UC Davis Survey Questionnaire for 2011 Honey Bee Colony Health

(All information is confidential and will not be released)

Beekeeper name _____

Name of Beekeeping Company (if applicable) _____

Beekeeper Mailing Address _____

Warehouse Address _____

Beekeeper Contacts: Attended phone _____ E-mail: _____

_____ I would be willing to participate in the bee sampling program proposed in the accompanying letter (includes an initial visit by Dr. Johnson and subsequent sampling by beekeeper).

	2008	2009	2010
Peak number of colonies			
Number of colonies rented for almond pollination			
Number of colonies that died			
Number of colonies lost to CCD			
% of income generated from pollination			
% of income generated from honey production			
% of income generated from queens, packages, and nucs			
% of income generated from other hive products			

If you pollinated other crops, besides almonds, please list the crops: _____

_____

_____ (cont.)

What is the general trend in colony numbers for your operation over the last four years?:

_____ Increasing in colony numbers
_____ Remaining about the same
_____ Decreasing in colony numbers

How do you make up your colony losses?:

_____ Collect swarms or extract colonies from buildings, etc. How many? _____
_____ Purchase colonies in hives How many? _____
_____ Purchase nucs (nucleus colonies) How many? _____
_____ Purchase packages How many? _____
_____ Make splits or divides How many? _____

If you purchased bees, whose stocks did you purchase?:

_____ Bees produced by neighboring beekeeper(s). How many? _____ queens;
_____ packages; _____ nucs; _____ full colonies in hives

Who was or were those beekeepers? _____

_____

_____ Bees produced by a commercial bee breeding operations. How many?

_____ queens; _____ packages; _____ nucs; _____ full colonies

Which operations(s) supplied the stocks? _____

_____

Colony examinations

How many times a year do you examine the brood nest of your colonies?:

_____ Never
_____ Once
_____ Twice
_____ Three times
_____ Four times
_____ Five times
_____ Six times
_____ Seven times
_____ Eight times
_____ Nine times
_____ Ten times
_____ More than ten times: Please specify a number _____

(cont.)

Requeening

How many times a year do you requeen your colonies?:

_____ Every six months
_____ Every year
_____ Only when making splits or divides
_____ Only when colony is lagging

When do you make splits or divides (please check all seasons that apply):

_____ Spring. How many? _____
_____ Summer How many? _____
_____ Fall How many? _____
_____ Winter How many? _____

Treatments used in the last year for mitigating colony health problems:

_____ NONE
_____ fluvalinate - _____ How many times? (number please)
_____ coumaphos - _____ How many times?
_____ amitraz - _____ How many times?
_____ Apiguard - _____ How many times?
_____ Api-life VAR - _____ How many times?
_____ Sucrocide - _____ How many times?
_____ powdered sugar - _____ How many times?
_____ oxalic acid - _____ How many times?
_____ formic acid - _____ How many times?
_____ Terramycin - _____ How many times?
_____ tylosin - _____ How many times?
_____ fumagillin - _____ How many times?
_____ Honey B Healthy - _____ How many times?
_____ essential oil patties - _____ How many times?
_____ menthol - _____ How many times?

Supplemental feeding

_____ Sucrose syrup - _____ How much total per colony?
_____ High fructose corn syrup - _____ How much total per colony?
_____ Sucrose/HFCS blend - _____ How much total per colony?
_____ Partial inverted sucrose syrup - _____ How much total per colony?
_____ Dry baker's Drivert (or similar) - _____ How much total per colony?
_____ Combs of honey from previous years - _____ How much total per colony?
_____ "Melter" or other heated honey - _____ How much total per colony?
_____ Brewers' yeast-based homemade substitute - _____ How much total per colony?
_____ Soy flour-based homemade substitute - _____ How much total per colony?

(cont.)

_____ Commercially prepared substitute (if checked, which one or ones?

_____)

- _____ How many pounds per colony?

_____ Commercial pollen supplement – includes some pollen (if checked, which one or ones?

_____)

- _____ How many pounds per colony?

_____ Home made pollen supplement – includes some pollen in the mixture

- _____ How many pounds per colony?

_____ Straight pollen feedings - _____ How many pounds per colony?

Beehive transportation

_____ Use company truck with boom lift
- _____ How many gasoline boom trucks?
- _____ How many diesel boom trucks?

_____ Use company truck and forklifts
- _____ How many gasoline company trucks?
- _____ How many diesel company trucks?
- _____ How many company gasoline forklifts?
- _____ How many company diesel forklifts?
- _____ How many compressed gas forklifts?
- _____ How many electric forklifts?

