



# Evaluating Beekeeping Mentorship

## **Models:** How written, virtual, and hands-on mentoring supports beekeepers

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## **Purpose**

We hope this report provides guidance to any beekeeping mentors looking to establish their own mentoring service.

## **Background**

New beekeepers often feel overwhelmed by the complexity of assessing colony health. They may struggle to accurately identify problems, leading to confusion about which management strategies to apply and when. Consequently, they frequently seek aid to solve issues or gain reassurance about their practices. While finding a mentor is one of the most common recommendations, experienced mentors with adequate time for new mentees can be difficult to find. Furthermore, traditional in-person mentoring, which requires traveling to various apiaries, can be time-consuming and costly for the mentor.

To address these challenges, several alternative mentoring models have emerged that reduce the need for frequent travel. These options are not mutually exclusive, and some can provide a source of income for experienced beekeepers, allowing them to build a business around their expertise.

- **Workbook.** A printed [workbook](#) that instructs beekeepers on colony inspections and management. This resource uses a combination of images, diagrams, text, and links to instructional videos. It often includes field sheets for note-taking, making it easier to track goals, observations, and seasonal progress without a direct mentor.

- **Teaching Apiary.** A hands-on, group-learning model where mentees travel to a central apiary managed by the mentor. This approach allows for direct, in-person skill-building and fosters a sense of community among new beekeepers.
- **Virtual Mentoring.** A remote support system where mentees post inspection reports, photos, and videos to an online platform. The mentor reviews this information and provides feedback, advice, and answers to specific questions.
- **Hybrid Mentoring.** This model combines the convenience of virtual mentoring with targeted, in-person visits. The mentor provides ongoing remote support while scheduling a few key on-site visits per year, often timed to coincide with critical seasonal management shifts. This allows the mentee to manage their colonies more autonomously while still receiving expert guidance when it is most needed.

Each of these models presents a different balance of pros and cons regarding the level of support for the mentee, the time commitment required from the mentor, and the associated costs.

## Testing Mentoring Services

### Program Enrollment

In 2023, a pilot program was conducted to compare the effectiveness of different mentoring models. Participants were recruited from the Bee Squad and Bee Lab listservs and voluntarily enrolled in the program.

Volunteers could request placement in a workbook-only, virtual, or hybrid (virtual and in-person) mentoring group. Participants were assigned based on their preference or, if necessary, through random selection. Participants for the teaching apiary group enrolled directly through the Beez Kneez business website.

All participants, regardless of their assigned group, received a printed workbook by mail. As a condition of enrollment, all participants agreed to complete a final survey to evaluate the program at the end of the beekeeping season.

## Mentoring Programs

- **Workbook.** This group received the printed workbook but no additional mentoring support, serving as a baseline for self-guided learning.
- **Teaching Apiary.** In partnership with the local business Beez Kneez, this model offered six hands-on training sessions throughout the active season. Participants traveled to a Beez Kneez apiary for 90 minutes of group instruction per session. The instructor also hosted a weekly one-hour Q&A session via Zoom.
- **Virtual Mentoring.** Participants were asked to complete and upload a field datasheet from their workbook after each inspection (or at least once per month). These reports, along with any questions and photos, were submitted through a Qualtrics survey. The Bee Squad team reviewed the submissions and provided feedback once per week.
- **Hybrid Mentoring.** This group received the full virtual mentoring service, supplemented by three 90-minute, in-person visits scheduled in the spring, summer, and fall. These on-site consultations required coordination with the mentee for scheduling and travel and involved personalized instruction tailored to the mentee's specific colony needs.

## Mentor Program Evaluation

At the conclusion of the beekeeping season, a final evaluation survey was distributed to all participants via Qualtrics. The survey was designed to gather feedback on learning outcomes, changes in beekeeping management practices, utilization of the mentoring service, and suggestions for improvement.

## What We Learned

Analysis of participant evaluations from the pilot program provided the following insights and recommendations.

### Workbook Only

**14** beekeepers participated in this program

**67%** of responding participants (8 out of 12) changed a management practice based on the workbook alone. Among the remaining respondents, one new beekeeper felt

they did not yet have established practices to change, while another noted that the workbook reinforced their existing methods.

## Strengths

- Participants consistently praised the workbook as an "essential" and "fantastic" resource that provided a clear, structured guide, helping them build confidence and establish good management habits.
- The monthly overviews, seasonal checklists, and task lists were highly valued for keeping beekeepers on track. The timeline-based design was cited as a particularly popular and effective feature.
- The content was considered highly relevant, with specific praise for the information on varroa mite control, the picture guides, and references to the Beekeeping in Northern Climates manual.
- The structured prompts encouraged more frequent and thorough hive inspections and helped normalize critical tasks like mite assessments.

