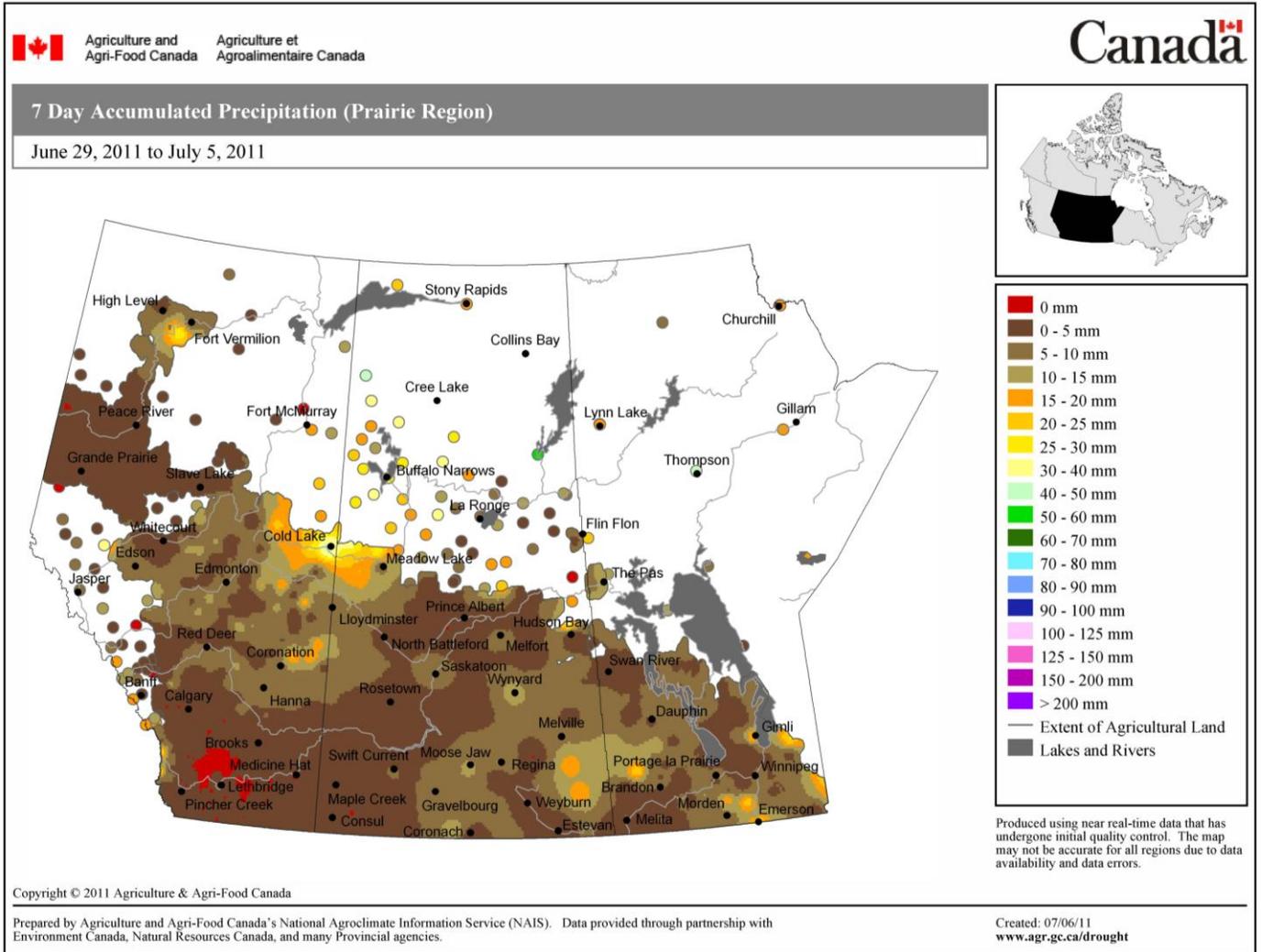
