

2025 Insect Pest Review

To estimate upcoming insect pest pressures for 2026 it is important to consider pest populations in 2025, as they directly impact initial populations for 2026. Insect pests that tolerate dryer conditions, such as grasshoppers, did well in 2025 and are expected to have an increased initial population at the start of 2026, while species like wheat midge maintained low populations.

First, grasshopper populations were high last year with an earlier hatching period and the lack of end of season moisture creating good conditions for overwintering eggs. Figure 1 shows that grasshoppers were light with areas of severe populations along highway 13, especially in Flagstaff, Wainwright, and Provost counties. While these counties did not have the highest populations in Alberta, they are important to keep an eye on, as grasshoppers are typically not a huge issue in those areas and are expected to increase in severity this year.

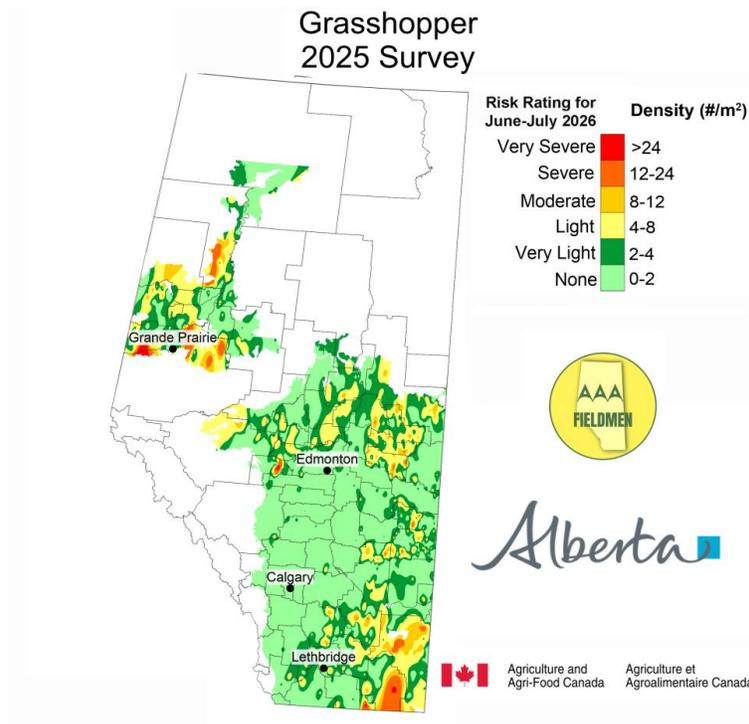


Figure 1: 2025 Grasshopper Population Survey

Another concerning species for 2026 is Pea Leaf Weevil which had increased populations across all of Alberta, especially central Alberta. As shown in Figure 2 Camrose, Beaver, and Flagstaff counties had the highest concentrations of Pea Leaf Weevil of east central Alberta ranging from moderate to severe populations. Pea Leaf Weevil populations also expanded further east than we have seen historically, creating a greater need for scouting this year in areas where this pest historically might not have been an issue.

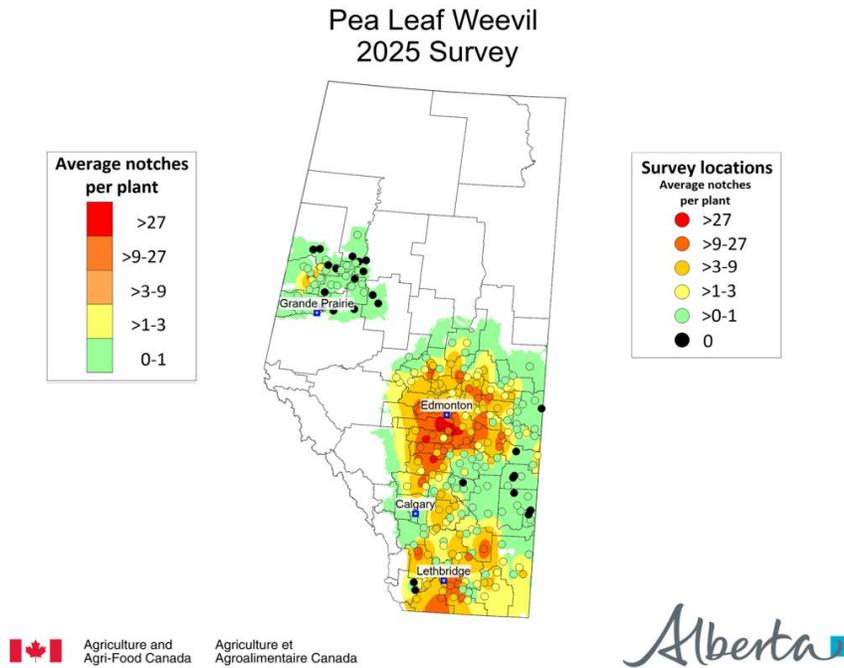


Figure 2: 2025 Pea Leaf Weevil Population Survey

Bertha Army worm populations remained low across central Alberta except for Provost County which had a huge spike in population from previous years. While Bertha Armyworm is universally controlled there will be an increased need for early scouting in Flagstaff, Provost, Wainwright, and Beaver Counties where population spikes were noted in 2025.

