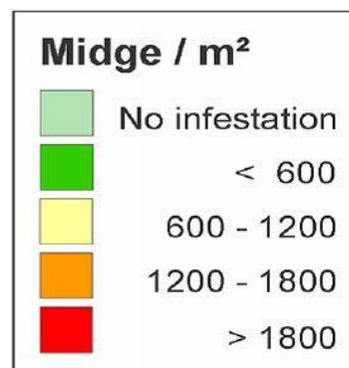
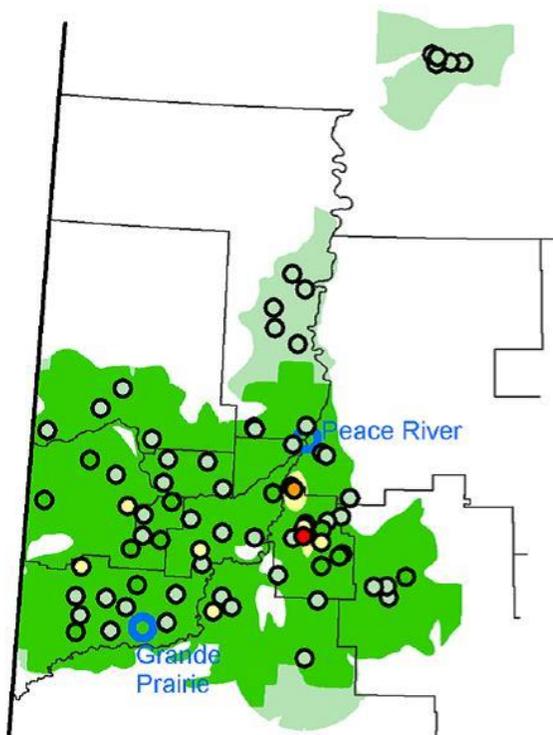


# 2016 Insect Forecast Maps for the Peace River Region

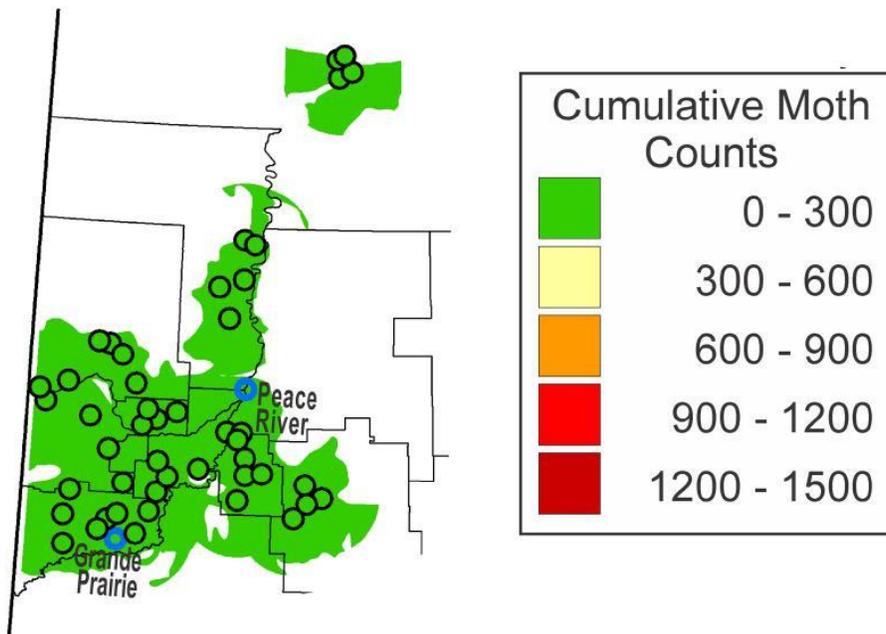
The 2016 Insect Pest forecast maps for the Peace River Region were posted earlier this week. With the assistance of Shelley Barkley and Scott Meers with Alberta Agriculture and Forestry, I am able to provide you with the specifics for the Peace River Region. Click on the map or caption to view the full explanation posted on their website and to access other documents of interest.

## Wheat Midge Forecast 2016



The [wheat midge forecast](#) for 2016 shows an overall lower level of wheat midge across Alberta. There has been a slight bounce back from the collapse of the extreme populations in the eastern Peace Region. Although wheat midge has not followed our forecasts very well in the Peace region it is important to note that there are likely sufficient populations of midge in the eastern Peace to fuel resurgence if conditions are in the insects favor. (Specifically delayed crops and higher than normal rainfall). Central Alberta has some areas of east of Edmonton with high numbers of wheat midge. The population has remains low in much of southern Alberta with the exception of some irrigated fields. Producers should pay attention to midge downgrading in their wheat samples and use this as a further indication of midge risk in their fields. Over the past several years the field to field variation has been very considerable throughout the province, especially in those areas with higher counts. **Individual fields throughout Alberta may still have economic levels of midge. Each producer also needs to assess their risk based on indicators specific to their farm.**

