



ABC - TTP

PROJECT PROPOSALS

FOR TTP WINTER-FALL 2026





Here we highlight several key issues and how we could address them next beekeeping season. At the end, there is a QR code to an online poll so you can voice your opinion on what is most important to you and your operation right now.



Project #1:

Hygienic Behaviour Testing



Issue:

- Domestic queen rearing is increasing due to imported queen issues
- Varroa mites present an issue as miticide resistance is on the rise.

Proposed Solution:

- Creation of a service provided by the TTP to test queen breeding yards for hygienic behaviour to promote naturally Varroa resistant bees (Freeze-kill assay).
- Steps:
 - Creation of a protocol
 - Advertising of service to beekeepers to investigate interest level
 - Trial protocol on volunteered honey bee colonies to ensure success of system

Predicted Project Scope

Requirements

- Supplies: liquid nitrogen, associated PPE & dewar, table, ipad, etc
- Beekeepers interested in this service
- Liquid nitrogen supplier
- Service cost analysis

Info to Beekeepers

- Hygienic behaviour score for tested apiaries
- Other tests could be performed while in the yard for more colony info



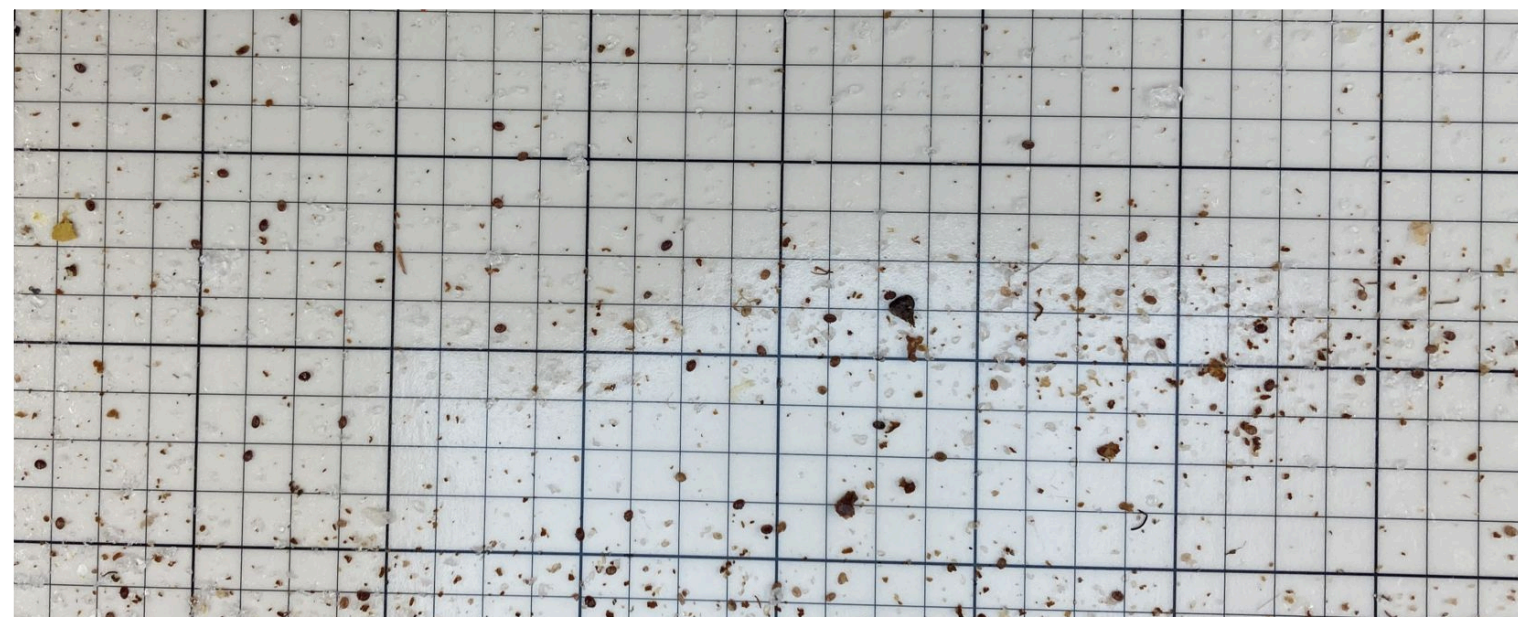
Timing

- Creation of protocol and determination of included tests -
Winter
 - including price of service and supplies - reference KRTP (\$15/hive + \$100 service fee: min \$220/beekeeper)
- Promote service to ABC's beekeepers - **Early Spring**
- Begin providing service - **May+June**
- Analyse data for trends in Alberta's honey bees hygienic behaviour- **Fall**



Project #2:

Starch Jelly Sticky Trap



Issue:

- Mite traps are currently oil-based and therefore difficult to remove from board
- Sticky boards coat mites in oil-based fluid that is challenging to remove for use in a lab analysis settings

Proposed Solution:

- Trial a new sticky trap base that is water soluble (Dahee Ahn project product- Ohio State University) and allows mite testing.
- Steps:
 - Create protocol for a research project
 - Trial several glycerin volume amounts for humidity testing
 - Assess if mites removed are viable for processing in lab
 - Compare with regular sticky straps
 - Complete results summary with findings