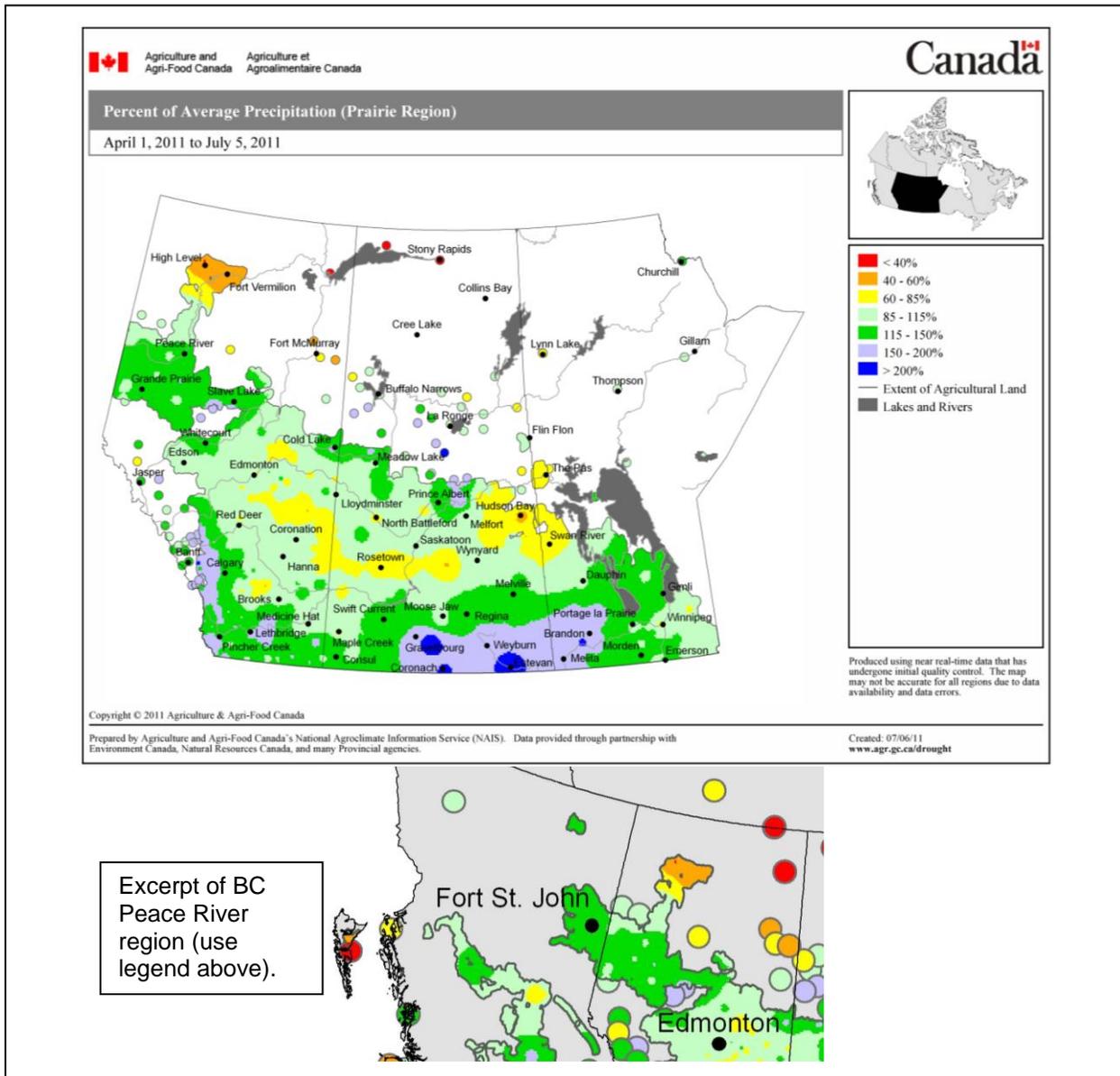


