



The Buzzzzz

The Monthly Newsletter of the Gilroy Beekeepers Association

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December 2014

SEASON'S GREETINGS!

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A female *Andrena limnanthis* visiting *Limnanthes douglasii* (Meadow Foam) Photo by Robbin Thorpe

Getting to Know Each Other!

by Vicki Basham

Dale Jelsema is another one of our members who is actually "bee-less" at the moment. He's patiently waiting for next spring, though, when he plans on getting a package or two. He already has a location picked out - in the midst of the fruit trees in his back yard in Gilroy.



Dale has actually kept bees before; in the year 2000 he purchased five colonies already established in hives and they did well for about four years. Then he noticed that one hive had no activity. He opened it up and "I discovered that it was a mess! All eaten up! I then saw that the other four hives were also stressed. I had a lot of trouble with ants, and to top it all off, the frames smelled really bad. I lost every colony and ended up burning the entire lot!"

Dale wanted to get bees again but was too busy with various other projects. He did discover Gilroy's bee club, though, and joined about five years ago. "I attended quite a few meetings and decided not to talk and instead, to listen a lot! I wanted to learn from other people's experience."

When asked about his most memorable beekeeping moment, Dale says, "It is actually a sad one - looking at my dying colonies and wanting to know what I did wrong. It felt like it was my fault. So this time, I want to learn ahead of time so I don't repeat the same mistakes!"

Dale had a second chance at beekeeping in early 2013. A very large swarm landed on a tree in his backyard. Dale was so excited about the keeping bees again that he hurriedly rushed to

San Jose to buy the equipment he would need to house the swarm. But by the time he returned home, the swarm had already moved on. "But at least I now have the equipment for my new packages next spring!" he says.

When asked why he likes beekeeping, Dale says, "I'm fascinated by how the colony can work in harmony, peacefully, with all the tasks they have at hand in the hive. The whole progression is fascinating, going from egg all the way to forager, working right to the end. And I'm astounded at how a bee can go out two miles, find a food source and then come back and tell the others. They may have a tiny brain, but I think they're more advanced than we are in many respects!"

News From The Bee World

Despite flogging the neonics issue yet another time, I feel this piece is worth including because of the broader issue of how it can contribute to general malaise in society and the reduction instead of expansion of co-operative efforts to reach consensus on a variety of subjects. A good source of articles of this type can be found at <http://www.mindful.org/livestream> - Fran Bach

NEONICS: A LESSON IN FEAR AND HOW IT CAN HURT US By Allen "Al" Summers

Neonicotinoid insecticides are teaching beekeepers and some members of the public a lesson in fear that results from misinformation and misunderstanding. First, a reality check: There have been no cases of bee kills or other confirmed bee die-offs that are exclusive to systemic pesticides such as the nicotinyls. In one or two instances the improper application of foliar sprays of these products resulted in relatively large numbers of bumble bees being affected and killed, however any number of insecticide products other than neonics could have had the same effect. Similarly, some cases of bee kills have been reported from drifting of dust from corn planting in limited areas, but again negative effects could have been seen with a number of other pesticide products and compounds. Planting equipment and planting seed lubricants have been developed now to reduce such exposures by as much as 90% from what they were just a couple of years ago.

Still, environmental activist and anti-pesticide groups are lobbying retailers like Home Depot and Lowe's to stop carrying products with nicotinyls in them, or to sell plants that have not been treated with these products. The problem with this approach, based upon what's known as the precautionary principle, is that it is based largely upon speculation and fear about what might happen rather than upon what the actual chances are of it happening. The time-tested way that pesticides are monitored and regulated in their use is based upon what is known as the risk management approach. In other words, with products like pesticides and insecticides, it is accepted that they are designed and formulated to control and kill insects. The actual risks and chances that they will negatively impact other insects and organisms is what the risk management approach is designed to limit or prevent. What the scientific studies are showing is that honey bees and other insect pollinators are much more likely to be killed or negatively impacted by causes other than insecticides such as the nicotinyls. Also, the nicotinyl products

are a group of pesticide products specifically formulated to reduce and limit the negative environmental and non-target effects of older products such as DDT, Malathion, Furadan, Carbaryl, etc.

Most everyone at some time or another accepts that there are risks involved as part of their everyday life. Driving a car, use of alcohol and tobacco, high risk sports-recreational activities, etc. The point is that we all accept some level of risk in our lives, so when it comes to pesticide use why would we approach it differently? Fear and uncertainty, fanned by alarmism is what seems to be the prominent reason currently.