## Areas for Improvement

- The most frequent criticism was that the note-taking sections were too small, particularly for beekeepers managing multiple hives.
- Some experienced participants viewed the workbook as more of a "reminder" than a primary tracking tool, stating they preferred their own spreadsheets for more detailed numerical data.
- A few users suggested organizational improvements, such as structuring sections by hive instead of by date and clarifying page number references.

## Willingness to Pay

When asked about cost, participants indicated a willingness to pay in the range of \$25 to \$30 for the workbook.

## Recommendations for Future Programs

Workbook revisions are underway and feedback from all mentoring groups have been instrumental in improving the content, design, and flow.

## Teaching Apiary

**24** beekeepers participated in this program

**95%** of responding participants (20 out of 21) changed a management practice based on the mentoring support.

## Strengths

- Participants overwhelmingly cited the in-person, "hands-on" sessions as the most valuable component. They emphasized that direct observation and participation are the most effective ways to learn the nuanced skills of beekeeping. Many stated a clear preference for this model, with comments like, "you can't beat in-person hands-on meetings."
- The opportunity to learn directly from an experienced beekeeper during hive inspections was a major benefit. Having an expert available to "bounce ideas off" via email provided guidance, encouragement, and a significant confidence boost.
- The virtual elements were seen as a strong supplement. The monthly Zoom Q&A sessions were particularly helpful, as they allowed mentees to learn from the questions and experiences of their peers. The ability to send photos of frames for feedback was also a highly useful feature.

## Areas for Improvement

Feedback did not include negative comments about the program's components but instead focused on a desire for more in-person opportunities and supplemental materials.

- Participants expressed a strong interest in expanding in-person learning, suggesting options like an instructional tour at the University's apiaries.
- One popular suggestion was the creation of a formal, university-led regional mentoring program. This would involve "U Certified Beekeeper Mentors" leading local, in-person groups that meet regularly in members' apiaries.
- A suggestion was made to provide written summaries after each class to help reinforce the lessons covered.

## Willingness to Pay

Participants' valuation of the complete package (in-person classes, Zoom sessions, email support, and workbook) varied significantly.

- Suggested prices ranged from \$50 to \$350, with a common cluster in the \$100 to \$200 range.
- One participant proposed a tiered pricing structure: a base price for the workbook and email support, with a higher price point that includes the live Zoom sessions.
- It is important to note that one participant stated they would not have been able to afford the program and were grateful it was offered at no cost.

## Recommendations for Future Programs

The success of a teaching apiary model is highly dependent on the instructor's beekeeping knowledge and communication skills. The feedback confirms that while virtual support is beneficial, participants place the highest value on in-person, hands-on instruction. Future programs should prioritize this component to ensure the greatest impact.

## Virtual mentoring

**43** beekeepers participated in this program

**83%** of responding participants (26 out of 31) changed a management practice based on the mentoring support.

## Strengths

- Participants highly valued having direct access to experts for specific, hive-related questions. This proved especially helpful for new beekeepers seeking a second opinion or detailed guidance.
- The availability of on-demand virtual support provided a significant confidence boost, assuring beekeepers they had a reliable source of information.
- The email-based support system was praised for its convenience, allowing participants to get answers without scheduling in-person meetings.

## Areas for Improvement

- Some participants suggested mentors should be more proactive with check-ins or reminders, as it was easy for mentees to forget to reach out during the busy season.
- A desire for faster response times was a common piece of feedback.
- A few users reported technical difficulties, such as problems uploading photos to the Qualtrics platform.
- At least one participant mentioned feeling "disconnected" from the virtual support, indicating a desire for a more personal or interactive experience.
- One beekeeper in their third year felt they were beyond the program's target experience level and did not use the service as much as a newer beekeeper might.

## Willingness to Pay

Participants' valuation of the service varied, with most suggesting a seasonal fee.

- Per Season: The most common suggested price range was \$50–\$75. Other price points suggested were \$35, \$100, and \$300.
- Per Month: One participant suggested a monthly fee of \$10.
- Itemized: One user suggested a breakdown of \$25 for the workbook and \$50 for email support.
- Several participants were unsure of a fair price but expressed a willingness to pay a "reasonable fee," with one emphasizing the need to keep the program affordable in an already expensive hobby.

## Recommendations for Future Programs

Based on participant feedback, the following recommendations are suggested to enhance future virtual mentoring programs.

### 1. Mentor Ratio and Consistency

For larger organizations, assigning a specific group of mentees to one mentor is preferable to a shared model. In this pilot, four mentors shared 43 mentees on alternating weeks, which made it difficult to track individual colony progress and build rapport. A dedicated mentor-mentee relationship would improve continuity and personalization.

