Honey Bees and Colony Evaluation – *An Online Learning Program*

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PROJECT SUMMARY

Objectives:

Develop an *Online Learning Program* to provide easily accessible information to improve the target audience's understanding of

- basic honey bee biology,
- recommended colony strength evaluation practices, and
- recognition of important diseases, pests, and parasites that impact honey bees.

Background and Discussion:

The target audience includes apiary inspectors, beekeepers, and growers, including almond, who rely on honey bees for pollination. It may also be of interest to individuals who are curious and desire to learn more about bees.

   Almond producers want to make sure they are getting what they pay for in terms of numbers of colonies at a strength specified in the pollination contract. Beekeepers want to be compensated for their additional expense in providing quality hives for spring pollination. As a result, County Ag Commissioner's apiary inspectors and private contractors have seen greater demand for colony strength inspections in recent years. In addition to colony strength inspections, inspections for pests, parasites, and diseases, including CCD, are being requested. In many cases, there aren't enough qualified apiary inspectors to meet the need.

   Apiary inspectors must understand honey bee biology and behavior, use accepted colony strength inspection procedures, and be able to identify a variety of important pests, parasites, and diseases. Recognizing the need for training, a workshop for Fresno area apiary inspectors was developed in 2009. The success of that workshop led to additional training events in other locations. Although participants have reported that the trainings were extremely helpful, there is a lot of information to absorb in a short period of time. From this, an *Online Learning Program* is being developed, organized by specific topics, which can be accessed at any time with the click of a web link.

   Working with UC Agricultural and Natural Resources (ANR) Communication Services, the *Online Learning Program* is developed from narrated PowerPoint slide sets and videos. Incorporated into the slide sets will be segments allowing for skills practice through interactive slide sequences. The program also includes quizzes within each module so participants can check for understanding, and a final exam will allow for either certification or continuing education credit.

   One benefit of *Online Learning Programs* is that individuals and organizations can take advantage of the training at their convenience. The modular approach requires short blocks of time for each section and the viewer can proceed at their own pace. Training modules can be re-visited as necessary and it is easy to update the existing information or add additional topics at any time. There are some disadvantages to online learning. The group discussion that occurs during a more traditional lecture format, which adds to the richness of the information disseminated, is lost in online learning. In addition, the hands-on component offered during traditional training programs is not possible.

   The online learning program will be available prior to spring inspections 2013 at the UC ANR Online Learning Site. Links will be provided at the 2012 Annual Almond Industry Conference.
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Project Cooperators and Personnel: Mike Poe and Leigh Dragoon, UC ANR Communication Services; Eric Mussen and Kathy Keatley Garvey, Entomology, UC Davis; and numerous beekeepers and apiary inspectors who generously shared their time and expertise.

For More Details, Visit

- Poster location 33, Exhibit Hall A & B during conference; or on the web (after January 2013) at www.almondboard.com/researchreports
- 2011.2012 Annual Report CD (11.POLL8.Mueller); or on the web (after January 2013) at www.almondboard.com/researchreports