Bertha armyworm 2025 Survey

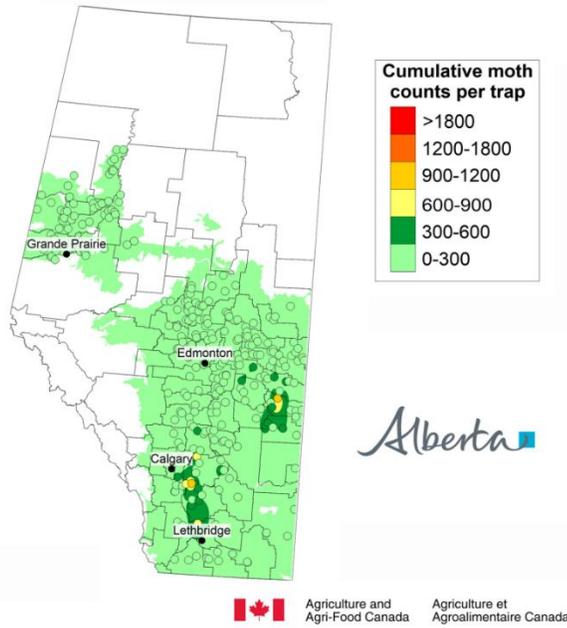


Figure 3: 2025 Bertha Armyworm Population Survey

Cabbage Seedpod Weevil had a significant increase in population moving north that we have not seen in the last couple of years. While most of the populations in east central Alberta remained low, there was a significant increase of populations in surrounding counties, meaning there will be higher migration pressure this year. Ensuring later season scouting to prevent populations from establishing will be important.

Cabbage Seedpod Weevil 2025 Survey

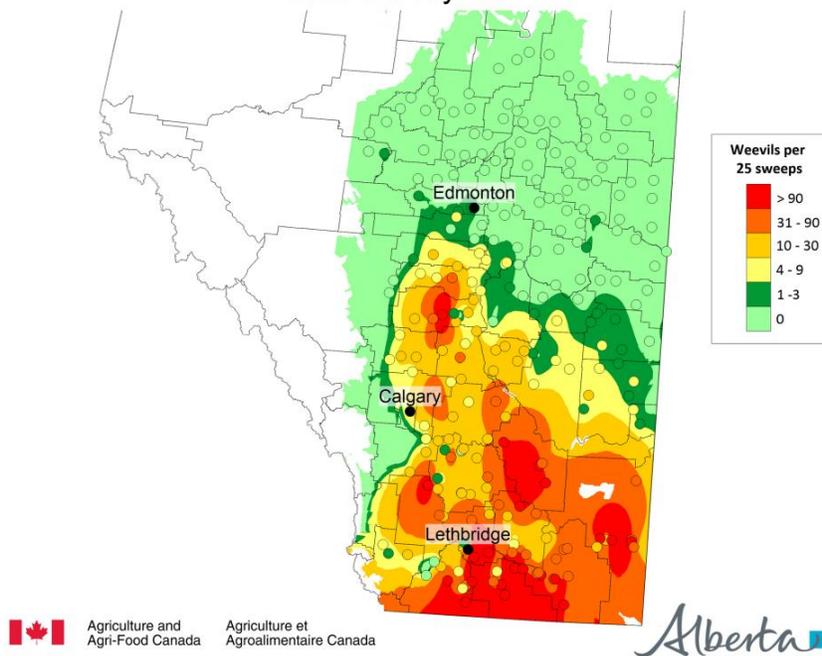


Figure 4: 2025 Cabbage Seedpod Weevil Population Survey

Wheat midge had a decrease in population in 2025 from 2024 but still maintained populations in areas in Beaver and Wainwright Counties (Figure 5). Similarly, Wheat Stem Sawfly saw a decrease in population in Central Alberta from 2024 (Figure 6). If 2026 stays dry like last year, Wheat Midge and Wheat Stem Sawfly are not expected to be of much concern. A contributing factor to the lower populations was an increase in parasitism of the midge and sawfly throughout the province, which will hopefully continue to reduce population stresses.

