

# Native bee species under pressure

Not all are doing well

By Tim Kalinowski

Published July 26, 2019



*Herald photo by Tim Kalinowski*

*Rosie Rosaasen was excited to look for and hear about wild pollinating bees at the final Farming Smarter Plot Hop of the summer on Thursday. Rosie is holding a couple of captured wild bumblebees caught near Farming Smarters experimental farm and released after the wild bees presentation.*

Alberta's native bee species face greater pressures and declines than managed species and other pollinators, but get far less of the attention and resources needed to help them, says Megan Evans, president of the Alberta Native Bee Council. Evans was speaking at Farming Smarter's final Plot Hop of the summer on Thursday.

"I think one of the things we need to talk about is we have an incredible diversity of wild bee species, and not all of them are doing very well," stated Evans. "There is a lot of misinformation out there, and a lot of save the bees initiatives focused on managed bees like honey bees, which are non-native to North America. They are a livestock species; whereas our wild bees are truly a cause for concern. Many of those species are declining,

and there is a disproportionate amount resources focused on managed bee over wild bee species because they are a livestock and an industry in Alberta.”

Part of the misconception, said Evans, is that people tend to know only three species of bees- honey bees, leafcutter bees and bumblebees- and that is a drastic under-representation of the vast diversity found within the bee family.

“Right now on record we have 321 wild bee species; those are bees that are native to Alberta,” she explained. “Some researchers suggest that number may even be closer to 400, we just haven’t identified all those species yet. To give you some context that number is higher than all of the mammal, fish, reptile and amphibian species combined we have in the province. Only birds and other insect species can rival that.”

Similarly, what Evans finds when she talks to people about creating native bee-friendly habitats is that very few seem to appreciate the fact that wild bees play a key role in the pollination of all types of flowering plants outside of agricultural crops grown like canola or alfalfa, for instance.

“These wild bee species are under-appreciated as pollinators because the focus has been on honey bees, and I think once people start exploring the world of wild bees, and insects in general which is like this endless learning journey, it is addictive and interesting,” she said.

Gardeners in the city and farmers in the country would benefit from establishing eco-buffers where a diversity of plant species would be allowed to grow on lands with sandy soils set aside to benefit wild bees, stated Evans. Wild bees, unlike honey bees, tend to be solitary and usually burrow in soil or nest in existing spaces in logs or trees to have their young during the winter season.

“The eco-buffer would provide eco-system services such as trapping snowmelt and regulating runoff,” she said.

“It would provide habitat for things like spiders, birds and bees. Spiders and birds are going to eat pest insects and pollinators are going to pollinate your crops. You could also use that eco-buffer to produce additional food for your family by growing things like Saskatoon berries on it.”

A great way to help all pollinators, including all bees, states Evans, would be to do something like planting a few more flowering plants that bloom at different times of the year.

In springtime, for example, fruit trees are a great resource for bees, she said.

“If you walk by an apple tree while it is in bloom- not only is it beautiful and going to provide you with apples later, it will be covered in bees because they love it. There is a way to make this work for you and the bees too. I think it is win-win; we just need to start thinking about things a little bit differently.”