Prairie Pest Monitoring Network Weekly Updates – July 4-8, 2011
Weiss, Olfert, Giffen, Dolatre – AAFC Saskatoon & Otani – AAFC Beaverlodge

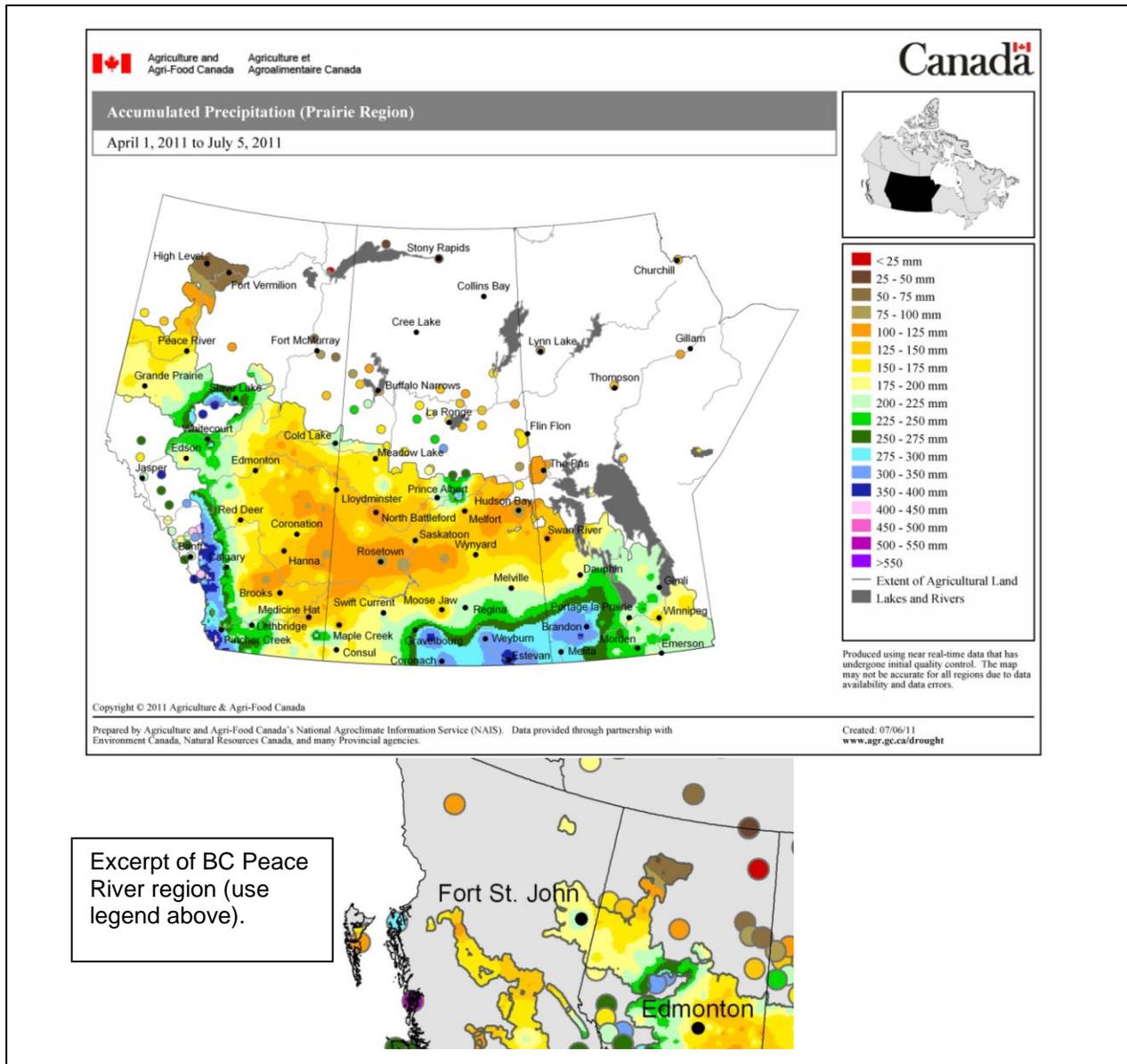
- Weather synopsis** – Less rain across the prairies this week but, on the positive side of things, two drier regions of the prairies, the north Peace River region and eastern central Alberta near Coronation, received some rain this week which improved the “percent of average precipitation” in the next map.