The Impact of fear -

E. Allison Holman, a professor at the University of California, Irvine, studied the health effects of populations of people who watched coverage of the September 11th attacks on the World Trade Center and the Boston Marathon bombings. His findings published by the American Medical Association, reported that those who watched the most TV coverage reported three-times more health and physical ailments (particularly heart problems) than those that didn't watch as much coverage.

Bruce McEwen a neuroscientist who studies stress at Rockefeller University in New York reports that fear and stress can cause people to change their lifestyles so that they sleep less, exercise less and change diets, particularly drinking and smoking to excess.

Good fear versus bad fear -

Fear in general is not usually a good thing, unless one's immediate life or physical security is threatened. However we all have experienced the feeling of elation or the "rush" when we do something thrilling, such as riding a roller coaster or visiting a haunted house on Halloween. Such "good fear" gets our blood pumping and can actually stimulate our immune systems to work more effectively, according to Vanderbilt University professor David Zald. Long term fear can have an opposite effect though, he says. Long term fear and stress elevates blood pressure, depresses the immune system and contributes to heart disease.

Understanding the risks associated with fear -

One of the major problems with understanding the effects of fear is that the average person does not appreciate that they are at much higher risk of having health problems and making poor decisions based on worry and fear, than they are from the actual risks themselves. All of the alarms we hear about pesticides and neonics tend to have us place more weight on the alarms than what these products are capable of actually doing. Fear rhetoric is designed to push our fear buttons. Also, because neonics are presented as being relatively new and untested, the uncertainty about their effects tends to heighten our uncertainty (these products aren't new particularly, and have been in use for almost 30 years now. Older ones such as Imidacloprid have been the subject of numerous scientific studies-none of which has shown them to cause major problems for bees in real world situations and when used properly).

Mistakes and misstatements by public officials and politicization of the issue only make fear and public trust worse, according to Baruch Fischhoff, professor of decision science at Carnegie Mellon University. When you create hysteria and unfounded fear, people tend to get excessively worried E. Allison Holman said.

Working with what is -

By understanding and appreciating that reducing fear and worry about the use of pesticides can be helpful in assessing actual risks, we are much more likely to make informed and accurate

decisions regarding their regulation and use. Whenever the bell of alarmism is sounded, or the rhetoric of a “beepocalypse” is repeated, we should be skeptical of the sources and look for sound data and information to back-up those claims. Most if not all of the time and energy spent on worry and fear of what might happen can be better directed to what we can actually be doing to help bees and pollinators to not only survive but thrive.

This article was adapted from an article titled: “Ebola: A crash course in fear and how it hurts us” by Seth Borenstein of the Associated Press. This author gratefully acknowledges Mr. Borenstein’s general theme that fear and worry when taken to extreme, negatively affect not only our health but our ability to address problems effectively.

(Editor's Note: Again I would like to thank Fran Bach for her permission to use this article)

President's Message

by Wayne Pitts

The Small Hive Beetle is Here in South Santa Clara



The Small Hive Beetle has been discovered alive and well in a hive in Gilroy. In a strong hive they are not a problem, as the bees round them up and put them in prisons. Yes, prisons made of propolis. They are fed but not executed. However, in a weak hive, the beetles are free to run around, laying eggs which soon turn into larvae which need to eat. Unlike the wax moth larvae that prefer brood comb, the beetle larvae prefer honey. As they eat the honey their waste covers the honey with what is referred to as ‘slime’, because it

looks like slime and just is as nasty. The easy way to capture hive beetles, since they are fleeing the bees to keep from being put in prison, is to use a trap. Most of the traps fit between 2 frames. The beetles head to the top and edges of the hive as they are chased by the bees. I put my traps, half filled with cooking oil, between frames 9 and 10 of the top super. This location makes it easy to check. I removed this trap in August from a hive in Palo Alto. Note the oil level and the large amount of trapped beetles.



Prevention measures are the traps and not storing honey. If you see a beetle, install a trap, don't be a beetle breeder. Extract your honey as soon as it is harvested, before the beetles have a chance to slime the honey.

December In The Beeyard

A New Monthly Column by Serge Labesque

Serge Labesque is a beekeeping instructor at Santa Rosa Junior College. He is well known and highly respected by many in Sonoma, Marin and San Mateo Counties where he conducts yearly beekeeping workshops, and is a frequent guest speaker at the San Mateo and Santa Clara bee guild meetings.

