

# Colorado Beekeeper Mentorship Program: Educating Beekeepers/Protecting Pollinators

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## Issue

The past decade has shown significant changes in beekeeping. In 2006, the beekeeping industry was alerted to Colony Collapse Disorder, a mysterious disorder in managed hives where 30-90 percent losses were reported (Kaplan, 2012 as reported in Breece & Sagili, 2015). Through reporting of these large colony losses in the popular media, the public became even more aware of the importance of pollinators in our food supply and ecosystems. A new generation of hobby and part-time professional beekeepers was born. The number of new beekeeping clubs and individual memberships in state beekeeping associations continues to grow nationally, and in the Upper Arkansas Valley.

At a beginning beekeeping class in February, 2016 co-sponsored by the Central Colorado Beekeepers Association and Colorado State University Extension, there was an overwhelming response of novice beekeepers who attended (85 participants). On a signup sheet distributed during the one-day class, there were 52 participants who indicated they would like to be assigned an experienced beekeeper to serve them as a mentor. On a separate sheet, only 4 people indicated they were confident they could serve as a mentor to a beginning beekeeper. The obvious disparity between the demand for beekeeping education, and the ability to deliver this education was apparent.

Previous research reports have also shown the importance of education on honeybee survivability. In one study in Idaho, researchers reported an increase of 14 percent colony survival in beekeepers who took an integrated hive management class over those who did not in the same geographic area (Findlay, Eborn, and Jones, 2015). Intuitively, having educated beekeepers available to serve as mentors for novice beekeepers helps to insure success and hopefully limits disease pressure for professional and hobby beekeepers through early detection and mitigation.



## CSU Extension Response

Chaffee County Extension Director Kurt Jones created an official volunteer program entitled the Colorado Beekeeper Mentorship Program with the aim to recruit and train a cadre of volunteers who could work with novice beekeepers and promote scientifically-based beekeeping and integrated hive management principles. Volunteers were selected based on an application and screening process which included reference checks, criminal and motor vehicle histories, interviews, and beekeeping experience.

Upon admittance into the program, volunteers participated in a seven-session course. Researchers, extension specialists, extension agents and experienced beekeepers taught classes aimed at mentoring novice beekeepers. Subjects included starting the apiary, equipment needs, safe handling and establishment of bee hives, disease recognition and abatement, bee nutritional needs, high altitude plants, seasonal management needs, and the art of mentorship. The Colorado Beekeeper Mentorship Program was sponsored by CSU Extension and Western SARE with assistance from the Central Colorado Beekeepers Association. Further support was provided by USDA-NIFA.

## Impacts

Evaluations of the CBMP showed significant knowledge gained in the areas of honeybee development, colony establishment, bee nutritional needs, high altitude plants, adult bee diseases, brood diseases, varroa mite management, and queen management. Other topics showing knowledge gained (but not as significant) were equipment needs for novice beekeepers, colony activities, and apiary site evaluation. This is not surprising as each of the volunteers accepted in the CBMP were experienced beekeepers and came to the course with a lot of knowledge in these areas.

Open-ended questions on the program evaluation lauded the textbook selected as a reference for this program. Volunteers also commented that the reading assignments between classes aided in their learning. Each participant also had to find a current research topic on beekeeping and report this to their classmates; something they found valuable on course evaluations. Program participants also reported that they intend to implement some of the concepts learned in this program; specifically evaluating varroa mite populations in their own hives and teaching others how to do this as well. Each of the volunteers also mentioned their desire for additional educational opportunities for themselves and for other beekeepers in the area.

Total reported hours from volunteers in 2018 was 168 hours. This value jumped to 307 hours in 2019. Independent Sector estimates the value of volunteer time at \$25.43 per hour. Utilizing this estimate, more than \$12,400 worth of time was contributed in these two years to educating novice beekeepers and protecting the health of honeybees in Colorado.



### For more information

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### References

Breece, C., & Sagili, R. (2015). Hands-on training emphasized in the Oregon Master Beekeeping program. *Journal of Extension* 53(3), Article 31AW6. Available at: <https://www.joe.org/joe/2015june/iw6.php>

Findlay, J.R., Eborn, B., & Jones, W. (2015). Effects on colony creation method and beekeeper education on honeybee (*Apis mellifera*) mortality. *Journal of Extension* 53(1), Article 1R1B6. Available at: <https://joe.org/joe/2015february/rb6.php>

Independent Sector (2019). Independent Sector releases new value of volunteer time of \$25.43 per hour. Available at: <https://independentsector.org/news-post/new-value-volunteer-time-2019/>

Program  
Sponsors:



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