NLBKA
Newfoundland and Labrador Beekeeping Association

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Stephen Balsom, Assistant Deputy Minister
Minister of Fisheries and Land Resources
Government of Newfoundland and Labrador
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Re. environmental assessment and notification related to apiculture

Dear Mr. Balsom, Mr. Deering, and Mr. Cleary,

I write to you on behalf of the Newfoundland and Labrador Beekeeping Association (NLBKA). We request that:

1. Our association and the provincial apiarist, Karen Kennedy, be notified about future proposed silviculture strategies involving herbicides.
2. That the possible effects of proposed commercial forestry, the application of herbicides, and other forest management activities on apiculture be considered in future environmental assessments (EA), and
3. That apiculture be flagged as a Valued Component for EA.

Our reasons for these requests are as follows.

It is our understanding that silviculture strategies related to forest management in Newfoundland and Labrador (NL) may at times require the application of herbicides. For example, the draft "Crown Five Year Operating Plan Forest Management Districts 02 and 03 (Zone 02) 2017-2021" notes that,

> [t]reatment to prepare sites that have been overgrown with hardwoods and other herbaceous species has been done with herbicides to reduce this competition and make the site more accessible and suitable for planting. Release herbicide treatment is also done which reduces the competition for a few years to allow planted seedlings to get established and 'get the jump' on the non crop tree species that occupy the site. In other instances, herbicides are used to control Kalmia either before or after planting. Herbicides, while used sparingly, are sometimes a necessary tool to help establishment of a new forest, particularly on the better sites (Government of Newfoundland and Labrador, 2016:107).

While the draft plan does not identify the herbicide(s), it is our understanding that the herbicide commonly in use in silviculture applications is glyphosate (aka Vision, Roundup). This is a concern to beekeepers given that herbicides can have lethal or sublethal effects on honey bees as well as wild pollinators (see Balbuena, 2015; Colopy, 2015; Morse, 1997).

Please note that most honey bee foraging occurs within 6 km of colonies (Winston, 1987:171). It appears that honey bees may benefit from commercial and domestic forest cutting activities, the reason being that conifer forests normally provide little in the way of nectar and pollen. Maple trees, pussy willow, and alder are seasonally important, but the wild forage species most attractive to honey bees are fireweed, lance-leaved goldenrod, rough-stemmed goldenrod, and bog aster. In managed forests, this type of "bee pasture" is found primarily along the margins of forest access roads, and in relatively new cutovers. Were it not for these disturbed landscapes and the forage species that grow up there, there would probably be very little of value to honey bees in our managed forest landscapes.

Advance notification of planned herbicide application would enable the NLBKA and Karen Kennedy to contact beekeepers whose colonies may be affected by the proposed activity. Potentially affected beekeepers could work with the Forestry Services Branch on appropriate mitigation and monitoring measures. Lastly, flagging apiculture as a Valued Component for EA will enhance the thoroughness with which EA is currently conducted in NL, and will help protect the interests of the beekeepers represented by our association.

Please do not hesitate to contact me should you have any questions about this matter. I look forward to your responses.

Sincerely,

Catherine Dempsey

Catherine Dempsey,
President

References

Balbuena, María Sol. 2015. "Effects of sublethal doses of glyphosate on honeybee navigation." *The Journal of Experimental Biology*. 218, 2799-2805 doi:10.1242/jeb.117291 http://www.boerenlandvogels.nl/sites/default/files/Effects%20of%20Glyphosate%20on%20Honey%20Bee%20Navigation.pdf (accessed 8 Feb. 2017).

Colopy, Michele. 2015. "Glyphosate." *Bee Culture*. Apr. 8. http://www.beeculture.com/glyphosate/ (accessed 8 Feb. 2017).

Government of Newfoundland and Labrador. 2016. Crown Five Year Operating Plan Forest Management Districts 02 and 03 (Zone 02) 2017-2021. St. John's: Department of Fisheries, Forestry and Agrifoods. Draft plan submitted to provincial environmental assessment.

Morse, Roger A. 1997. "Honey Bees and Pesticides." In Roger A. Morse and Kim Flottum (eds.). *Honey Bee Pests, Predators and Diseases*. Medina, Ohio: A.I. Root Company. Appendix 5. pp.551-555.

Winston, Mark L. 1987. *The Biology of the Honey Bee*. Cambridge, Mass.: Harvard University Press.