Serge Labesque keeps local bees only, and uses no treatment whatsoever in his colonies for pests or diseases. He keeps about 60 hives and has had an amazing success rate. He attributes his success to some interesting management techniques that he attributes to his success. He talks about his management style in his monthly beekeeping to-do column that he is graciously allowing us to print in our newsletter. I hope you'll all enjoy it! - Vicki Basham

My December Beekeeping To-Do List

By Serge Labesque

A few points to keep in mind

Beekeeping practices

Although it's most often the conventional methods of keeping bees that are taught to beekeepers, they are no better for the bees than honey hunting was. They are in fact much worse. The damage that they inflict on the honey bee is largely due to the reduction in its genetic diversity to the few strains that are selected and mass-produced by humans for their own immediate interests. This harm is exacerbated by the conventional beekeepers' reliance on treatments for pests and diseases and on feedings, practices that also interfere directly with the process of natural selection. In addition, migratory beekeeping hurts the bees by spreading pathogens between apiaries.

The primary goal of conventional beekeeping is to exploit the bees as effectively as possible to support businesses, personal careers and private interests that rely on the products of the hives. Such a priority is definitely not a sound basis of hive management for the beekeepers who care about the bees.

Fortunately, beekeeping does not have to be so ruthless. There are alternatives to the conventional methods, and they make the wellbeing of the bees a priority. It is heartening to see that the ranks of their practitioners are growing.

Stewards of the bees

It is not necessary to actually have your own hives to be a good steward of the species. As consumers, gardeners, farmers, environmentalists, politicians, we all affect bees by the

choices we make every day, when we buy food, take care of our plants, and manage our crops and natural resources.

Bees are not domesticated animals

Bees are free to come and go. They fly over fences and ignore property lines. It's only because they are adaptable, and because we understand their biology well enough that we can keep bee colonies in our hives. Although we may own the equipment they inhabit, we do not own the bees any more than we own the scrub jays that visit our gardens, no matter how much we may have paid for them. Beekeepers do well to appreciate and respect the wild nature of the bees.

The best of all beekeepers

Bees have been on this planet for over fifty million years. Throughout all this time, they have surmounted all sorts of challenges. Undeniably, the process of natural selection has brought to us strong and resilient bees. But then here we come! By comparison to what nature has done very well for eons, much of our management of the environment in general and of the honey bee in particular is nothing to be proud of. Nature can teach us very good lessons indeed.

Beekeeping equipment

There is no perfect beehive. Most hive designs are driven by the goal of making the equipment as economical and as simple to produce and utilize as possible, and not by the goal of providing bees with sound nest cavities.

When we see flaws in our beekeeping equipment, we can try to correct them or to compensate for them by adjusting the management of our colonies.

Keeping bees for the love of the bees changes us

As soon as we start thinking about having a beehive, we begin to see the world differently. We notice everything that is in bloom. We also become keenly aware of the dangers bees have to face, poisons, ignorance and greed. We worry about them when they are ailing, and we rejoice when they are thriving. And then, we talk about bees all the time.

To the aspiring beekeepers:

There are no guarantees in beekeeping. So, be prepared for occasional setbacks. Yet, this adventure is overwhelmingly thrilling. All along, trust the bees and enjoy the experience.

December in the apiaries:

Although some of the bees may be seen flying for a few hours on mild sunny days, they spend most of the time assembled in tight clusters inside the hives at this time of year. Indeed, these shortest days of the year correspond to a period of relatively low activity for the colonies. However, this is actually an important phase of their life cycle. Since most of the queens stopped laying eggs several weeks earlier, there is no brood nest in the hives to offer the varroa mites places where they can reproduce safely. They are all exposed to the adult bees, which can eliminate these parasites by grooming. When this does not happen, which may be the case

when the fall brood nests contain too much empty comb, or when fall feedings stimulate egg-laying, for example, the brood nests become mite nurseries, the emerging bees often display signs of viral infections, and the colonies subsequently suffer or fail. Also, because they have no brood to take care of, the bees do not have to produce much heat. Therefore, the colonies consume very little honey at this time of year.

Visits to the apiaries are limited to the inspections of the exteriors of the hives, of the monitoring trays, which show signs of what is happening inside the hives, and occasionally of the flight paths, when bees can break away from their clusters. At times, placing an ear against the side of a hive can reassure us that the bees are there, humming softly. To avoid agitating the bees needlessly, the hives are left undisturbed.

