Arguments in favour of mandatory beekeeper and/or apiary registration

By Peter Armitage

Many beekeepers on the Mainland and elsewhere in the World know that Newfoundland and Labrador (Canada) is the only part of North America that remains *Varroa*-free, and that we are in the process of developing a Varroa Action Plan (VAP). However, one problem we face in implementing this plan is that our provincial *Animal Health and Protection Act* and associated regulations that protect honey bee health are quite outdated and need revision ASAP. One revision that would help is a regulation requiring beekeeper and/or apiary registration with the provincial apiarist. We and PEI are currently the only provinces in Canada that lack some kind of mandatory registration.

Good knowledge of apiary locations is crucial if we intercept early a *Varroa* incursion and want to conduct a "delimitation survey," possibly with the view to establishing quarantine boundaries and attempting eradication (if the infestation is confined to a small geographic area). A delimitation survey involves testing colonies in an ever increasing radius around the initial *Varroa*-infested apiary, until no more infested apiaries are found. At the same time, any traffic in honey bees between the infested apiary and other apiaries must be determined, so that potentially infested colonies located elsewhere in the province can be tested.

Earlier this fall I asked BEE-L participants and some other beekeepers across Canada to weigh in on the topic of mandatory registration. BEE_L is a LISTSERV with participants from Canada, the U.S., Europe, South American, Australia, New Zealand, and other parts of the World. Note that I asked only for supportive commentary. To the best of my knowledge, registration was first implemented by various governments in order to deal with foulbrood epidemics and otherwise protect honey bee health. The logic behind registration remains the same today. It's all about health!

Brian Tamboline, Alberta

We have mandatory registration in Alberta. This also requires PID, property identification, a separate registration. Neither requires a fee. Basically, the Provincial Apiarist knows you have a certain number of hives, and the Province knows where they are located. No issues for me, ever. It's painless, transparent, and most, if not all, participate.

We had an incursion of SHB one year ago in the Peace country due to unscrupulous beeks bringing in uninspected colonies from Ontario. Total contravention of the rules/law. Registration allowed the Provincial authorities to institute a quarantine that effectively stopped a disaster. Registration is (can be) painless and can bring great benefits.

For your situation, perhaps New Zealand or Australia might be good models. Bio-security is irreplaceable, in my opinion. Best wishes and good luck!

Richard Cryberg, Ohio

I live in Ohio. We have had a state run mandatory apiary registration program forever which I support 100%. Its original purpose was to limit American foulbrood. We had an AFB epidemic right where I live in the 1970s. The story (which may not be true - I simply do not know) is a commercial honey producer brought in about 1000 hives during our golden rod bloom to make fall honey. In spite of all the talk about how bad golden rod honey is, I find it to be my personal favourite. About two-thirds of my customers also love it. At any rate, the AFB epidemic was bad. Ohio law at that time was an infected hive had to be burned. The inspector burned about half my hives and two-thirds of my equipment. All the strong hives were infected. Everyone who lived within a couple of miles of me had the same experience. Usually a county had one inspector. Cuyahoga county, the county just west of me, had three inspectors during the epidemic. It took a couple of years to get the disease under control. Basically we did not lick it until all the ferals were dead and robbed out and taken over by wax moths. I hate to think how long it would have lasted without the vigorous inspection and burn infected hives program. I hate to think how long it would have lasted if people had tried to control it with antibiotics. Since then, AFB has been rare in this area. But, I just heard seven hives were found less than 100 miles from me a few weeks ago over in PA. I hope they can contain it.

If I were to criticize our Ohio program, I would say it is too weak today. There are too many that do not register. The inspectors are terribly underpaid so it is hard to get a really good inspector who actually knows bees and is any place close to adequately trained. Only about 25% of apiaries get inspected in any given year these days. And, that inspection is pretty cursory. He generally only looks in a couple of hives at my place when I have 20 or more. All he wants to see is one frame of brood from the hives he looks at. He typically even asks me to pick the hives he inspects. I feel we are playing with fire and will get burned one of these years. A large part of the problem is so few beekeepers here have had bees for even five years that there is no memory of the last AFB epidemic.