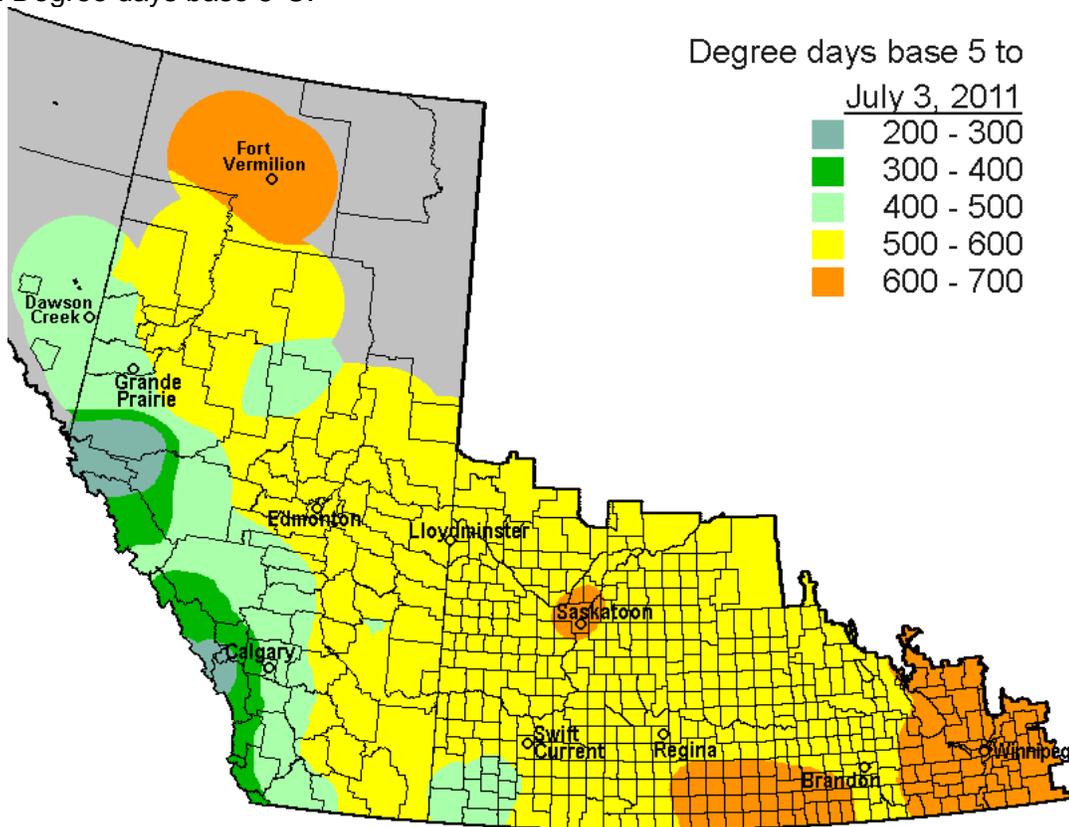
The percent of average map below indicates that the **majority of the prairies received at least 85% of average precipitation for the growing season** (April 1 – July 5). The north Peace River region remains drier than average along with parts of central AB, central SK and into MB near Swan River.



