Hands-On Training Emphasized in the Oregon Master Beekeeper Program

Abstract
Honey bee colony declines have garnered immense public interest, and consequently there is a significant demand for the dissemination of apicultural information. The Oregon Master Beekeeper Program was developed in response to this increased interest in bees and beekeeping and a demand for a credible educational program for new beekeepers. The program focuses on hands-on training by matching students with volunteer mentors. Upon completion of the beginning (Apprentice) level, trained students may enroll in the advanced (Journey) level. This program has gained popularity and strives to educate beekeepers to promote sustainable beekeeping in the Pacific Northwest.

Introduction
The 21st century has presented beekeepers with events and changes like no other in the field. In 2006, the world was alerted to Colony Collapse Disorder, a mysterious phenomenon that led to an alarming loss of 30-90% of colonies managed by beekeepers (Kaplan, 2012). As newscasters reported the disasters and beekeepers demanded attention to the matter, the public became more aware of the importance of pollinators to our ecosystem and food supply. Funding from governmental agencies, growers commissions, and other sources was quickly allocated to apicultural research and Extension (Pettis & Delaplane, 2010). In just a few years, a dramatic surge in research programs occurred in universities across the country. In addition, the numbers of backyard beekeepers and new beekeeping clubs has increased, and membership in existing clubs has reached all-time highs. In essence, honey bees have never before received such attention. This attention, however, is accompanied by pressure from concerned citizens on researchers and Extension faculty to answer questions, provide resources, and disseminate research information.

Horticulture researchers and Extension agents were faced with similar pressures when urban and home gardening gained popularity. In the 1970s, the Master Gardener Program was formed as a result of horticultural professors and Extension agents becoming overwhelmed with requests for information from citizens (Chalker-Scott & Collman, 2006). The Master Gardener Program now extensively trains citizens, who are later required to share their knowledge with others through volunteer service.

Carolyn Breece
Faculty Research Assistant
carolyn.breece@oregonstate.edu

Ramesh Sagili
Assistant Professor
ramesh.sagili@oregonstate.edu

Oregon State University
Corvallis, Oregon
Master Beekeeper programs are joining the force of other "Master" programs (e.g., Master Gardener, Master Naturalist) across the country with the same goal of educating the public in subject areas of high demand. As of June 2014, there were 13 Master Beekeeper programs in the United States. Each program has a unique design, while all aim to educate beekeepers of all levels and provide a means of evaluating the beekeeper's progress in their education (McNeil, 2011). Here we describe a relatively new Master Beekeeper Program developed with an emphasis on hands-on training that has garnered significant support and attention from citizens interested in bees and beekeeping.

**The Oregon Master Beekeeper Program**

The [Oregon Master Beekeeper](#) (OMB) Program is designed to provide new and experienced beekeepers with a consistent, credible education in honey bees and beekeeping. The program is a collaborative effort between the Oregon State Beekeepers Association and Oregon State University (OSU). A diverse 12-person committee comprising university professors, commercial beekeepers, and experienced backyard beekeepers have been instrumental in developing this program. We believe that we have developed a novel educational experience for students by matching them with an experienced mentor to provide essential hands-on training.

The OMB program has three ascending levels: the Apprentice Beekeeper Level, the Journey Beekeeper Level, and the Master Beekeeper Level. The Apprentice Beekeeper Level has just begun its third year and has enrolled a total of 470 students since its inception. To certify as an Apprentice Beekeeper, the student must (1) earn education points by taking classes, attending bee club meetings, etc.; (2) keep a log of hive management activity for 1 year; (3) pass an open-book written exam; and (4) submit four field worksheets.

Each student in the Apprentice Beekeeper Level is assigned a volunteer field mentor. The mentors must have at least 3 years of experience in beekeeping, must attend a Mentor Training Day, and preferably have some experience mentoring or teaching students.

**Hands-On Training**

The mentoring component of the Apprentice Beekeeper Level is what sets the Oregon Master Beekeeper program apart from other similar programs in the U.S. While other program may encourage mentoring or offer field days, the OMB program is the only one in which working with a mentor is required and the field work is hands-on, as opposed to observational. We believe this hands-on training is essential in beekeeping education, because books and classes simply can't provide the real-life experience. Hands-on demonstration was found to be most effective teaching strategy in other Extension training events (Strong, Harder, & Carter, 2010, Kane, 2002).

**Student and Mentor Feedback**

We regularly request feedback from both students and mentors. Most have positive feedback and helpful suggestions. Students find the extra effort of meeting with a mentor to positively affect their beekeeping skills. Apprentice student Esther Youngberg states:
Trevor Riches was a great mentor, very knowledgeable, and very helpful. He always came to me and my bees. My year with him is over, but he continues to help me and will be assisting me when I split my three remaining hives. I can't express how much Trevor helped me with encouragement when I was ready to give up.

Mentors also find the mentoring experience to be rewarding and enriching.

As with any program, we have also received negative feedback. Our top complaint by students and mentors is difficulty in scheduling. We recognize that life can be busy, scheduling can be difficult, and some people eagerly embark on a new activity, then fade out. We do our best to ameliorate challenging situations by shuffling students and mentors in hopes to make a better match.

We hope to retain our best mentors and certified Apprentices by encouraging them to enroll in the Journey Beekeeper Level, which is the second level in the OMB program. This level offers advanced education in beekeeping and incorporates a community service component. The final Master Beekeeper Level of the OMB program is currently under development.

**Conclusion**

To date, we have 113 certified Apprentices (470 enrolled) and 74 Journey Beekeepers in the OMB program. We are pleased to have trained a large group of engaged students in the art and science of beekeeping, most of whom will train others in the future. The hands-on experience they acquire through the program gives them confidence in their beekeeping skills, and in many cases, the students have formed networks of support and friendship. We look forward to continuing the development in the OMB program with the goal of training beekeepers to maintain healthy colonies in the Pacific Northwest.

**References**


