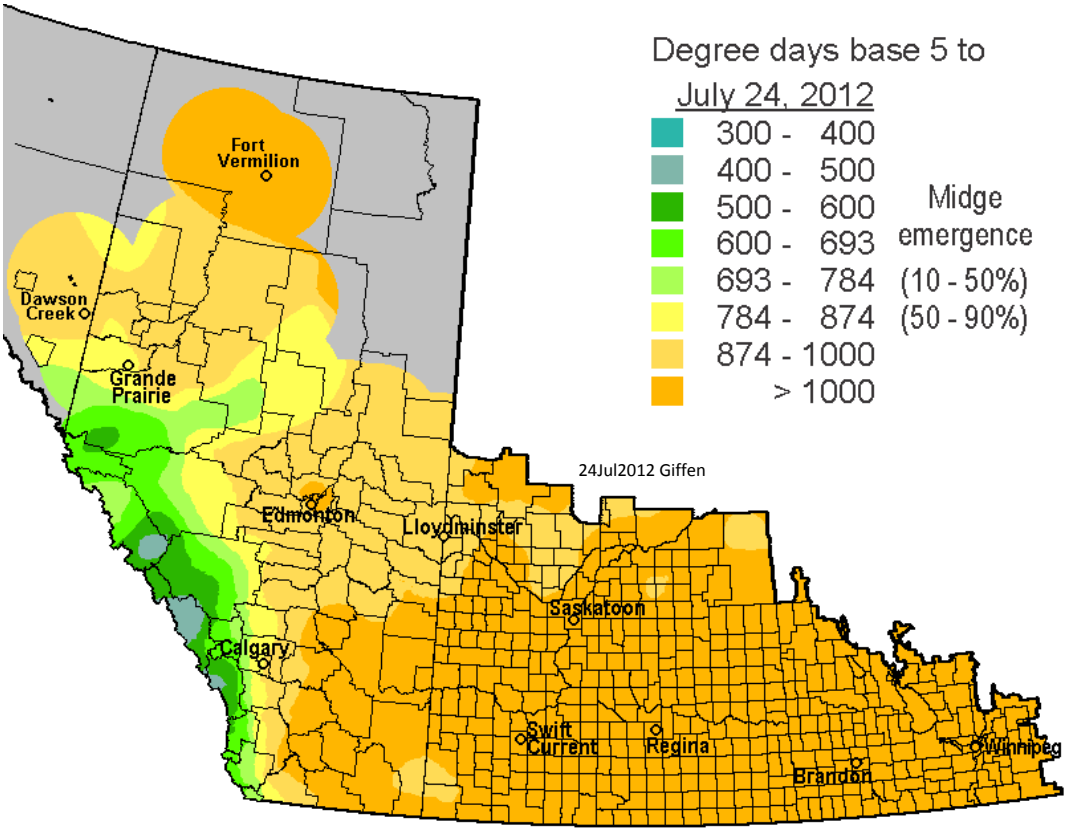


5. Bertha armyworm (*Mamestra configurata*) – No update available this week for this pest. More information on Bertha armyworm biology and pest management is located here or your provincial fact sheet can be link by clicking Manitoba, Saskatchewan, Alberta, or British Columbia. It's now time to think about retrieving your pheromone traps - thank you for trapping and reporting your moth counts for 2012!

6. Grasshopper (*Melanoplus sanguinipes*) simulation model output – The map below illustrates the simulation model's predicted progression of *M. sanguinipes* development across the prairies. Most of the prairies, as of July 23, should be experiencing fourth and fifth instar *M. sanguinipes* nymphs while the most southern areas of the prairies are expected to see adults.

