THE NEWS LETTER

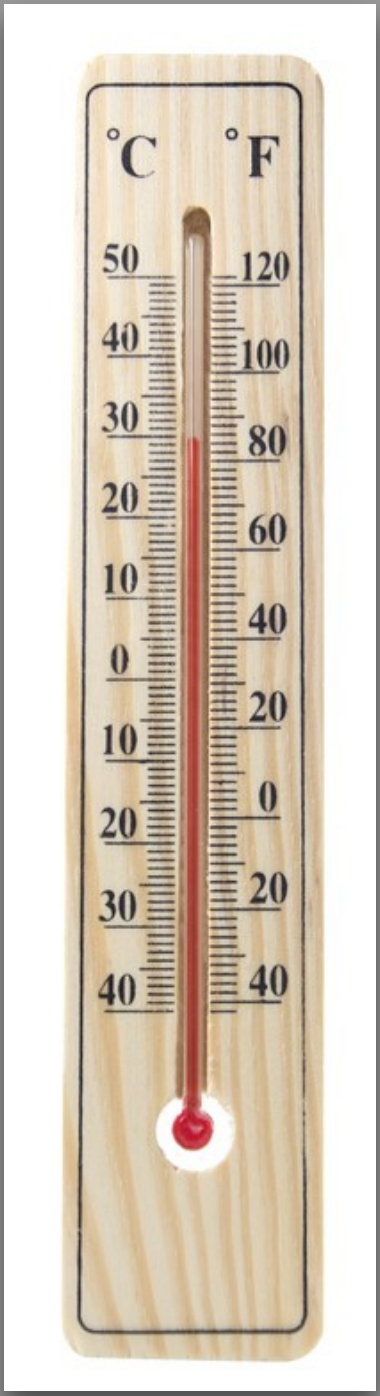
BATTLE RIVER IMPLEMENTS LTD.

June 2021

AGRONOMY

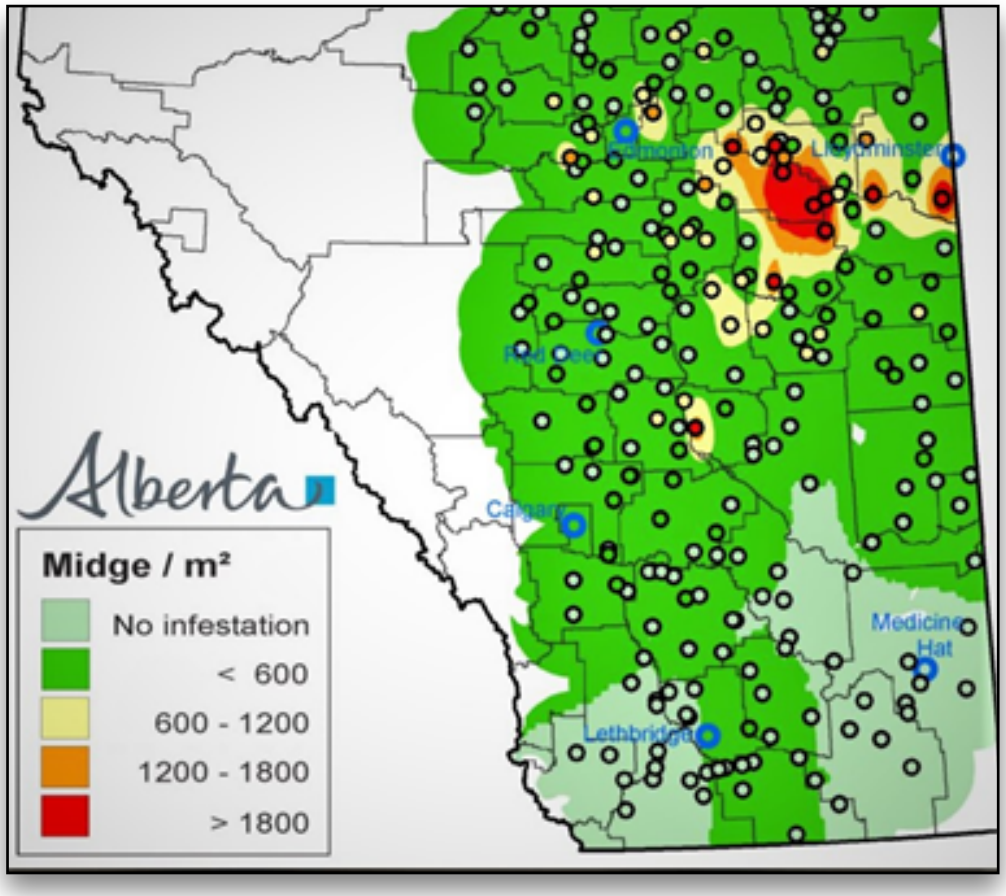
WHEAT MIDGE

While our crops may not have enjoyed the unexpected and unwelcome blast of heat that dominated the last few days of June, many of the insect pests we deal with in Western Canada tend to do well in these conditions. There is one pest in particular whose appearance in our crops has been accelerated by the hot weather; the Orange Blossom Wheat Midge. Their emergence and egg laying on exposed wheat heads can be directly tied to Growing Degree Days (GDDs) and this hot weather is accelerating when you can expect to see them in your fields.