I would sure like to see out local inspection program include doing an alcohol wash for mites. We have way too many new beekeepers who are doing a totally inadequate job of mite control resulting in massive winter losses. And, if you happen to be located close to one of those people, which I am, the fight to control mites is really made a lot tougher due to fall mite migration.

Janet L. Wilson, Tsawwassen, B.C.

I strongly support mandatory registration of honey bee colonies. Registration not only assists in disease and pest containment during outbreaks, it provides an opportunity to offer support and education to beekeepers. Registration can be a potent tool for maintaining bee health across the province.

Rhéal Lafrenière (M. Sc. P. Ag), Industry Development Specialist – Provincial Apiarist, Manitoba Agriculture

A mandatory inspection program will provide the biggest bang for your buck when it comes to mandatory beekeeper or apiary site registration. The two go hand-in-hand and are a one—two punch when it comes to controlling the spread of disease. Knowing who has bees is a good start, but actually

looking at their bees periodically is how you catch diseases early. Having good biosecurity measures for beekeepers to follow to prevent introducing disease is incredibly important, but having an inspection program as a watch dog to ensure those biosecurity measures are being followed and working is also very important.

Randy Oliver, California

California has long had mandatory registration, and is actually stepping it up next year with GPS pin drop registration of locations. Such mandatory registration is objected to by beekeepers for any number of reasons, but has the benefit of giving local AG commissioners the means to deal with beekeepers who don't manage diseases or parasites, or who do not respect setbacks from established apiaries. It also helps to protect apiaries from pesticide damage.

In my own county in California, we beekeepers recently united in getting our supervisors to pass an ordinance to protect the sustainability of beekeeping in our county, which was threatened by an invasion of disrespectful beekeepers from elsewhere. We love our ordinance! As a beekeeper and biologist, I completely support the desire of Newfoundland and Labrador to prevent the introduction of the devastating varroa mite. Mandatory registration would be a requisite step.



Ron Miksha, Alberta (Bad Beekeeping Blog)

Honey bees are free-ranging livestock. Virtually everywhere they are kept, they easily forage five kilometres or more, encountering property not owned by the beekeeper. Some of the land (roadsides, parks, easements, public buildings with flower gardens) is owned by the government. As such, the government has an obligation to assure that honey bees foraging on public lands are healthy. To help assess that these free-ranging livestock are kept responsibly and not spreading bee-related parasites or maladies to other community bees, the government needs to know the location of all apiaries so that veterinarians or inspectors can identify potential sources of infection. Because of the vast area that honey bees forage and their ability to carry bee diseases and pests, I have long supported the registration of both urban and rural honey bee apiaries.

Ian Steppler, Steppler Farms Ltd., Manitoba

We don't have mandatory site registration here in Manitoba but we have mandatory registration of all beekeepers here. The two are a bit different. I suggest that beekeeper registration is probably the most effective action from a return on investment stand-point. Site registration requires

policing, and I doubt you will have the means to do that. It is important to be able to monitor the 'herd' from the stand-point of the provincial apiarist. Unlike cattle, bees fly considerable distances and mingle with neighbouring colonies. This in a way creates a situation where infection (e.g., AFB) can spread throughout the immediate area and to wherever those beekeepers move their hives. The entire area where those bees are kept is the herd, which needs to have a singular control. It's the act of registration that protects the herd from one bad beekeeper negatively inflicting disease on everyone else.

