



## ***Newfoundland & Labrador Beekeeping Association***

### **NEWS RELEASE**

FOR IMMEDIATE RELEASE — 5 July 2017

#### **“Beekeepers Applaud Minister’s Decision on Bumble Bee Imports”**

**Carbonnear (Newfoundland).** Dr. Barry Hicks, vice-president of the Newfoundland and Labrador Beekeeping Association, today applauded the decision by the Honourable Steve Crocker, Minister of Fisheries and Land Resources, not to permit the importation of an exotic bumble bee species for cranberry pollination.

“We highly commend Minister Crocker for his decision not to permit the importation of a non-native bumble bee species for cranberry pollination,” said Hicks. “The Provincial Government is clearly basing this decision on serious concerns raised in the scientific literature about the risk of disease spreading to our native and honey bee species. It’s how good public policy should be made; on the basis of scientific evidence and the precautionary principle.”

“We now have an opportunity to work together to help the cranberry growers get their crops pollinated,” continued Hicks. “We wrote to the Cranberry Association on February 23<sup>rd</sup> explaining that we are happy to work with them to develop environmentally responsible solutions to their pollination issues,” said Hicks. “However, these solutions must be well researched, well considered, and based on the best available scientific evidence. We would be happy to partner with them to facilitate the kind of research required so that their pollination needs can be met.”

Hicks said, “We have been deeply concerned that the bumble bees imported from Nova Scotia would come loaded with a variety of viruses and other pathogens that would infect our native bumble bees as well as our honey bees. These could include pathogens that are not already found in our bees, or they could amplify what we already have. There is scientific evidence that shows this to be a real problem in Europe and elsewhere in North America. The commercially raised Nova Scotian bees are not screened by independent regulators, and would already have done service in the cranberry and/or blueberry fields in that province, during which time they could acquire pathogens and diseases from native bumble bees or honey bees there.”

“Another big concern is that the commercial bumble bees would become established here and would force out key native species that are already performing important ecosystem services such as pollinating our vegetable crops and garden flowers,” continued Hicks. “Dr. Julie Sircom, MUN Grenfell campus, collected 24 illegally

imported *Bombus impatiens* queens from a cranberry farm in Western Newfoundland in May and June, 2016. Clearly they had overwintered” (see Backgrounder).

“No importation of commercial bumble bees! That’s our bottom line,” said Hicks. “However, we reiterate our offer to the Cranberry Association to meet to explore various ways to meet their pollination needs, ways that do not require Mainland bees.”

Minister Crocker is responsible for enforcing the provincial Wild Life Act which restricts importation of exotic species like commercial bumble bees. The bumble bee species that would be imported for pollination services is called the “Common Eastern Bumble Bee” (*Bombus impatiens*). **This species is not native to Newfoundland and Labrador.**

– 30 –

MORE INFORMATION – Dr. Barry Hicks, tel.709-596-8956 [www.nlbeekeeping.ca](http://www.nlbeekeeping.ca)

# BACKGROUND

## Why importation of commercial bumble bees for pollination is a bad idea

- Newfoundland and Labrador has at least 76 species of native bees. Very little research has been conducted regarding these bees and as a result very little is known about them. For more detailed information on our native bees, see <http://nlbeekeeping.ca/data/documents/The-status-of-NL-native-bees.pdf>
- The bumble bee species used for pollination services is called the “Common Eastern Bumble Bee” (*Bombus impatiens*). **This species is not native to Newfoundland and Labrador.**



