President’s Message, Amy Hustead

Well, what an “interesting” year. Most people I have talked to are seeing a very poor honey harvest. For the first time ever I am harvesting no honey at all from my home apiary. I did have a few frames marked for harvest, but the honey was eaten during the week of the Jones Bar fire. The star thistle is blooming and I hope the bees can get enough nectar to rebuild their stores. I am planning on feeding most of my colonies for the remainder of the month. Count yourself among the lucky if you are getting a honey harvest this year.

You should be seeing a lot of yellow pollen coming in from the star thistle right now. If your colonies pollen stores are low, you can supplement them by feeding pollen substitute. This can be purchased in wet or dry from A to Z. If feeding wet pollen, place the pollen patty above the brood nest.

Nutrition is key to a strong, healthy hive.

September 7th Meeting – On Zoom

Due to current events the upcoming regular meeting will be hosted on Zoom. Members will be notified by email of the link to the meeting.

Bee Bits
Submitted by Randy Oliver

What a bummer to have the Fair canceled. I’ve been deeply involved in setting up and running the bee booth since we built it in 1980. The Fair was our annual chance to all get together as a community, something that we could have used in these divisive times. But it was a wise decision to cancel, since we’ve now seen how much virus transmission takes place at such events. Our county is still only beginning to experience the epidemic, and it will likely be a long time before we reach the herd immunity necessary to slow down transmission.

We went into August with low expectations, due to the poor nectar flows earlier in the season. The ground was dry, and the late-blooming yellow star thistle appeared to be struggling. We set up 144 hives for a comparative trial of the pollen subs on the market, assuming that they wouldn’t be seeing much natural pollen and nectar coming in.

As it turns out, in mid August, when the temperature started hitting the mid 90s, star thistle did what it used to do in “the old days” – it responded to the high temps by pumping out pollen and nectar. To our amazement, in several areas, the blossom size increased, and the bees lingered on the flowers, indicating that they were finding nectar. Colonies started “shaking nectar” and we saw full frames of fresh bee bread (consisting of both yellow and orange pollen). The colonies responded by ramping up brood rearing. The honey produced was not straight thistle, but was mixed with something else – what I don’t know. By late August, the flow tapered off.

What with our “new normal” of a warming climate, coupled with lightning, our native vegetation did what it has evolved to do – burn regularly. When the fire hit, we evacuated three yards of bees from the mandatory evacuation areas – yards that were just ahead of the fire. An escort by animal control officer was required. We Californians are going to need to adapt to more frequent fires.
We weed whack and rake all of our apiaries, so that there is a fire break around the hives.

Water for our bees has become an issue, and we’ve needed to move all the hives out of a number of our apiaries when neighbors complained that our thirsty bees were a nuisance around water sources on their properties. We’ve been experimenting with water source design, trying to figure out how to create watering holes that will draw the bees away from the neighbors:

I’m building small ponds as water sources, but find that it’s really difficult to create one that the bees prefer over what the neighbors have to offer.
Mite management
If you want your colonies to survive winter, you need to get varroa under control NOW!
We recently completed a test of summer mite treatments, involving 260 hives. We tested Hopguard 3, Formic Pro (applied either as 1 strip repeated at 10 days, or 2 strips applied at the same time), and three different amounts of experimental oxalic acid/glycerin treatments. Many beekeepers are afraid to use formic acid during hot weather, so we intentionally applied the Formic Pro at temperatures in the low to mid 90s.

I’ll be happy to show the results in a Zoom meeting, but here’s the short version. Hopguard 3 was unfortunately disappointing. The repeated 1-strip of Formic Pro knocked the mites back quickly, with no more queen loss than took place in the Controls, but the results were inconsistent in one yard. The 2 strips of Formic Pro treatment gave somewhat better results, but there was a bit more queen loss.