Predicted Project Scope

Based on study completed by Nganso et al. 2017

Requirements

- 1 yard of bees from a beekeeper - 2 variables + 1 control
- Supplies: Sticky board (standard), starch jelly ingredients, ethanol, hygrometer...
- NBDC collaboration - mite resistance testing

Info to beekeepers

- Mite damage levels - hygiene
- Mite level monitoring
- Mite resistance testing
- Mite removal



Timing

- Protocol development - **Winter**
- Preparing bottom boards - **Spring**
- Running experiment - **June/End August**
 - Initial Varroa level sampling
 - Daily mite fall counting for 1(?) week
 - Mite sorting
 - Run experiment 2-3 times, different times of year
- Ship mites to NBDC for resistance testing - **Fall**



Project #3:

Classroom Outreach - Long term results



Issue:

- The industry is struggling to find apiary workers during summer field season
- The government is reducing the ability of Canadian beekeepers to secure foreign workers for seasonal aid

Proposed Solution:

- Create an instructional package for high school/continued education teachers. Introduces beekeeping as a profession to next generation.
- Steps:
 - Determine interest in schoolboards across nearby counties
 - Create course and materials for teachers and classroom instruction
 - Trial course on select classrooms to ensure success

Predicted Project Scope

Requirements

- Graphic designer
- Video editor/animation specialist



Timing

- Poll to assess interest in schoolboards - **Winter**
- Creation of course - **Winter/Spring**
 - writing, videoing, animations...
- Review by beekeepers/scholars - **Spring/Summer**
- Final edits - **Fall**



Project #4:

Spring Emergency Inspections



Issue:

- We are still struggling to determine the exact causes of Spring dwindle
- Entire yards that did not survive overwintering are challenging and disheartening with no signs of cause

Proposed Solution:

- Initiate a program for spring emergency inspections on beekeepers dead-out yards to undergo detailed inspection and laboratory analysis.
- Steps:
 - Create inspection checklist to investigate possible causes of colony death, and sample for various pesticides/disease
 - Provide report to beekeepers on results
 - Gather dataset to assess trends and recommend practice changes

Predicted Project Scope

Requirements

- Collaboration with NBDC and Alberta Agriculture and Irrigation
- Sampling supplies: virus, pesticide, pollen, dead bees for lab analysis, etc.
- Survivorship bias: assess dead mites on bottom board for Amitraz resistance.

Info to beekeepers:

- All results will be given to beekeeper in report format



Timing

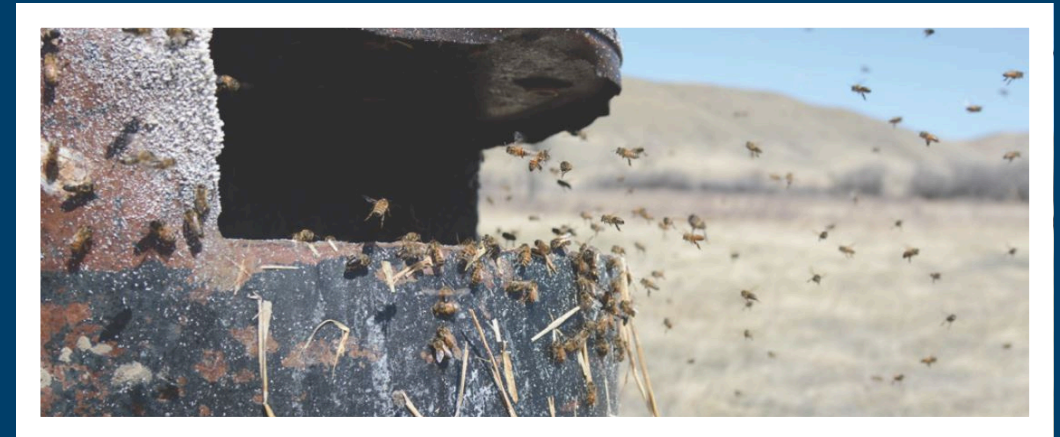
- Develop protocol and datasheets for yard inspections and data collection - **Winter**
- Promote service along with pricing details - **Late Winter**
- Begin inspections once hives are unwrapped - **Early Spring**



Other Short-term Projects

1. Creation of a Best Practices Guide for Mixing and Storing Sugar Syrup

- assess varying water sources



2. Syrup testing services:

- Test quality of syrup before or at end of feeding period. Assesses safety for bee health using home-mixed products.



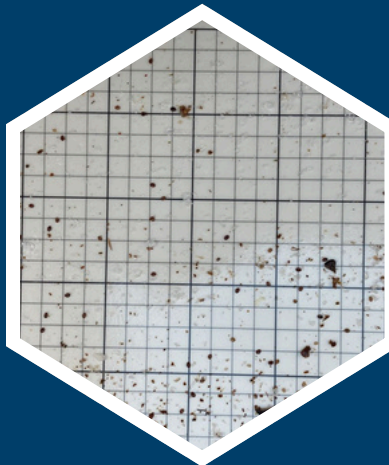
Voting Options: Ranked



Project #1:
Hygienic Brood
Testing Service



Project #4:
Spring Emergency
Inspections



Project #2:
Starch Jelly Sticky
Boards



Project #3:
Classroom
Outreach

Please scan
this QR code
to vote:



All responses are
anonymous

Further Suggestions?

Do any other issues come to mind?

Can you think of other problems in commercial
beekeeping the TTP should address?

Are there any services you would like the TTP to
provide?

Email us at ttp@albertabeekeepers.ca!