GROWING DEGREE DAYS - GDD

Just in case you are not familiar with the term, GDDs are calculated each day as maximum temperature plus the minimum temperature divided by 2, minus the base temperature (5 C in this case). In a 2009 study was conducted by R.H. Elliott et.al. which definitively linked wheat midge emergence in Saskatchewan to environmental conditions. They showed that the males emerge about 2 to 3 days ahead of the females, but in general about 10% of the population will emerge around 690 GDDs, 50% by 785 and 90% by 875 GDDs. So why is this important? Well, first of all, many people who read this newsletter are in moderate to high risk areas for Midge damage this year. As you can see by this forecast map, Flagstaff and parts of Wainwright Counties could easily have issues with the pest this year.

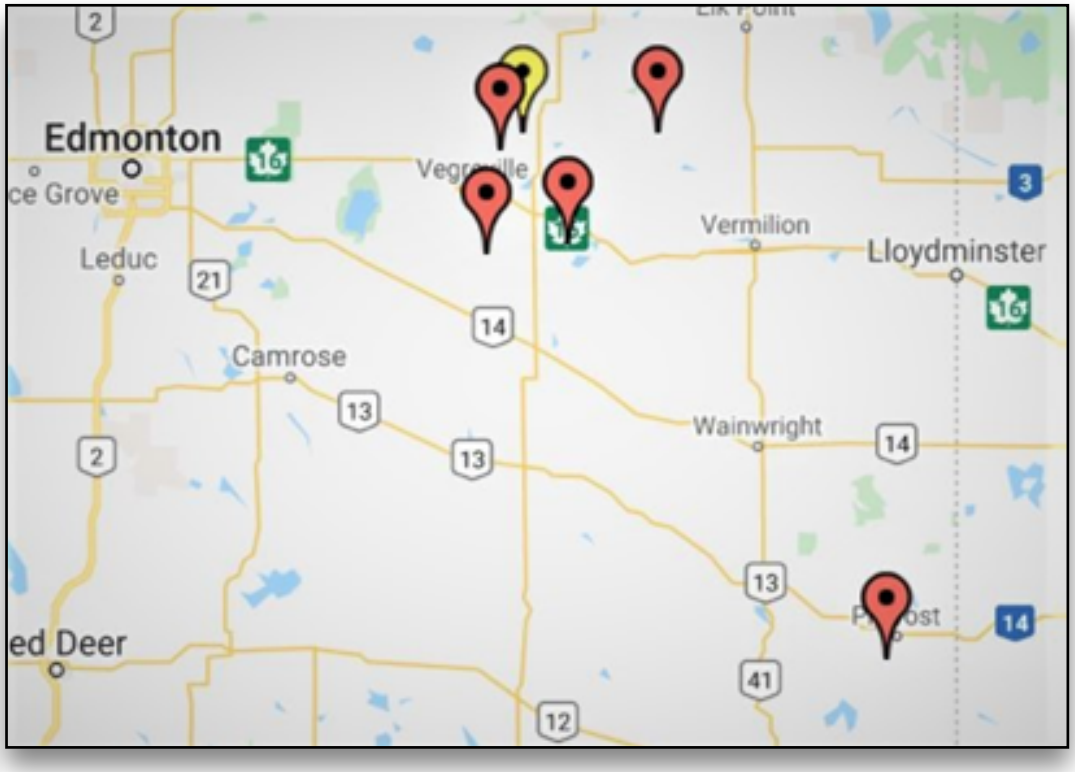


AS YOU CAN SEE BY THIS FORECAST MAP, FLAGSTAFF AND PARTS OF WAINWRIGHT COUNTIES COULD EASILY HAVE ISSUES

There are not a lot of Wheat Midge traps out, but the ones that are reporting in already are not reassuring as they are already showing early indications that the forecast map is depressingly accurate. This is a live reporting map, so if you want to follow along until your wheat is past the high risk stage, you can use this link.

https://www.agric.gov.ab.ca/app68/listings/midge/midge_map.jsp

WHEAT MIDGE TRAPS



The time of highest risk for most wheat is between head emergence from the boot up to the anthers being exposed. With the way the heat has pushed crops, this stage is going to be upon us earlier than normal this year. The heat has also piled on a lot of extra Growing Degree Days in a hurry.By July 1st, east central Alberta generally would be showing a range of 510 – 555 GDD (highest along the Saskatchewan border and declining as you move west). This year, those numbers range from 555 – 630 GDDs. Generally we have enough heat for 50% Midge emergence by the middle of July. This year that time line will be pushed forward by at least a week. If you have vulnerable wheat, you should be monitoring it by as early as July 7th or 8th.

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FOR MORE INFORMATION

For more information on what Growing Degree Days are doing in your area, check out your nearest Alberta Agriculture weather station here

https://www.agric.gov.ab.ca/acis/weather-data-viewer.jsp

For scouting tips and control options for Wheat Midge, as well as more information on their life cycle follow this link

https://www.alberta.ca/wheat-midge-overview.aspx.

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