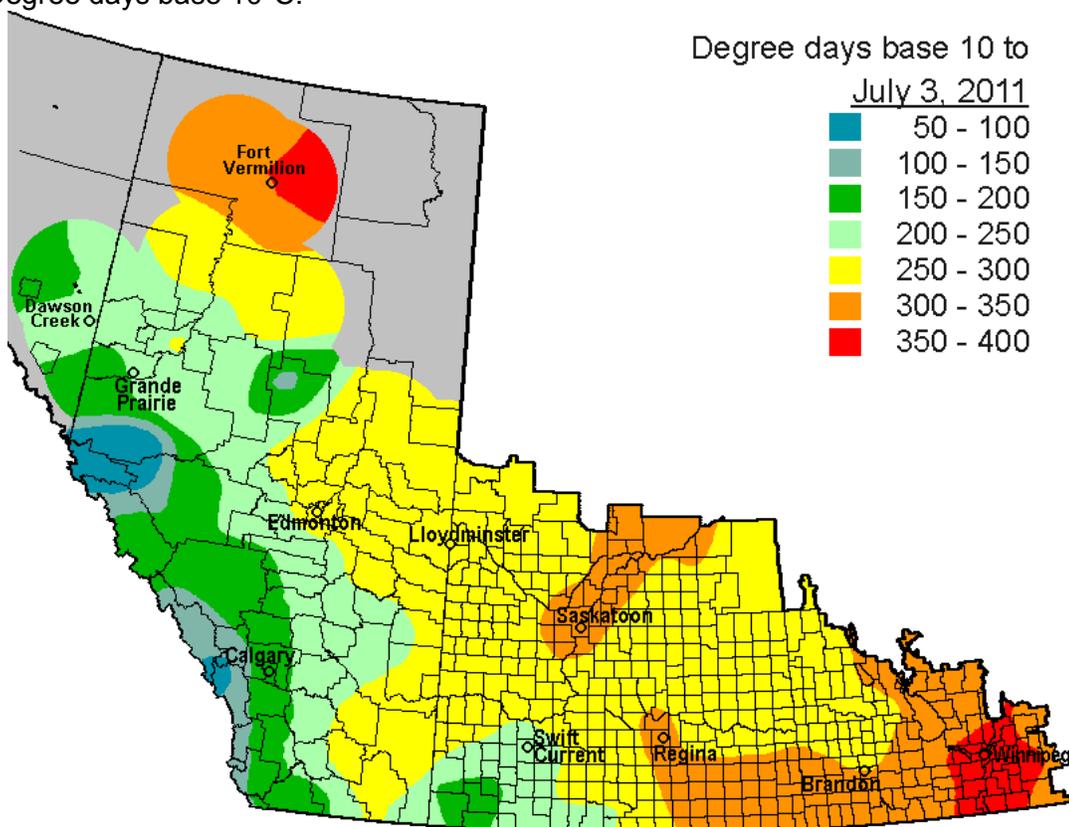
The following is the **accumulated rainfall for April 1-July 5** across the prairies:



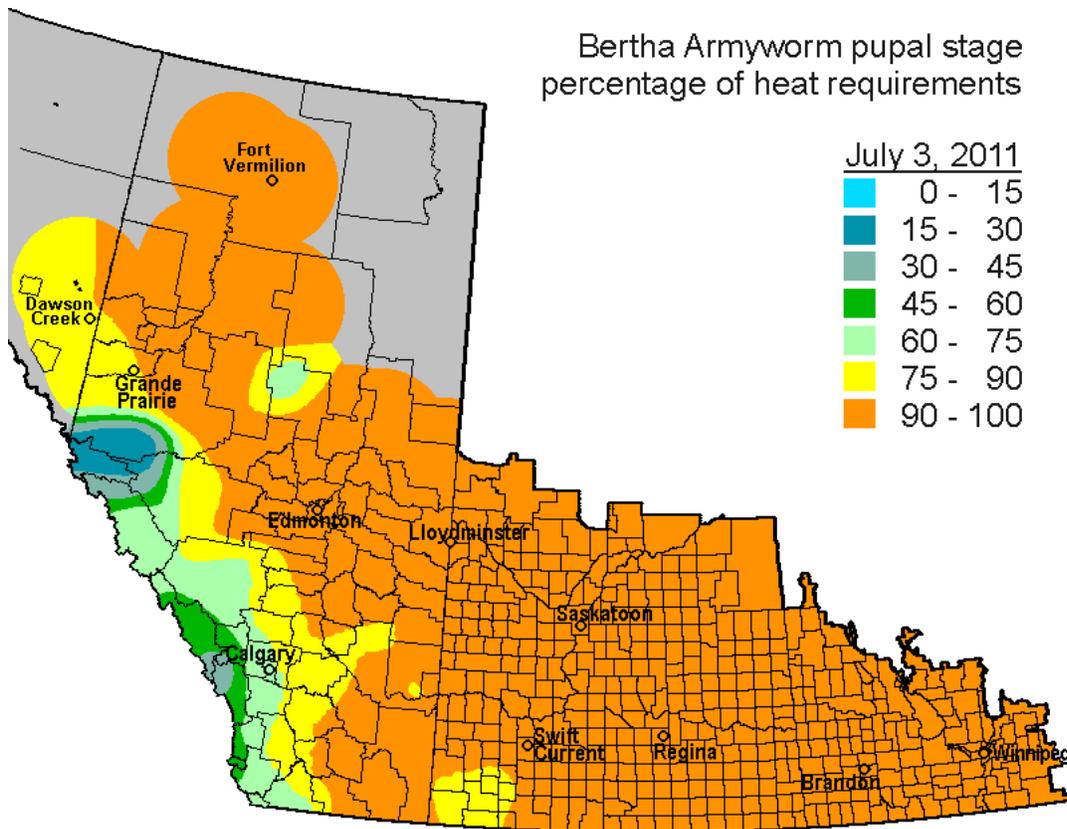
This is an update on the growing season in terms of **heat units**. Here are the maps for across the prairies starting with Degree days base 5°C:



...and for Degree days base 10°C:



2. **Wind trajectories** – Sorry, update not available this week (staff surveying).
3. **Grasshoppers** – sorry, model update not available this week (staff surveying) but **scouting remains important**.
4. **Bertha Armyworm** – According to the map below, moths should be showing up in pheromone traps across the entire prairies this week. This also means female moths will be laying eggs in all orange and even yellow areas of the map below. Scouting for larvae should commence soon and even sooner if the weather remains warm and sunny over the next 7-10 days.



Manitoba's 2011 pheromone trap results are updated weekly and available at:
<http://www.gov.mb.ca/agriculture/crops//insects/bertha/pdf/2011berthadata.pdf>

Alberta's 2011 pheromone trap counts are mapped weekly and available at:
[http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/prm13394](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/prm13394)

Saskatchewan's 2010 BAW map is available at:
http://www.agriculture.gov.sk.ca/adx.aspx/adxGetMedia.aspx?DocID=656,14668,14661,14613,81,1,Documents&MediaID=9371&Filename=baw_20100804.pdf

5. **Cabbage Seedpod Weevil** - Field monitoring is underway in AB and SK this week. **Thank you** for the following, **preliminary observations** offered this week (July 5th):
 - AAFC-Saskatoon Staff are surveying in Saskatchewan now that canola is starting to flower.
 - Scott Hartley (SMA) updated with, "no reports of CSPW" [as of July 5th] but added that fields were in full flower for only about a week to the southwest of Hwy #1 in SK, whereas closer to

Moose Jaw and Regina, very little of the canola is in flower. Scott added that “flowering will come on quickly with the recent warm weather”.

