

Society urged to focus more on wild bee protection

By Barb Glen



Megan Evans of the Alberta Native Bee Council captures some specimens to show participants at a recent Farming Smarter field event near Lethbridge. | Barb Glen photo

misinformation that's out there. You hear that a lot. We need to help save the bees and people are focused on honeybees. Well, that's like saying we need to help save the birds and focusing on chickens."

Marla Spivak, a renowned entomologist and bee expert based at the University of Minnesota, said she views honeybees as "the gateway or entry drug into bee awareness.

"We need all 20,000 species of bees," she said, referring to the number of species worldwide. "I like to excite people about honeybees then open the door to the importance of all the bees.

"Honeybees are native to Europe and Africa. They are not 'chickens' at all in Africa or South America."

Spivak said some wild bees, including bumblebees, are in population decline but others are increasing. The extent of either change is unknown and any historical surveys that would help in the assessment are incomplete.

Evans said there are 321 native bee species in Alberta. Twenty-nine of them are bumblebees, which are commonly recognized by most people. Other bee species come in various sizes, colours, habits and habitat needs.

The Alberta Native Bee Council is a science-based organization focused entirely on wild bee conservation. She also noted population and survival rates of the many wild species are difficult to measure and numbers vary with the method used to measure them.

However, research indicates between 25 and 50 percent of wild bees are declining, mostly due to habitat loss. Cropping practices and efforts to maximize crop-productive areas has affected the biodiversity on which wild bees depend.

"Those 321 wild bee species do and are of conservation concern. They need our attention and they're not doing super well," said Evans.

Save the bees. That has been a rallying cry in recent years, leading to greater public awareness about the importance of pollinators, especially honeybees.

But it isn't honeybees that society should worry about, said Megan Evans, president of the Alberta Native Bee Council.

It's wild bees that are in peril, yet public perception of that is poor. Honeybees, which are not native to Canada, are farmed and managed by honey producers.

"You have to manage those honeybees much like you'd manage your chickens or your cows. They're a livestock species. They're not of any conservation concern," Evans told those at a recent field day in Lethbridge organized by Farming Smarter.

"That's one of the big pieces of

“It’s ironic that we’ve modified these landscapes from the native grasslands that would have supported really robust and abundant bee populations into these landscapes where we rely on pollinators to pollinate the crops but they don’t support those robust and abundant bee populations that they used to.”

Many wild bees are solitary and nest in the ground or in rotten logs or clumps of grass. Different species rely on different food sources so a variety of flowers are needed to meet their various needs.

“With regard to flowers ... they need a diversity of flowers, so they need flowers that are going to bloom all season long, they need flowers that are different shapes and colours,” said Evans.

The leafcutter bees used to pollinate alfalfa seed and canola crops are a non-native species, but there are also native leafcutters. Sweat bees, which are ground nesters, will build nest cells in loose, sandy soil, lay eggs, leave some pollen behind and seal up the nests.

Evans said farmers could aid in wild bee protection by building or preserving habitat in unproductive areas like field margins, hedgerows and pivot corners.

“Every farm is different and every scenario would be different but there’s lots of little things you can do, and of course those bees really need that complexity,” she said.

Use of pesticides is also a threat but that can be mitigated through management practices such as spraying in early morning when bees are not active, and not spraying when flowers are in bloom.

Spivak said homeowners are the worst offenders when it comes to pesticide use that threatens bees. Unlike farmer use, homeowner use is unregulated, often leading to harmful consequences for bees.

In an Aug. 2 news release, the Canadian Wildlife Federation urged support for a national pollinator recovery strategy and a monitoring program. It listed pesticide use and habitat loss as key problems.

“Despite the important services they provide, the populations of many wild pollinators are declining, largely due to changes in their habitat, intensive agricultural practices and pesticide use, invasive species, disease and climate change,” the CWF said.

“By some estimates, 40 per cent of pollinators — particularly bees and butterflies — are facing extinction. We don’t know how serious the problem is in Canada overall, because we don’t measure it at a national or provincial level.”

The CWF has launched a petition that urges the federal environment department to make an action plan to protect all pollinators and establish habitat restoration projects.

“We can support sustainable and regenerative agricultural practices, including crop rotation and retaining hedgerows and wildflower strips,” it said.