Left — *Bombus impatiens* worker

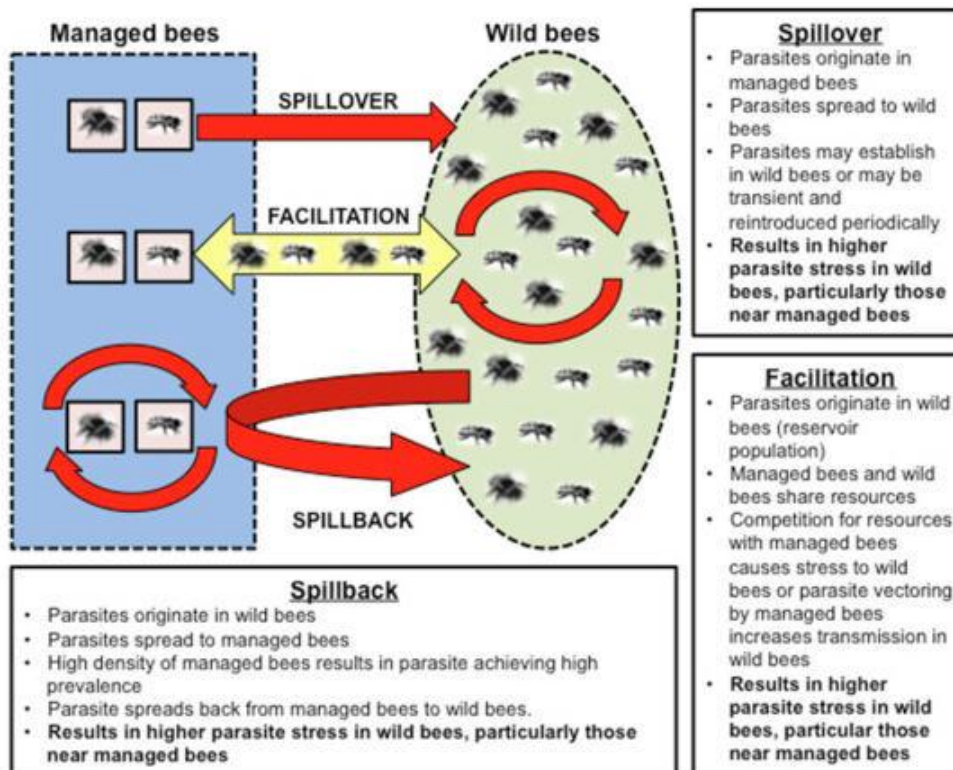
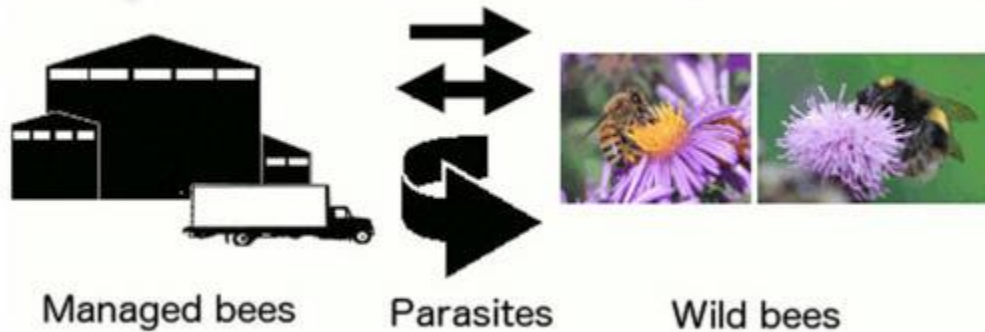


Right — a quad for small fruit pollination

- The Government of Newfoundland and Labrador was asked to allow the importation of bumble bee quads for cranberry pollination. These quads would be “used” ones likely purchased from blueberry and/or cranberry growers in Nova Scotia. A quad is four bumble bee box hives, each hive containing approximately 250 workers, a reproductive queen, and developing brood (eggs, larvae, and pupae). An importation of 750 quads for cranberry pollination would amount to **¾ million exotic bumble bees being brought to the Island, including 3,000 queen bumble bees.**
- Spillover of viruses and other pathogens from *Bombus impatiens* to native bumble bee species and honey bees is a serious risk. Honey bee stocks in Newfoundland and Labrador are relatively free of many of the pathogens, diseases and pests found elsewhere in North America.
- Every possible effort must be made to prevent the spread of pathogens, diseases and pests to bumble bees and honey bees in Newfoundland and Labrador. *Bombus impatiens* importation is far too risky given our lack of knowledge about native pollinator species in the province, the absence of baseline data concerning pathogen profiles in these species, the potential for intra-species out-competition, and substantial evidence of pathogen spillover elsewhere in North America as well as Europe.
- Importation of *Bombus impatiens* quads could lead quickly to the permanent establishment of this species in the province, given that the queens are able to over winter here.
- *Bombus impatiens* could out-compete native bumble bee species with potentially significant consequences for pollinator and plant ecosystems, and the maintenance of agricultural ecosystem services.

