# May 12, 2014, ALMOND GROWER NEWSLETTER

(Joe Traynor)

# 2015 Pollination

Our 2015 bee rental prices will be the same as this year. Please fill out and return the enclosed form at your earliest convenience so that we can secure sufficient bee colonies. For those that haven't already done so, consider cutting back to 1.5 colonies/acre (1.0 for mixed hardshell/softshell plantings). 3 years ago a grower cut back to  $\frac{1}{2}$  colony/acre on 600 acres of mature trees (hardshell/softshell) and he has been pleased with his yields. Your current agreement with us remains in effect for 2015 unless you cancel by July 1<sup>st</sup>, 2014.

The 2015 bee supply for almonds will be lower due to some beekeepers not returning for several reasons: although almost all bee colonies got placed this year, some did not get placed until the last minute -- the shortage or almond bees in 2013 caused some beekeepers to bring bees to California without a secure pollination agreement; this is unlikely to happen in 2015. Excessive bee losses to pesticides put some bee operations in the hole after almond bloom. With current robust honey prices some beekeepers figure they can do better staying home.

## The 2014 Pollination Season

Ideal bloom weather made for excellent bee activity and subsequent nut set. Bees gained 2 to 4 frames of bees during almond bloom but a number of beekeepers saw a significant decline in colony populations when they got their bees home in March and April. Most beekeepers divide (split) bee colonies after almond bloom in order to make up winter losses and to have more colonies available for summer honey flows. When it came time to split colonies this year, some beekeepers found that the colonies went backward – they lost a brood cycle and the remaining brood was deformed or didn't hatch properly. Chemicals picked up during and after almond pollination are being blamed, although there is no smoking gun that would implicate a given chemical. Some growers (hopefully not you) throw IGRs (Insect Growth Regulators) into fungicide tank mixes to give them a free ride. Most IGR labels state *Non-toxic to Bees* but this applies only to adult bees – IGRs can do a number on bee larvae (just as they do on harmful almond pests).

Bees are most sensitive to fungicide sprays when there is lots of almond pollen in the orchard (a relatively short segment of the entire blooming period). Many petal-fall and post-petal fall sprays were applied this year with bees in the orchard and apparently caused some bee losses. Bees greatly expand their foraging radius when almond pollen is gone and can get hurt when alfalfa fields up to 3 miles away are sprayed. Releasing bees when no almond pollen remains in orchards eliminates the risk of late-season bee losses. As you likely know, Paramount Farms applies little or no fungicides when bees are in their orchards because they feel fungicide applications depress yields. As a result, Paramount's beekeepers are very pleased with the condition of their bees when they get them home. Because there are a limited number of strong colonies available for almond orchards, our beekeepers are tempted to bail out of our organization and go with Paramount to insure that their bees don't deteriorate after almond bloom. Bees on one of Paramount's orchards did suffer a loss when a neighbor sprayed the IGR Tourismo on a nearby orchard. Note: Google *PNW 591* to download info on the toxicity of ag chemicals to bees. Every almond grower and PCA in California should have this publication.

## **Do New Adjuvants Hurt Bees?**

Check out *Mother Jones Eric Mussen*. Mother Jones isn't always a reliable source, but Dr. Mussen is. Here's an excerpt from an MJ blog by Tom Philpott:

In recent years, the industry has come out with what Mussen calls "superduper" adjuvants, that not only coat leaves but also penetrate them – which is desirable for growers because it prevents expensive agrichemicals from being washed away by rain or degraded by sun.

For bees, though, that development might be bad news. Mussen says its possible that the bees' own skin tissues had been blocking the pesticides – until the new-and-improved adjuvants gave them a pathway inside. Also, he added, the chemicals "have some pretty potent material in them that we believe could be toxic to honeybees."

#### Paramount Gets in the Bee Business

Paramount Farming purchased around 2,000 bee colonies last year. Their bee guru, Dr. Gordon Wardell will be overseeing them (in addition to the 90,00+ colonies Paramount rents from independent beekeepers and their Blue Orchard Bee project). Dr. Wardel has a background in making spun-honey. With their nonpareil marketing skills, look for the Resnicks to get in the honey business – *Wonderful* honey? A *Pom-Honey* spread?

#### **Spell-Check Alert**

As a poor speller, I depend on Spell-Check and usually accept their suggestions. When I typed *Resnicks* (above) it was suggested that I change it to *Rednecks*. Fortunately I didn't.

#### **Bee Classes**

Lots of interest in bees lately, with bee classes sprouting up all over the country. Many students are interested in just a few hives, but some may eventually morph into commercial beekeepers. Paramount's multi-talented Dr. Wardell is teaching a bee course at Cal Poly (San Luis Obispo) and enrollment had to be halted when a big enough room wasn't available for the over 100 applicants. *Cautionary Note:* If you talk to someone that has taken a course in beekeeping, they might tell you that you're paying way too little for 8+ frame bee colonies since it costs well over \$200/colony to maintain such colonies. Two Kern County growers (Starrh Farms and Bloemhof Farms) have purchased bee colonies. Ask them what their per colony costs are to supply 8+ frame almond colonies.

#### Dean Helene the New Ag Queen

UC, Davis has a new Dean of Agriculture, Dr. Helene Dillard. I had the opportunity to meet Dr. Dillard during her recent swing through the San Joaquin Valley, a charming, brainy lady. Dr. Dillard comes from a stellar, award-winning, productive 30-year career at Cornell. Dr. Dillard received both her PhD (Plant Pathology) and MS (Soil Science) from UCD. Welcome home Dean!

#### Sounds Good to Me

At Bakersfield's April 29<sup>th</sup> Water Forum, sponsored by the Kern County Farm Bureau, grower Wes Selvidge made an intriguing suggestion: *Declare the San Joaquin Valley a National Treasure and mandate that all coastal California cities use desalinized water.* 

#### Prize-Winning Film Now out on DVD

The film *More Than Honey*, winner of multiple awards, is easily the best of the many bee films out there and includes shots of Valley almond orchards.

#### Times Change

I've been in the almond game a long time (as some of you know, I'm closer to 70 than I am to 60) and have seen lots of changes over the years. The accompanying <u>Almond Conventional Wisdom</u> – <u>Past and Current</u> outlines many of these changes.

## Sorry About That

Some scientists feel that if our fossil-fuel consumption continues at its current rate, the world as we know it will be totally different a hundred years from now – and not in a good way.

#### The Odds Are in Our Favor!

Science writer Jared Diamond says there's a 51% chance that human civilization will survive for another 100 years.