

Keeping bugs at bay in Alberta

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by C. Lacombe

Farming Smarter joined the Prairie Pest Monitoring Network (PPMN) about 10 years ago when it received a request to give additional locations for insect traps and monitoring.

Assistant Manager Jamie Puchinger outlines that, “We do Diamond Back moth & Bertha Armyworm traps and Cabbage Seed Pod Weevil sweeps. In the fall, we do Wheat Stem Sawfly and Wheat Midge sampling.” She adds that she’s seen shifts in populations over the years.

“Some years there will be larger issues with Diamond Back moth; other years it’s Bertha Army worm moths” Puchinger says.

As stated on its website, the concept of a coordinated insect surveillance program for the prairies first took shape in 1997. Since then, the PPMN developed monitoring protocols and coordinated field crop insect population monitoring. Entomologists correlate the distribution and abundance of crop pests with climate, weather, agronomic practices and insect natural enemies. These factors can help forecast pest populations and better understand where and when they may affect crops.

Field crop entomologists that conduct research and actively monitor to support crop protection on the Canadian prairies make up the PPMN. It includes researchers from Agriculture and Agri-Food Canada, Manitoba Agriculture, Saskatchewan

Agriculture, Alberta Agriculture & Forestry as well as University researchers. Industry stakeholders provide regular input and valuable insight at annual PPMN working group meetings.

Meghan Vankosky, Research Scientist, Field Crop Entomology Agriculture and Agri-Food Canada, leads the PPMN. She says that, “Our network coverage of the prairies is quite thorough for many of the insects we target.” She explains that the PPMN is over 20 years old and has evolved over time.

“The biggest change in the past few years has been the development of the PPMN Blog, led by Jennifer Otani at AAFC-Beaverlodge. The Blog allows us to communicate a lot of valuable information to users of the PPMN and do so very quickly. The technology we use for mapping and modeling insect pests also improved significantly over time,” says Vankosky.

The PPMN entomologist network appreciates the farming community volunteers that allow them access to sites to monitor insect populations.

“Volunteered information is valuable to the network. Many growers in Alberta are in contact with Scott Meers (Alberta Agriculture and Forestry) or their local Ag Fieldmen to volunteer their property for the surveys that the PPMN conducts, or their time to oversee traps for insects like diamondback moth and bertha armyworm,” says Vankosky.

She explains that for some species, the area surveyed is smaller than for others due to their current range and pest status.

“In winter 2019, Shelley Barkley and Scott Meers successfully increased the number of trap sites for bertha armyworm, thanks to volunteers from across Alberta. As we see the need for increased sampling or trap sites, we leverage tools like Twitter and the blog for volunteers,” says Vankosky.



Also, if PPMN or farmers identify new insect pests that need annual surveillance, PPMN entomologists work as a team to develop the best possible plan to approach monitoring.

If you want to learn more about PPMN or sign up for its weekly updates, visit the blog <http://prairiepestmonitoring.blogspot.com/> You can also follow Jennifer Otani - @bugs5132 or Meghan Vankosky - DrVanbugsky @vanbugsky on Twitter.

If you'd like to find out who works with PPMN in your area, search AAFC staff online.