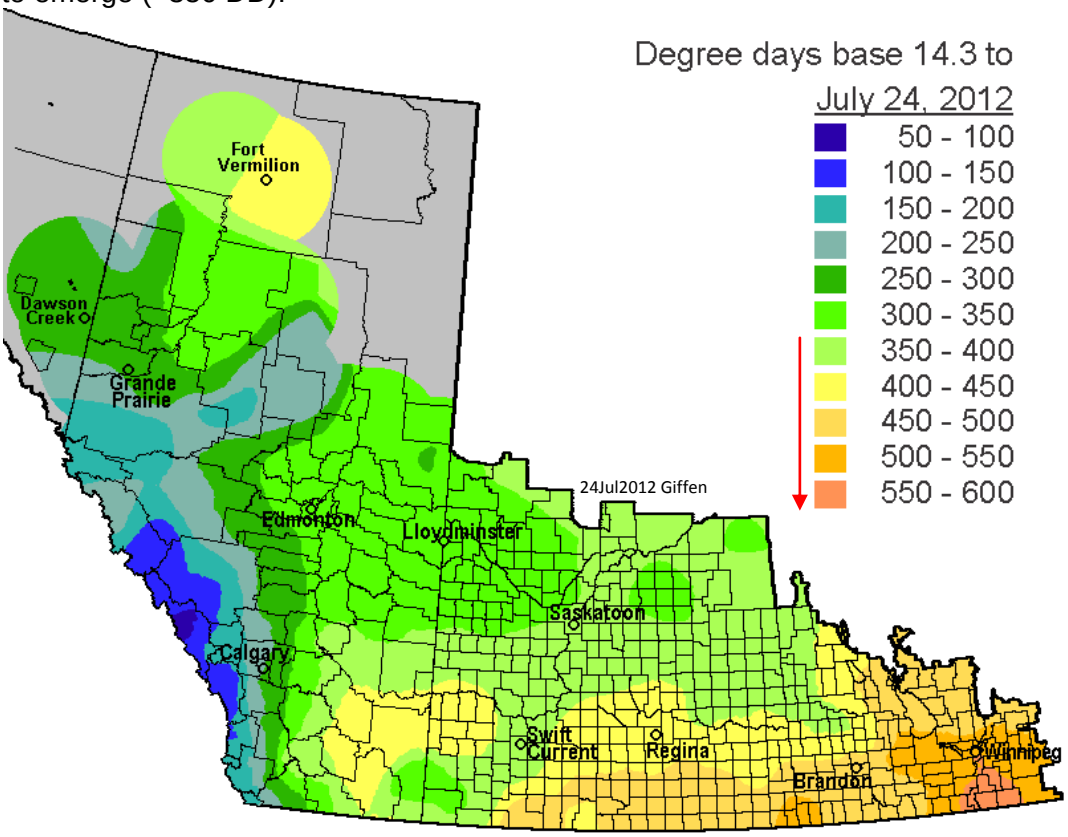


7. Wheat midge (*Sitodiplosis mosellana*) - This week, areas highlighted yellow might expect to see peak midge flight whereas Manitoba and most of Saskatchewan would expect soon to see midge larvae developing within wheat heads.

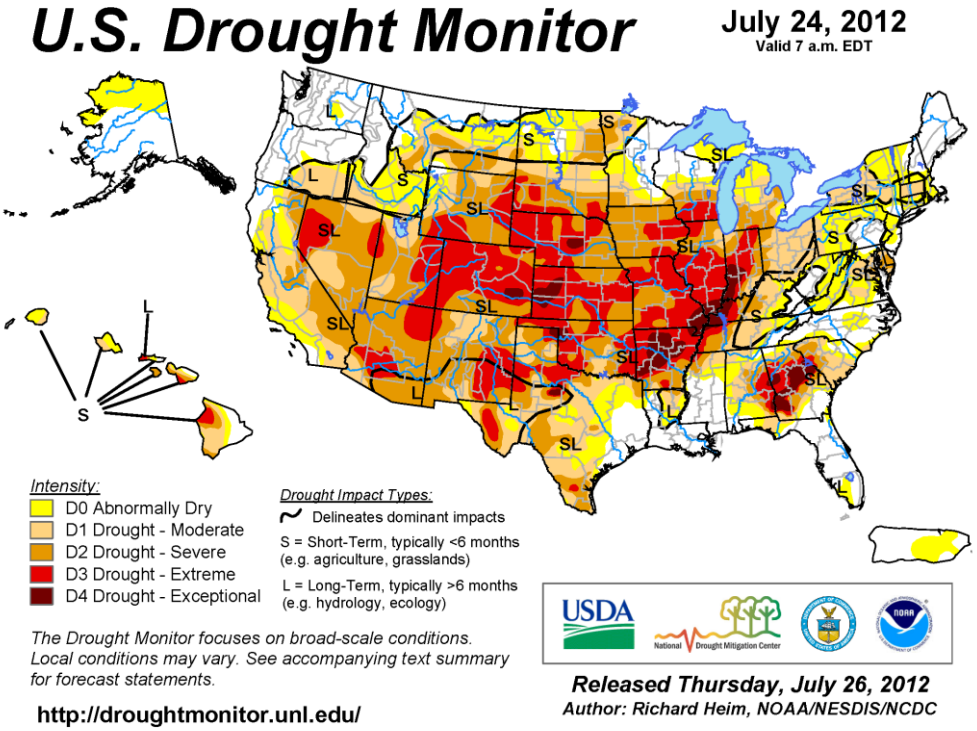


8. Cereal leaf beetle (*Oulema melanoplus*) – No update is available this week for this pest. Remember, the most current publication related to cereal leaf beetle on the Canadian prairies was published by Kher, Dosdall, and Cárcamo in 2011. Additional pest biology and monitoring information can be located by clicking here.

9. West Nile Virus (*Culex tarsalis*). Below is the degree-day map David Giffen produced for the health agencies indicating the regions of the prairies that have acquired sufficient heat accumulations for *Culex tarsalis* adults to emerge (>350 DD).



10. Drought conditions in the United States featured repeatedly in the news this week. The "International Crop Production Highlights", according to the USDA, can be found by clicking here (update scheduled for August 11, 2012). The "U.S. Drought Monitor" map is updated weekly and can be found by linking here while their July 24, 2012 map is below:



11. Previous and current Weekly Updates are posted to the web and can be perused by clicking Weekly Updates.