This gives us the time to take care of our tools and equipment, which amounts to cleaning, repairing and assembling hive components in preparation for next spring.

Reviewing our notes from the previous beekeeping season is also of great value, as much can be learned from them. This was another year in a series of challenging ones. The persistent drought drastically reduced the amount of nectar and pollen that was available to the bees, especially in the interior valleys and hills, where the colonies do not have access to irrigated plants. Not all the colonies can handle these tough conditions. But there is a silver lining: In this case, we have an opportunity to develop locally adapted populations that fare well in spite of the dire situation. Yet, this can only happen if we do not interfere with the process of natural selection that is relentlessly taking place, and if beekeepers do not bring in bees from outside our immediate areas.

In summary, this month:

- Inspect the exterior condition of the hives:
 - Hive tops should be properly set and secured.
 - Observe the hive entrances and the ground in front of the hives.
 - Verify that the hive entrances remain unobstructed.
 - On nice days, observe the flight paths and the bee activity at the entrances.
- Examine monitoring trays. The clusters should remain centered in order to maintain access to their stores. Correct such conditions, if necessary.
- Verify that mice have not entered hives (telltale clues of their presence are visible on the monitoring trays, as coarse pieces of comb, mouse feces, etc.).
- Ensure that the hives are adequately ventilated.
- Clean and torch tools and equipment.
- Scrub your smoker.
- Repair and build beekeeping equipment.
- Review notes from the year.
- Plan next season (evaluate the need for equipment and bees).
- Read and learn more about bees and beekeeping (Is there anything else to read?)
- Enjoy some honey

Happy Holidays to all of you from the Labesques!

Bee Plant Of The Month

by Randy Fox

Penstemon is a genus consisting of approximately 275 species. They are native perennials, and their range stretches throughout North America. Some grow tall and look great in the middle of the border, while others have a short and spreading growth habit lending them to rock gardens.

Their flowers can be white, blue, violet and other shades of purple, red and hot pink. Penstemons bloom in early spring, and their foliage makes a good backdrop for other plants with later blooming flowers. They attract honey bees as well as other native blue bees, several different species of bumblebees, and on the cultivars with red flowers, hummingbirds.

The pollinators are drawn to *Penstemons'* tubular or funnel shaped flowers, depending upon the species. The flowers provide the flying insect a kind of runway on which to land and drink the nectar. *Penstemon* is a popular garden ornamental as well as an interesting plant to examine in its native habitats. Its common name, beardtongue, comes from the bearded staminode found in most species.

Floral colors include white, yellow (rare), blue, violet, purple, pink, magenta, and red. Corollas can be tubular or funnel shaped. The flowers are pollinated by bees, wasps, moths, butterflies, flies, and hummingbirds.

Penstemon is growing in popularity for gardeners around the world. Given the proper conditions, it will flourish with little care. For us in the American western regions the choice of native plants amenable to most garden situations is large.

Some penstemons are suited to some garden settings, but not others (e.g., border vs. rock garden). The following paragraphs are from the American *Penstemon* Society Manual for Beginners:

Penstemons like 10 to 40 inches of rainfall without added water! They can tolerate a little water to get established. After that leave them alone! They actually like dry summers and generally arid conditions. They do not tolerate garden conditions well. Most do great with sages, buckwheats and other dry loving plants. Penstemons are not good for coastal areas or areas with high rainfall or humidity.



The shape and color of penstemon flowers are the result of adaptations to attract pollinators. Diverse flower types reflect differences in animal pollinators. For about four-fifths of penstemon species (the ones with white, blue, or purple flowers), the principal pollinators are bees and wasps. The remaining fifth of penstemon species have red or pink flowers adapted to hummingbird pollination, with some of these also retaining the bees as co-pollinators.

What Could Possibly Go Wrong?

by Anon E. Muss

Once upon a time in the little red honey house, our novice beekeeper was harvesting honey. As the extraction was taking place he was pondering how a group of bees, with a single bee that weighs no more than a regular M&M, can bring back to the hive pounds of nectar. The nectar contains 50% water, which the bees have to reduce to 18% before capping. He deduced that in 100 pounds of honey, 18 pounds are water. How much water was evaporated? How

many pounds of nectar were needed to make 100 pounds of honey? How many bees does it take to do this? How many miles do they fly? How fast can they remove the moisture? Oh, before they collect nectar for the super, comb has to be built. How fast can they build comb? How much honey do the bees need to eat to make enough wax to fill the frames in a super? As his mind was spinning and grinding gears trying to answer these questions, his eyes noticed a puddle forming around the extractor. Oh NO!! The gate valve wasn't closed!

