



# Manitoba Bee Health Monitoring Program

## 2022 Registration Form

Regular monitoring of colony health is a critical component of an effective Integrated Pest Management (IPM) strategy. Monitoring for pests and pathogens and implementing Best Management Practices (BMP's) helps to improve the health of honey bee colonies and increase honey production. Further, adoption of these strategies is associated with reduced annual colony losses, less use of chemical treatments and antibiotics, lower operating costs, and a decreased risk of developing resistant pests and pathogens. The Manitoba Bee Health Monitoring Program is designed to provide Manitoba beekeepers with additional resources to help monitor the health of their colonies at multiple time points over the beekeeping season.

Beekeepers opting into this program can choose the number of yards they would like to have monitored. Ten colonies per yard will be sampled in both the spring and late summer for major pests and pathogens of the beekeeper's choosing. Varroa samples will be collected from each individual colony and (when time allows) alcohol washes will be performed on site to obtain immediate results. Pooled samples from the 10 colonies will be taken for (1) Nosema, (2) Viruses, and (3) American Foulbrood (AFB) & European Foulbrood (EFB). Nosema and Viral analyses will be completed at the Manitoba Veterinary Diagnostic Services Laboratory and results can be expected within 2 weeks. AFB/EFB samples will be sent to the National Bee Diagnostic Centre and these results can be expected within 3 weeks. Should varroa levels for individual colonies test above 3% (in a post-Apivar treatment period), a follow-up Apivar efficacy test may occur at no additional cost to the beekeeper.

Since effective hive management also includes continual evaluation and adaptation of your management practices, we will also collect colony management data from you to provide tailored advice and guidance specific to your operation.

\*\*\*Hygienic testing using the liquid nitrogen freeze-killed brood test is available again for the upcoming season. Up to 15 hives can be tested for hygienic behaviour. Beekeepers also registering for a diagnostics option can add hygienic behaviour testing at a reduced cost. However, those registering only for hygienic testing will be charged a service fee to help recoup travel costs. See table below.

**To register for the program, please fill out the form below and email to:**

**[krtpmb@gmail.com](mailto:krtpmb@gmail.com)**

(a scan, or good quality image of the completed form will do)



**Manitoba Bee Health Monitoring Program Registration Form**

<b>Name:</b>					
<b>Company:</b>					
<b>Email Address:</b>					
<b>Phone #:</b>					
<b>Address:</b>					
<b>City/Town:</b>			<b>Province:</b>		<b>Postal Code:</b>
<b>Number of yards to be sampled (max 3):</b>					
<b>Please provide GPS Location and a Name ID for all yards</b>	<b>Yard 1:</b>				
	<b>Yard 2:</b>				
	<b>Yard 3:</b>				

<b>Spring and Fall sampling could be completed before or after miticide/Nosema treatment. Do you have a preference?</b>	<b>Spring: Before</b> <input type="checkbox"/> <b>After</b> <input type="checkbox"/>
	<b>Fall: Before</b> <input type="checkbox"/> <b>After</b> <input type="checkbox"/>
	<b>No preference</b> <input type="checkbox"/>
<b>We will be sampling 10 colonies in each yard. Would you like to choose the specific 10 colonies or can we choose at random?</b>	<b>Specific 10</b> <input type="checkbox"/> (Colonies to be identified by beekeeper prior to sampling day)
	<b>Choose at random</b> <input type="checkbox"/>



**MANITOBA CROP ALLIANCE**



**Manitoba Canola Growers Association**



**Manitoba Beekeepers' Association**



Please select your preferred diagnostics option and complete the table below.

Bee Health Monitoring Program	Diagnostics	Cost per Yard	Number of Yards	Total (Cost x Number of yards)
<b>Option 1:</b>	<ul style="list-style-type: none"> <li>• Varroa count</li> <li>• Nosema count*</li> <li>• AFB (including resistance test if positive) *</li> <li>• EFB*</li> <li>• 3 Viruses (DWV, SBV, BQCV)</li> </ul>	\$425.00		
<b>Option 2:</b>	<ul style="list-style-type: none"> <li>• Varroa count</li> <li>• Nosema count*</li> <li>• AFB (including resistance test if positive) *</li> <li>• EFB*</li> </ul>	\$280.00		
<b>Option 3:</b>	<ul style="list-style-type: none"> <li>• Varroa count</li> <li>• Nosema count*</li> <li>• 3 Viruses (DWV, SBV, BQCV)</li> </ul>	\$290.00		
<b>Option 4:</b>	<ul style="list-style-type: none"> <li>• Varroa count</li> <li>• Nosema count*</li> </ul>	\$145.00		
<b>Additional Diagnostics**</b>	<i>Please see the NBDC website for additional diagnostics. List additional requested diagnostics to the right.</i>			

\* **PLEASE NOTE:** By signing up for AFB & EFB diagnostics, the beekeeper acknowledges and understands that positive results for AFB or EFB are required to be shared with the Provincial Apiarist and will trigger a follow-up inspection by a provincially appointed inspector. Nosema results are also required to be shared with the Provincial Apiarist for disease tracking purposes only (no follow-up inspection will occur for Nosema).

\*\* Additional diagnostics are available through the National Bee Diagnostic Centre (e.g. additional viruses, pesticide residues, antibiotic residues in honey). If the beekeeper wishes, the KRTP can collect additional samples to be submitted for analysis at an extra cost. Please see the NBDC website for more information on diagnostics and costs:

<https://www.gprc.ab.ca/research/nbdc/submitsamples.html>

Hygienic Testing	Cost per Hive	Number of Hives (max 15)	Service Fee	Total = (Cost x Number of Hives) + Fee
Liquid Nitrogen freeze-killed brood test ( <u>with</u> a diagnostics option)	\$8.00		None	
Liquid Nitrogen freeze-killed brood test ( <u>no</u> diagnostics option)	\$8.00		\$100.00	

Hygienic testing will be performed only once per year. The KRTP will provide liquid nitrogen and labour to freeze two patches of brood for each selected colony, however, the beekeeper will be required to send pictures of the frozen patches 24hrs later to verify hygienic counts. For those choosing a monitoring program diagnostics option, hygienic testing will be combined with spring sampling. For those choosing only hygienic testing, please indicate a preferred week when you would like the testing done. The KRTP will do its best to accommodate your request. We will contact you to schedule a specific date. (Indicate preferred week dates (Mon-Fri) here: \_\_\_\_\_)



**Please Sign and Date:**

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Cost & Payment:** Beekeepers will be invoiced directly upon receipt of a complete and signed registration form. Payment in full (by cheque) will be required before spring sampling is completed. Additional payment detail will be noted on the invoice.

**Protection of Privacy:** All information you share with the Knowledge & Research Transfer Program (KRTP) is confidential and will not be released to anyone outside the program (with the exception of the positive diagnostic results noted above that are required to be shared only with the Provincial Apiarist).

At times, the KRTP may aggregate data to better understand overall trends in bee health. However, in doing so, much care will be taken to protect your privacy. Your name or apiary locations will never be used. Instead, anonymous identification numbers will be assigned to each beekeeper and data will be pooled among regions or over sampling periods to protect apiary locations and specific sampling dates.

### **Contact Information:**

Derek Micholson  
Knowledge & Research Transfer Program Lead  
Tel: (204) 997-6793  
Email: [krtymb@gmail.com](mailto:krtymb@gmail.com)  
<http://manitobabee.org/hive/category/krtyp/>