### 2. Improve Technology and Technology Use

The Qualtrics platform proved to be a barrier for some users. Future programs should consider simpler, more direct technologies like text messaging or a dedicated Slack channel, which would allow for more immediate feedback and simplify the process of sending images and videos. While this approach offers faster, more intuitive communication, a potential drawback is that it could create an expectation of constant availability, increasing the risk of mentor burnout. This risk can be mitigated by continuing to use the field datasheet from the workbook. The datasheet guides mentees to provide the most important data in a structured format, making communication more efficient and focused, regardless of the platform used.

High quality photos were extremely important in diagnosing colony issues remotely. Since it is not intuitive for new beekeepers to know what to capture, direct instruction is needed. A photo-taking guide has been added to the newest version of

the workbook, and mentors should clearly communicate what images they need and why.

### **3. Establish Clear Expectations**

A written service agreement presented at the beginning of the program would address many of the communication challenges. This document should clearly outline:

- Roles and responsibilities for both mentor and mentee.
- Communication protocols, including expected response times.
- The timeframe for the service and the total cost.

While we communicated expectations in the intake form, this was clearly not enough of a touchpoint for the participants.

### **4. Enhance Community**

To combat feelings of disconnection, programs should incorporate more interactive elements. Suggestions from participants included:

- A private message board for peer-to-peer interaction.
- Live, group online Q&A sessions to answer common questions and build rapport.
- An expanded library of supplemental video content.

## **Hybrid mentoring**

**12** beekeepers participated in this program

**100%** of responding participants (9 out of 9) changed a management practice based on the mentoring support.

### **Strengths**

- Participants overwhelmingly described the hands-on, in-person sessions as the most critical component, using terms like "invaluable" and "priceless." The ability to receive personalized, hive-specific advice in their own apiary was crucial for building confidence, validating their observations, and learning complex techniques directly from an expert.
- The virtual component served as an essential "safety net," providing reassurance and timely advice between scheduled visits. Participants felt this model offered the "best of both worlds"—combining the depth of in-person instruction with the convenience of on-demand remote support.

- The program was highly effective at building beekeeper confidence. One participant, who had been considering quitting the hobby, stated that the program made them feel they could finally be successful.

### **Areas for Improvement**

- While highly valued, participants suggested adding a fourth in-person visit in the fall (after the honey harvest) and dedicating more time to specific late-season tasks, like oxalic acid treatment. There was also a request for more content on splitting hives.
- Similar to the virtual-only group, some participants felt that the remote support could be more proactive, suggesting monthly email check-ins to encourage them to use the service.
- From a program management perspective, the primary drawbacks are the significant time and travel costs required of the mentor. These logistical challenges make the hybrid model difficult to scale to a large number of beekeepers.

### **Willingness to Pay**

Reflecting its perceived value as a premium service, the suggested price for the hybrid model was significantly higher than for any other group.

- The most frequently suggested price range for the season was \$250–\$300. Several participants suggested prices between \$300 and \$600.
- A few participants noted that while the service's true value is high, a fair price might be more than they could afford, suggesting lower prices in the \$120–\$150 range.

### **Recommendations for Future Programs**

The hybrid model is a high-impact but resource-intensive option. Future programs should prioritize a structure that is both valuable for the mentee and financially sustainable for the mentor.

- In-person sessions are the most valued component, they should be a focus when possible. However, pricing must account for all associated costs—including the mentor's travel time, mileage, and professional expertise—to be profitable and sustainable.
- A tiered structure could broaden accessibility. Mentors could offer a basic tier of virtual-only support and a premium tier that includes a set number of in-person visits. This allows beekeepers to select a level of support that

matches their needs and budget, making the mentor's expertise available to more people while properly valuing the intensive, hands-on service.

## Summary

A pilot program evaluating four distinct beekeeping mentoring models revealed that while all methods were effective, hands-on, in-person support delivers the most significant impact. The Hybrid and Teaching Apiary programs, which included face-to-face instruction, prompted behavior changes in 95 to 100% of participants and were described as "invaluable" for building the confidence and nuanced skills essential to beekeeping. Despite the challenges, the Virtual mentoring program was also seen as valuable and served as a "safety net" for beekeepers needing advice. The self-guided Workbook proved to be an essential foundational tool, enabling 67% of its users to improve their practices on their own. In addition, it is possible the impact could improve based on the feedback from all responding participants. Based on these findings, the most promising path forward is a tiered service model that accommodates diverse needs and budgets. This structure would offer the workbook as an accessible entry point, a mid-level tier adding virtual support for ongoing guidance, and a premium hybrid tier that includes a limited number of high-value, in-person consultations. Such a model makes expert guidance scalable and accessible to a broad audience while ensuring mentors are fairly compensated for their most intensive, personalized work, striking a balance between maximum impact and program sustainability.

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