What did go wrong? Not getting properly prepared. How does one ensure this doesn't happen again? In the culinary world, heavily dominated by French terms, we find the practice of 'mise en place'. Mise en place is a French phrase which means "putting in place" as in, set up everything you need for the task at hand before you start the process. In the aviation world this is called a check list.

Drippings From the Extractor

by Dave Stocks

As another year draws to a close, it's hard to imagine that this is the twenty-fourth edition of the re-birth of "*The Buzzz*". As much as I have enjoyed writing it, it would not have been possible without all the great contributions from so many. As a result, many new friendships have been forged and for that I am most thankful.

Our December meeting is another opportunity for us to do what we do so well-eat!! This month's meeting will be our annual Christmas dinner. It will be held at the Pitt's residence and will begin at 7:00 pm. The GBA will furnish Honey Baked Ham and a very special potato dish, soft drinks and water.

If your last name starts with A-M please bring a side dish that can serve 8, N-Z please bring a dessert that serves 8. RSVPs are requested. Please e-mail Wayne Pitts at kingbee@uvasgold.com.

Just a friendly reminder - 2015 Association membership dues of \$20 are due. We will gladly accept payment at the December meeting.

The on-going debate about the cause of colony collapse disorder (CCD) reminds me of the story about the poor lady who owned a row boat. It was a beautiful boat, made of highly shellacked mahogany, that could seat four. As coincidence would have it, the women's name was Avis. She loved to row along the shore of the lake and gaze at the many beautiful flowers that grew there and the thousands of pollinators that visited. She especially liked the peace and quiet. One day a stranger arrived at the lakeside and asked if Avis would row him around the lake. As coincidence would have it, the stranger's name was Desy. Avis quickly noted that things were not the same, but being the strong, persistent individual that she was, she happily rowed on. Shortly thereafter, another stranger arrived at the lakeside and asked if he too could be rowed around the lake. As coincidence would have it, his name was Patty. Not wanting to insult him, Avis agreed. Immediately Avis again recognized that things again had changed, but being the strong, persistent individual that she was, she rowed on. As Avis rowed on, yet another stranger appeared on the shore begging for a ride. As coincidence would have it, his name was Voris. Reluctantly Avis agreed, knowing that her boat would be at its maximum capacity. Immediately Avis realized that things would never be the same. The poor boat sat

low in the water and Avis struggled to row, but being the strong, persistent individual that that she was, she struggled on. Without warning, a fifth stranger, without saying a word, jumped in the boat. As coincidence would have it, his name was Trixie. The boat sank!

So how does this story relate to bees? I feel it closely mimics the struggle that honey bees have experienced over the last century or so. As you might have guessed, Avis's real name is *Apis mellifera*. Almost from the beginning, the honey bee has been exposed to an array of diseases (Desy). Nosema, chalkbrood, American Foulbrood and other have taken their toll. Fortunately, through management and in some cases treatment, these diseases are controllable. For the last eighty years or so the honey bee has been exposed to agricultural chemicals (Patty) The list is endless: DDT, malathion, parathion, organophosphates and now neonicotinoids. Yet through all the years, somehow the honey bee has survived.

In the 1980's Varroa arrived (Voris). Thousands of hives were decimated. As an immediate reaction beekeepers and the scientific community begin to develop chemicals for Varroa control (Trixie). Succeeding chemicals have resulted in the breeding of super mites as well as lethal levels of the chemicals in hives .

So what are we going to do to get the fifth person out of the boat? With management practices we can control disease. As much as we might like too, I don't think we will ever be able to eliminate agricultural chemical. Their use is too entrenched in our way of life. We can, however, advocate for their proper use. Likewise, varroa is here to stay. How we deal with the varroa might be our chance to save the bees.

As an alternative to treating, there is a growing trend towards breeding bees with the genetic behavior to control mites. Grass roots groups in Arizona, California, Washington and the Midwest are choosing queens with good hygienic behavior- the ability to recognize the mite in a capped cell and remove it. Beekeepers in New Zealand, which does not allow the use of chemicals, have had great success in controlling disease. Why can't it work for varroa also? A complete discussion of the topic is for people with far more knowledge than I. I encourage everyone research the idea. The internet is full of information. Maybe we can refloat the boat!