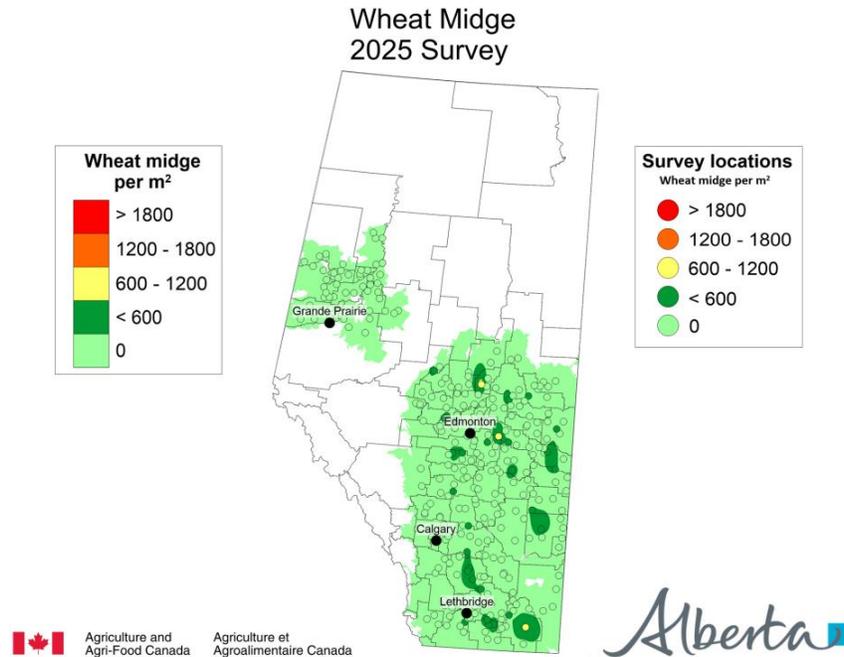


Figure 5: 2025 Wheat Midge Population Survey

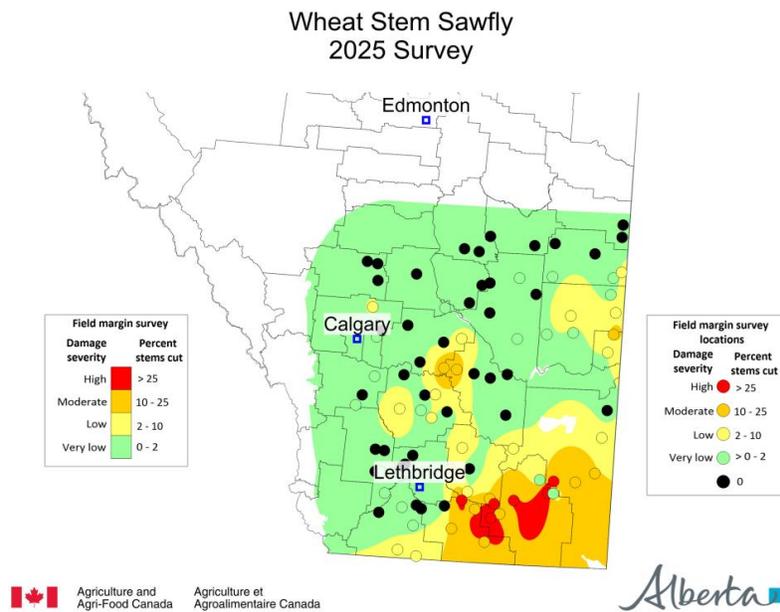


Figure 6: 2025 Wheat Stem Sawfly Population Survey

Some other species worthy of note, but are not part of a province wide survey, are the flea beetle, aphids, and diamond back moths. While flea beetles do not necessarily correlate to a direct loss in yield, they can create damage resulting in increased disease risk. There are no official population numbers but,

there were observations of increased populations of flea beetles in central Alberta and Saskatchewan suggesting a greater need for monitoring in 2026. New methods for scouting and associated economic thresholds are being developed, as calculating leaf surface area damage is labor intensive and highly variable throughout a field. The current project from University of Saskatchewan includes developing pheromone traps and associated economic thresholds. Aphid economic thresholds are being reconsidered to a lower rate, especially amongst legume species, where aphids can make a significant impact on seed pod quality. Aphids have also been observed to overwinter on alternate legume crops, such as alfalfa, creating a high initial population in crops like Faba bean. While there is greater pressure in southern Alberta, it is still important to consider in Central Alberta if any legumes are being planted. Finally, diamond back moths were observed to have a low initial population at the start of 2025, meaning that there will be fewer initial populations in 2026. However, they still need to be monitored, as they can complete multiple life cycles in one season dramatically increasing their populations in a short period of time.

2025 Insect Population Surveys:

[https://www.alberta.ca/alberta-insect-pest-monitoring-network\](https://www.alberta.ca/alberta-insect-pest-monitoring-network)

Flea Beetle Pheromone Trap Scouting Project:

<https://albertacanola.com/research/projects/enhancing-flea-beetle-monitoring-and-management-through-production-of-pheromones-in-yeast/>

Aphid Economic Threshold Project and Pea Leaf Aphid Research:

<https://agriculture.canada.ca/en/science/agriculture-and-agri-food-research-centres/pest-management-centre/pesticide-risk-reduction-pest-management-centre/integrated-pest-management-projects/develop-and-validate-dynamic-action-threshold-tool-aphid-management-cereal-crops-prairies>

<https://research-groups.usask.ca/entomology/documents/toad128.pdf>

Diamond Back Moth Trap Map:

https://www.agric.gov.ab.ca/app68/listings/diamondback/diamondback_map.jsp



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