- Regarding exotic *Bombus impatiens* overwintering in Newfoundland. “It is also clear that *B. impatiens* can overwinter in Newfoundland. Bumble bee nests die off at the end of the season, and only new queens overwinter. In 2015, *B. impatiens* was imported for supplemental pollination on a cranberry farm in Western Newfoundland. To the best of my knowledge, these were ‘used’ bees, from lowbush blueberry crops in Nova Scotia or New Brunswick. This is obviously of concern, as they would have been exposed to a range of parasites and diseases in those fields. These nests either were not equipped with queen excluders because *B. impatiens* is native to the Maritime provinces, or were damaged; either way, an unknown number of queens escaped. In May and June 2016, I collected 24 *B. impatiens* queens on the farm. These must have come from the commercial nests imported the previous year; no *B. impatiens* were recorded in any other sampling location” (Julie Sircom. 2017. “Bees, Agriculture and the Precautionary Principle.” NL Nature Blog. <http://naturenl.ca/2017/05/bees-agriculture-and-the-precautionary-principle/>)
- Honey bees from five commercial operations were last tested in 2016 at the National Bee Diagnostic Centre in Beaverlodge, Alberta, as part of the Canadian National Honey Bee Health Survey. Test results are available here <https://www.gprc.ab.ca/doc.php?d=2016NHBHS> Our honey bees have been tested in previous years as well, e.g., see Shutler, et al. (2014), and Williams, et al. (2010).
- **Letter to the Honourable Steve Crocker re. bumble bee importation February 24, 2017**  
<http://nlbeekeeping.ca/data/documents/2017-02-24-response-to-Minister-re-cranberry-assoc-final.pdf>
- [March 23, 2017. Letter from Rich Hatfield, Senior Conservation Biologist, Xerces Society, and IUCN Bumblebee Specialist Group Red List Authority, to Honourable Steve Crocker, Minister of Fisheries and Land Resources, Government of NL, re. issue of \*Bombus impatiens\* importation for the purpose of cranberry pollination.](#)
- [March 9, 2017. Letter from Jim Coneybeare, President, Ontario Beekeepers' Association, to Honourable Steve Crocker, Minister of Fisheries and Land Resources, Government of NL, re. issue of \*Bombus impatiens\* importation for the purpose of cranberry pollination.](#)
- **NLBKA pamphlet concerning bumble bee importation**  
<http://nlbeekeeping.ca/data/documents/bumblebeeimportpamphlet-5.pdf>

## Effects on wild bee health due to managed bee proximity



Graphics Graystock, et al. 2016

## References

[Graystock, P., E.J. Blane, Q.S. McFrederick, D.Goulson, and W.O.H. Hughes. 2016. "Do managed bees drive parasite spread and emergence in wild bees?" \*International Journal for Parasitology: Parasites and Wildlife\*. 5:64-75](#)

[Graystock P., K. Yates, S. Evison, B. Darvill, D. Goulson, and W.O.H. Hughes. 2013b. "The Trojan hives: pollinator pathogens, imported and distributed in bumblebee colonies." \*Journal of Applied Ecology\*. 50:1207–1215.](#)

[Shutler, Dave, et al. 2014. "Honey Bee \*Apis mellifera\* Parasites in the Absence of \*Nosema ceranae\* Fungi and \*Varroa destructor\* Mites." \*PLOS ONE\*. 9\(6\): e98599. doi:10.1371/journal.pone.0098599.](#)

[Williams, G.R., K. Head, K. L. Burgher-MacLellan, R. E.L. Rogers, D. Shutler. 2010. "Parasitic Mites and Microsporidians in Managed Western Honey Bee Colonies on the Island of Newfoundland, Canada." \*The Canadian Entomologist\*. 142: 584–588.](#)