# Bertha Armyworm 2015



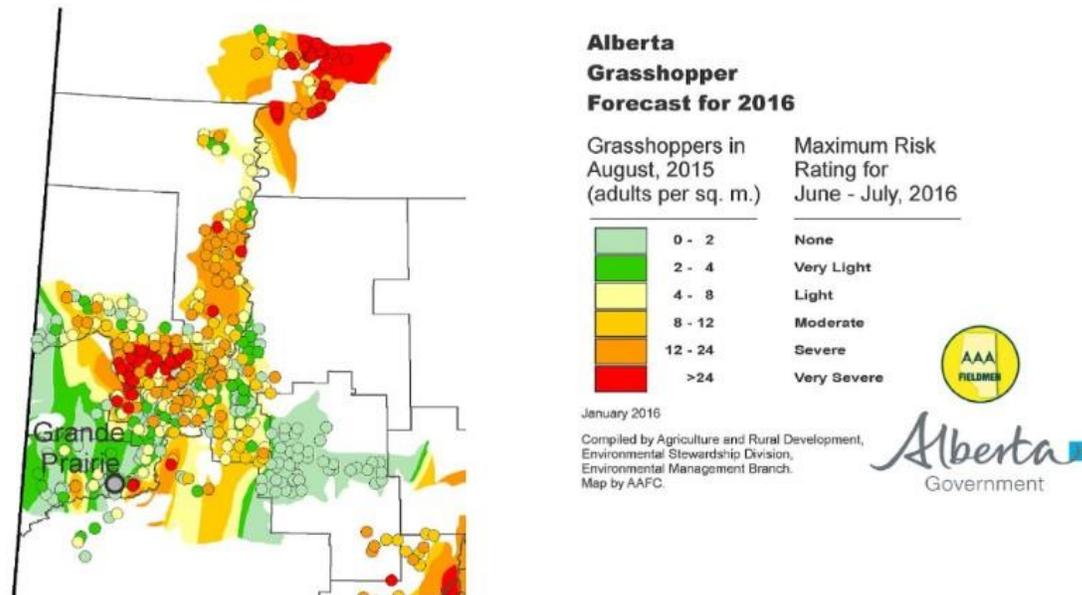
Bertha armyworm (*Mamestra configurata*) was monitored in 2015 using a network of pheromone-baited traps placed in 265 locations throughout Alberta.

Pheromone traps are used to determine the density and distribution of moths. This network of pheromone traps is organized by Alberta Agriculture and Forestry and individual traps are managed by a wide range of cooperators. Without dedicated and willing cooperators such a comprehensive monitoring system would not be possible. Our cooperators can submit their trap counts using their smart phones with a web based application.

The bertha armyworm population in Alberta has mostly collapsed in 2015, especially in central Alberta. This is likely due to the impact of diseases and parasitism in the areas that previously had high populations.

There was very little need for spraying of bertha armyworm in Alberta in 2015 with the exception of a small area in the northern Peace Region. This small

bertha armyworm outbreak unfortunately occurred in an area not covered by the pheromone trapping system.



The risk of economically significant grasshopper populations in 2016 has increased in northern central Alberta and the Peace region.

In some cases the populations in 2015 were very severe. Southern parts of central Alberta is highly variable with several areas that could cause problems in 2016.

The grasshopper risk had been increasing in southern Alberta for the last few years and although populations in southern Alberta are generally lower several areas remain with significant risk, notably in Forty Mile (and parts of Cypress) and Willow Creek (and western Lethbridge) counties but the overall population in southern Alberta could translate into grasshopper problems if conditions are favorable in the spring.

Areas indicated with moderate to severe risk could experience problems with grasshoppers if environmental conditions favor the hatching and development of grasshoppers in late May through June. Localized factors such as light soils or south facing slopes result in an elevated risk of grasshopper infestations. Conditions in late spring 2016 will determine the extent of the grasshopper problems later this growing season. Infestation levels in individual fields are NOT indicated in this [2016 Grasshopper Forecast Map](#).

The 2016 grasshopper forecast map is based on adult grasshoppers counts conducted in early August of 2015 by participating [Agriculture Fieldmen](#) across

the province. These adult counts give an indication of the number of adults at the end of the season that are capable of reproduction and egg laying. Environmental factors can result in higher or lower actual populations than forecast. Individual producers need to be aware of the potential risks in their area and monitor fields in order to be prepared to make the appropriate decisions to implement control measures.

On individual farms, particular attention should be paid to areas that traditionally have higher grasshopper populations. In addition, grasshoppers tend to lay their eggs near areas of green growth in the fall that will provide potential food sources for emerging young the following spring. Areas with early green plant growth such as field margins, fence-lines and roadsides are also areas that will give early indications of potential grasshopper problems.

If insecticides are needed, note label precautions regarding user safety, proper application techniques and instructions to reduce impacts on non-target organisms. It is important to remember that control measures are intended to protect the crops from economic damage and are never successful in totally eliminating grasshopper populations.

Alberta Agriculture and Forestry acknowledges the commitment and support of the Agriculture Fieldmen across the province in conducting the surveys essential to the creation of this forecast. This survey was coordinated by David Brennan of Alberta Agriculture and Forestry. The data management for this survey was done by Jan Lepp of Alberta Agriculture and Forestry.