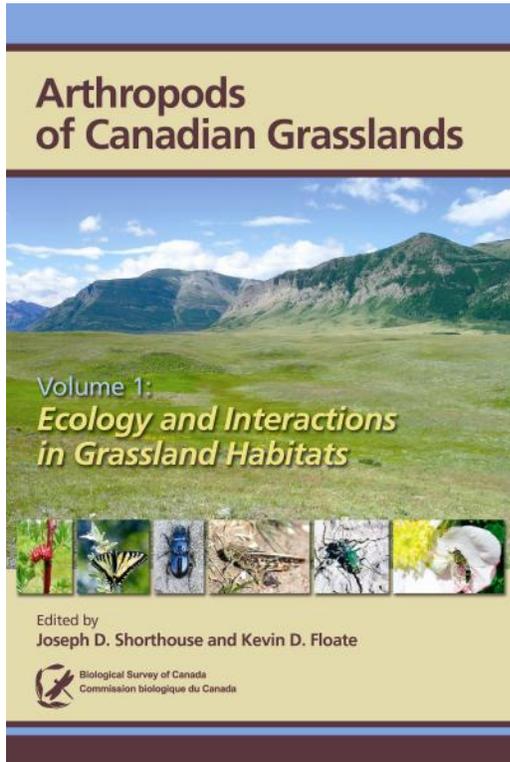
- Scott Meers (AAFRD) updated with, “CSPW numbers are generally down this year”. He added that, “field plots near Medicine Hat AB were above threshold [this week] but, generally, what we’ve seen (Vulcan north) is below threshold even when bumping the nominal threshold value to 25 per 10 sweeps [due to the higher commodity pricing this year].”
- Hector Carcamo updated with, “CSPW numbers from the canola fields we have sampled [near Lethbridge AB] are under threshold. The highest counts in a few spots in one field along the edge were around 27 per 10 sweeps but others were much lower.”
- Lloyd Dosdall described low densities so far but noted, “we did see a number of fields [southeast of Coaldale or south of Taber AB] that were just coming into flower and they were right on or just below the nominal threshold but, given that the fields were not yet in 10% flower, weevils are likely still moving in.”

A “how to monitor” for CSPW refresher is available at:

<http://www.westernforum.org/IPMNProtocols.html> (scroll down to click on “cabbage seedpod weevil”).

6. **Published references** - Volumes 1 & 2 of *Arthropods of Canadian Grasslands* are now published by the Biological Survey of Canada. These richly illustrated books examine native and altered grasslands as habitat for Canada’s arthropods. Both books are **free** online at:

<http://www.biology.ualberta.ca/bsc/english/grasslands.htm>

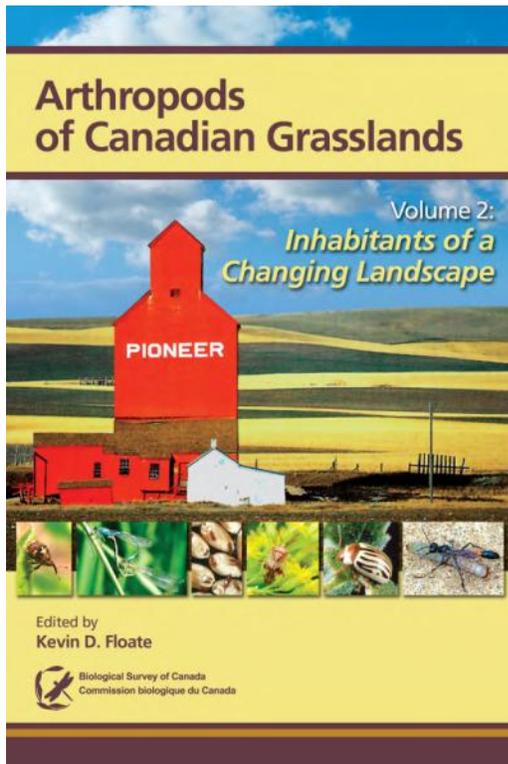


Arthropods of Canadian Grasslands. Volume 1: Ecology and Interactions in Grassland Habitats

(<http://www.biology.ualberta.ca/bsc/english/grasslandsbook.htm>)

Individual chapters:

- Title page, preface, dedication, list of contributors
- Chapter 1: Introduction to the grasslands and grassland arthropods of Canada. *J.D. Shorthouse and D.J. Larson*
- Chapter 2: Canada’s grasslands as habitat for arthropods. *J.D. Shorthouse*
- Chapter 3: Ecoregions of Canada’s prairie grasslands. *J.D. Shorthouse*
- Chapter 4: Ecoregions with grasslands in British Columbia, the Yukon, and southern Ontario. *J.D. Shorthouse*
- Chapter 5: Weather and climate patterns in Canada’s prairie grasslands. *S.M. McGinn*
- Chapter 6: Grasslands: biodiversity hotspots for some arthropods in British Columbia. *G.G.E. Scudder*
- Chapter 7: Acari in grassland soils of Canada. *V. M. Behan-Pelletier and D. Kanashiro*
- Chapter 8: Leafhoppers (Homoptera: Cicadellidae): a major family adapted to grassland habitats. *K.G.A. Hamilton and R.F. Whitcomb*
- Chapter 9: Insects of Ojibway Prairie, a southern Ontario tallgrass prairie. *S.M. Paiero, S.A. Marshall, P.D. Pratt and M. Buck*
- Chapter 10: Tallgrass prairie, ground beetles (Coleoptera: Carabidae) and the use of fire as a biodiversity and conservation management tool. *R.E. Roughley, D.A. Pollock and D.J. Wade*
- Chapter 11: Responses of a tallgrass prairie spider (Araneae) community to various burn seasons and its importance to tallgrass prairie management. *D.J. Wade and R.E. Roughley*
- Chapter 12: Galls induced by cynipid wasps of the genus *Diplolepis* (Hymenoptera: Cynipidae) on the roses of Canada’s grasslands. *J.D. Shorthouse*
- Chapter 13: Gall-inducing aphids and mites associated with the hybrid complex of cottonwoods, *Populus* spp. (Salicaceae) on Canada’s grasslands. *K.D. Floate*
- Chapter 14: Aquatic Hemiptera of the prairie grasslands and parkland. *G.G.E. Scudder, M.A. Alperyn and R.E. Roughley*
- Chapter 15: Arthropods in Canada’s grasslands: synthesis and future directions. *J.D. Shorthouse and D.J. Larson*
- Species index for arthropods, Species index for plants, Subject index.



Arthropods of Canadian Grasslands. Volume 2: Inhabitants of a Changing Landscape
(<http://www.biology.ualberta.ca/bsc/english/grasslandsbook2.htm>)

Individual chapters:

- Title page, preface, dedication, list of contributors
- Chapter 1. Anthropogenic changes of Canadian grasslands. *W. Willms, B. Adams and R. McKenzie*
- Chapter 2. Sand hill arthropods in Canadian grasslands. *J. H. Acorn*
- Chapter 3. Arthropods associated with livestock grazing systems. *T. J. Lysyk*
- Chapter 4. Arthropods in cattle dung on Canada's grasslands. *K. D. Floate*
- Chapter 5. Aquatic invertebrates of prairie wetlands: community composition, ecological roles, and impacts of agriculture. *D. A. Wrubleski and L. C. M. Ross*
- Chapter 6. Insects of the Saskatchewan River system in Saskatchewan. *R. Miyazaki and D. M. Lehmkuhl*
- Chapter 7. Insects of sunflower in the northern Great Plains of North America. *L. D. Charlet and J. Gavloski*
- Chapter 8. Insects of canola, mustard, and flax in Canadian grasslands. *J. Gavloski, H. Cárcamo and L. Dosdall*
- Chapter 9. Arthropods of cereal crops in Canadian grasslands. *J. Gavloski and S. Meers*
- Chapter 10. Arthropods of legume forage crops. *J. Soroka and J. Otani*
- Chapter 11. Arthropods of stored cereals, oilseeds, and their products in Canada: artificial ecosystems on grasslands. *N. D. G. White, P. G. Fields, C. J. Demianyk, B. Timlick and D. S. Jayas*
- Chapter 12. Biocontrol arthropods: new denizens of Canada's grassland agroecosystems. *R. De Clerck-Floate and H. Cárcamo*
- Chapter 13. Insects at risk in the prairie region. *P. W. Hall, P. M. Catling and J. D. Lafontaine*
- Species index for arthropods, Species index for plants, Subject index