Pollinator of the Month

When we think of most bees, we visualize honey bees, bumble bees and others flying throughout the garden, visiting many different plants. It would be easy to imagine the over 1600 species of native bees in California doing the same. However, nature is not that general. In fact some native bees visit only a handful of different flower varieties and some only a single genus. One such bee is *Andrena limnanthis*



Andrena bee on meadowfoam. (Photo by Kathy Keatley Garvey)

Andrena limnanthis is a small solitary bee that only visits members of the Genus *Limnanthus*. The most common member, *Limnanthus douglassi* also known as Common Meadow Foam, is only found at the edge of vernal pools. Vernal pools are depressions in areas



California Vernal Pool

where a hard underground layer prevents rainwater from draining downward into the subsoils. When rain fills the pools in the winter and spring, the water collects and remains in the

depressions. In the springtime the water gradually evaporates away until the pools become completely dry in the summer and fall. Vernal pools can be found throughout the Central Valley and Coast Range.

The *Andrena* bee makes its home in the ground at the edges of these pools. It is only active during the months when the pools have water. The rest of the year they remain in hibernation. *Andrena* bees, like vernal pool, have been greatly impacted by man. In 2005 a USDA Technical Report estimated that 90% of vernal pools have been lost.

It is my assumption that beekeepers have an interest in pollinators in general. Like the *Andrena limnanthus*, many of our native pollinators are in distress. A perfect example is the Monarch butterfly. The Monarch is currently in its southern migration. The Xerces Society is looking for volunteers to count them. If you're interested, please go to <http://westernmonarchcount.org/> for information on volunteering.

Questions From The Mailbag

by Wayne Pitts

This month we introduce a new feature to The Buzzz. If you have a question about beekeeping, please send it to Wayne at presidentGBA@uvasgold.com

How do I protect my frames with comb from wax moths?

If you have freezer space, freeze the frames for a minimum of 24 hours. On removal allow to warm to room temperature and the moisture to evaporate. A fan blowing air over them helps with the evaporation. Then tightly seal the frames in a heavy duty plastic bag. If you don't have access to a freezer, use a top cover as the bottom board, place the appropriate size hive body on the upside down top cover. Add frames and boxes until all of the frames are hanging in the stack of box(es). Get moth balls, but be sure they are paradichlorobenzene. Place about an ounce or two in a glass container on top of the frames. Add an empty box and top cover to seal. Check every couple of weeks and refresh as necessary. When spring is about to arrive, unstack the boxes and turn them on their side with the frames vertical to air out. Do this in a covered but open to fresh air area. In three weeks they are ready to put on a hive. Paradichlorobenzene sublimates very easily at room temperature, which is why it will be removed from the airing of the frames.

How do I treat my bees for varroa using oxalic acid?

Oxalic acid is an organic acid used extensively in Europe for treating for mites. It has not been approved in the USA as of yet, but it is also a wood bleach. It is legal to bleach your frames with bees attached. Randy Oliver has a couple of excellent articles about how oxalic acid works, when to use, how to mix and how to apply. Start at:

<http://scientificbeekeeping.com/oxalic-acid-questions-answers-and-more-questions-part-1-of-2-parts>

Calendar of Events

Meetings

December 1, 2014

Santa Clara Valley Beekeepers Guild
6:15 pm
1292 Minnesota Ave.
San Jose, CA
<http://beeguild.org/>

Dec. 2, 2014

Gilroy Beekeepers Association
7:00 pm
Wayne Pitts Residence
110 Bella Vista Ln.
Watsonville, CA
<http://www.uvasgold.com/gba/>

December 3, 2014

Santa Cruz Beekeepers Guild
6:30 pm
El Rio Mobile Home Park
2120 N. Pacific Ave.
Santa Cruz, CA
<http://santacruzbees.com>

December 4, 2014

Beekeepers Guild of San Mateo
7:00 pm
1106 Alameda de Pulgas
Belmont, CA
<http://www.sanmateobeeguild.org/>

December 6, 2014

Monterey Bay Beekeepers
8:00 am
2450 N. Fremont St
Monterey, CA
<http://www.montereybaybeekeepers.org/>

Conferences

January 6-10, 2014

American Honey Producers Association
Annual Conference
Manhattan Beach, CA
<http://americanhoneyproducers.org/>