_____ Hire commercial truckers - _____ How many truckloads, annual total?

_____ Average number of times an apiary (truckload) is moved during the year

_____ Average number of substantial accidents, towing requirement, etc. encountered annually

_____ Nets are used to cover all loads when hauling

_____ Hives are sprayed with water before and during each move, depending on distance and weather

_____ Encountered difficulty moving bees across state borders (if so, please explain: _____

_____

_____)

Colony damage apparently due to pesticides (please supply an estimate):

_____ Average number of "significant" visible kills (can see many dying and dead bees on the ground in front of the hives) across the operation each year

(cont.)

_____ Average number of times substantial numbers of frames of bees suddenly drop in otherwise normal looking colonies (a sprinkle of bees out front)
_____ Average number of times brood seems to be way below normal
_____ Average number of times pupae fail to emerge (heads uncapped, with tongues sticking out), emerging bees cannot escape their cells, newly emerged bees are malformed, often with crumpled wings (make sure *Varroa* and deformed wing virus are not heavy)

Colony losses apparently due to mismanagement (please supply an estimate):

_____ Average number of colonies lost to starvation (no honey; bees plugged headfirst into cells)
_____ Average number of colonies lost to dehydration (especially after moves to dry spots)
_____ Average number of colonies lost to being overwhelmed by *Varroa* (all workers leave the hive, but many die on bottom board and on the ground; white mite fecal deposits on the tops of many worker and drone cells)
_____ Average number of colonies lost with many adults with deformed wings
_____ Average number of colonies lost to tracheal mite infestations (all the adult bees walk out of the colony on a given day, scattering over the ground and climbing things – not writhing, like pesticides – often with K-wing)
_____ Average number of colonies lost to American foulbrood disease
_____ Average number of colonies lost to flooding
_____ Average number of colonies with populations reduced and retarded by swarming

Miscellaneous losses

_____ Average number of colonies lost to bear damage
_____ Average number of colonies lost to ant invasions
_____ Average number of colonies lost to wasp predation
_____ Average number of colonies lost to skunk predation

Honey bee problem diagnosis (please supply an estimate)

_____ Average number of colony or yard samples taken and examined for tracheal mite infestations
_____ Average number of colony or yard samples taken and examined for varroa mite infestations (sticky boards are appropriate to count, here)
_____ Average number of colony or yard samples taken and examined for *Nosema* infections (all methods count, despite inherent problems with providing exact numbers – high, medium, low infestation estimates good enough)
_____ Average number of samples taken and submitted for virus determinations
_____ Average number of samples taken and submitted for pesticide residue analysis

Beekeeping information sources (please check all that apply)

_____ Obtain most of my beekeeping information through the grapevine from beekeepers visits in coffee shops, fast food restaurants, etc.

(cont.)

_____ Obtain most of my beekeeping information from local newspapers, radio and television
_____ Obtain most of my beekeeping information from the Internet
_____ Obtain most of my beekeeping information from pollination broker services
_____ Belong to an area beekeeping organization
_____ Belong to a state beekeeping organization
_____ visit organization's web page
_____ Belong to a regional beekeeping organization (California or southeastern U.S. bee breeders' group, EAS, HAS, WAS, etc.)
_____ Belong to a national beekeeping organization (ABF, AHPA, AIA, AAPA)
_____ Belong to a honey bee advisory committee of some kind
_____ Subscribe to The Speedy Bee
_____ Subscribe to the American Bee Journal
_____ Subscribe to Bee Culture magazine
_____ Belong to the American Apitherapy Society
_____ Subscribe to one or more apiary newsletters from various universities
_____ Subscribe to Apis, Catch the Buzz, or other on-line sources of beekeeping information
_____ Subscribe to or visit the web sites of other industry organizations such as Project *Apis m* (PAm), the Almond Board of California, and international web sites such as Apinews
_____ Contact cooperative extension farm advisors
_____ Visit the UC Davis Entomology web site of Extension Apiculturist Eric Mussen
_____ Contact the office of the county agricultural commissioner
_____ Contact the California Department of Food and Agriculture
_____ Contact the California Department of Pesticide Regulation
_____ Contact the California Attorney General
_____ Contact the California Secretary of State
_____ Contact the California Department of Justice

Thank you very much for taking the time to complete this questionnaire for Dr. Brian Johnson and me. The information will help us prioritize our research efforts on topics of benefit for the beekeepers who took the time to share their answers with us. We will be contacting some of you, soliciting samples for a study on parasite and pathogen loads in California honey bee colonies. Perhaps answering these questions also prompted you to think about less-frequently considered aspects of colony management in your operation.

If you desire to download or print further copies of this questionnaire, please visit my UC Davis web page and look in my Bee Briefs for "2011 Questionnaire."

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