Anne Bennett, Montreal

I'm a backyard beekeeper in Montreal. The province of Québec has mandatory registration of beekeepers. All I need to do is pay the modest annual fee (about \$20 no matter how many colonies I have), and keep a register of bees (queens, nucs, packages) entering and leaving my 'apiary' (such as it is!). The annual renewal of my registration also involves filling out a small questionnaire, which takes only a couple of minutes in my case. Larger operations also fill out an annual survey on colony mortality. In return, I have the reassurance that, by knowing where the beehives are in my province, the MAPAQ (Ministry of Agriculture) is able to intervene effectively to track the spread of pests and diseases, and where possible, stop it or at least slow it down. I periodically receive information about these activities. Lately, efforts seem to concentrate on preventing the small hive beetle from establishing itself in our province. I'm all in favour of such vigilance, and happy to participate in any way I can.



Fletcher Colpitts, chief bee inspector, New Brunswick, inspecting hives summer 2019 (photo courtesy Mary Colpitts)

Rob Hughes, New Brunswick

In response to your Bee-L note, we have mandatory registration here in New Brunswick. Registration is required by law if you keep bees, but is free. 'Policing' of this legislation appears to be fairly restrained. On the other hand, the provincial inspector (it's a husband and wife team, although technically only one of them is the inspector) gets around the whole province, and what with rural word of mouth being what it is, relatively few beekeeping operations escape their knowledge, and I would suspect none of any size.

Everyone I know appreciates the inspector's visits. They are a great opportunity to get a lot of free expert advice, as well as assurance that

one's bees are in good shape. While it could be argued we need more inspectors, they prioritise checking the most important locations, and do a decent job of keeping on top of things. Data presented at recent meeting shows foulbrood outbreaks have virtually disappeared in the past 20 years. In addition the inspector regularly makes presentations at regional beekeeper gatherings and as he is a commercial beekeeper himself, he has a lot of useful information to impart.

With the way government programs have atrophied in recent years it seems unlikely such a program

would be initiated now, but it keeps going as it is a legacy program. It is also supported financially by the NB Beekeepers Association, although I am not clear on the formula.
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Jim Fischer, New York

In any densely-populated area, there will be inevitable misapprehension about bees. Stings for children while playing have been very rare for decades for a number of reasons, so it is common to have parents who have never been stung themselves taking their children to the emergency room over a bee sting, where a doctor (who has also never been stung!) will invariably administer a Defensive Medicine dose of Ephedrine, so as to avoid the very rare case where the patient goes home and has a delayed systemic reaction. Thus the false impression that the child is "allergic to bees" is established, never to be corrected by an allergist, or any form of rational thought.

In practice, bees will generally go unnoticed by civilians unless the beekeeper makes a spectacle of him/herself. The rubber-meets-road problem for the local government is handling complaints from random citizens about bees, and being able to quickly triage between a swarm, feral colony, and managed colony. Knowing the locations of apiaries makes that task easier, and allows them to notify the beekeeper with an apiary nearest the swarm that it is very likely his bees that have swarmed.

Karen Pedersen, Pedersen Apiaries, Saskatchewan

I support mandatory registration of beekeepers and beeyards. *Varroa* is still the number one killer of honey bees. Even though we live quite close to the Alberta border, we gained about 20 years of *Varroa*-free beekeeping because Saskatchewan limited the movement of honey bees. That was 20 years with fewer expenses and time for others to do research so that we could learn from their mistakes.

I worked as a beekeeper in New Zealand and implemented antibiotic free beekeeping when I came home, modelled after their long-time program. I recently heard that after decades of successfully controlling AFB in New Zealand without antibiotics, they are having outbreaks now because they don't know where all the hives are and who has them. The high price of Manuka honey is making people ignore the regulations. Since beekeepers have to get permission from landowners before they place bees on their land anyways, I strongly support taking the further step of registering all of the locations where bees are.

Finally, I recognize that for any registration program to work, it needs to be backed up with an inspection program with teeth. Even poor registration and inspection programs have proven that they delay the spread of diseases. Nonetheless, the better funded programs are more likely to find and catch the smugglers thereby delaying the spread longer.