The best mite control was obtained with Swedish sponges soaked in 1:1 oxalic acid in glycerin, with 50 g total OA per sponge. Unfortunately, this is still an experimental treatment, and not yet approved for use (I have a permit). We’re running additional tests of OA/gly at different doses.

We didn’t test Apiguard gel in this trial, but already know that it is highly effective in late August, when applied at 50g in a 1½ inch rim, repeated at 10 days.

You may have heard of using “thermal treatment” to control varroa. By using a device to hold the interior of the hive to 106°F for 2½ hours, the claim is that it will kill the mites. I’m currently testing that claim on four hives. Twenty-four hours after treatment, I dissect brood cells to see what proportion of mites have been killed:

The pupae and propupae in the foreground were removed from the drone cells above. Nearly every mite was vigorously running around. So far, the evidence is not supporting the claim that thermal treatment is effective at killing mites. I still have more follow up mite counts to make at 15 and 30 days post treatment.
More on Mite Control
Submitted by Janet Brisson

You know me, I am the one who uses powdered sugar to lower mite counts. I avoid chemicals because of the potential dangers to me and my family (wearing a respirator is scary), it could be hard on our bees and it gets expensive. I have been doing it a long time, 15 years now. But at 68, these hives are becoming heavy and dusting with powdered sugar is becoming more intensive. And I am getting very tired. We really got hit hard by mites again this year. I was dusting two times a week for 3 weeks and then skipping a couple of weeks only to have the mite counts soar again, then doing the whole three weeks again, trying to keep the mites loads down.

Randy Oliver’s experiments with Oxalic Acid and Shop towels, look easy and safe to use once he gets FDA approval. Until this process is approved, I tried doing a brood break, removing the queen from my most infested hive. I put the queen in a nuc with a frame of brood and honey. Randy did not have any available queen cells, so I let that hive make its own queen. That was a huge hive, 3 medium brood boxes and two almost filled honey supers and plenty of eggs. It was successful, but it was a lot of work. Being home because of Covid-19 allowed me to be very intensive this year, but I am not sure I want to do this again. I took my mite counts yesterday and had very few mites on all our hives. But it is clear that can change again in a month.

Someone on our Nevada County Facebook page posted this Forbes Magazine article, about a 17-year-old Connecticut high school graduate, Raina Jain, who attended a science symposium in May 2018 and got to hear my good friend Sammy, (Dr. Samuel Ramsey), talk about Varroa Mites. This inspired her to meet up with him and invent an entry way into hives that was impregnated with Thymol. As the bees enter the hive, they received a small dose of Thymol that reduced the mite population by 70% and did not hurt the bees nor get into the honey or wax.

Raina Jain, who is now attending University of Connecticut, has applied for a patent, has her own website, HiveGuard, and is setting up testing sites all over the United States. I will give you three guesses as to who will be testing her invention in California. You only need one guess, our very own Randy Oliver. I am looking forward to this product hitting the market. This would be something I am willing to use, it sounds easy and safe. I am sure Randy will keep us informed.
### Classifieds

**Honey Extraction House**
A to Z Supply has a honey extraction house available for rent. Equipment is provided and the room is heated and there's lots of hot water for cleanup. For more information: 530.273.6608

**Amy Hustead, Bear River Bees**
Consultations, Swarm Removal
One on One Mentoring
**530.613.7171**
BearRiverBees@gmail.com

**Spring Nucs — taking orders now**
Available for pickup in Napa or Waterford in late April. For more information on bulk orders, deliveries and pricing please visit [https://abeeprovisions.com/](https://abeeprovisions.com/)

<table>
<thead>
<tr>
<th>June 2020</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning Balance</td>
<td>$4565.22</td>
</tr>
<tr>
<td>Deposits</td>
<td>299.77</td>
</tr>
<tr>
<td>Sub Total</td>
<td>$4864.99</td>
</tr>
<tr>
<td>Debits</td>
<td>(328.96)</td>
</tr>
<tr>
<td>Total R/C 8/27/20</td>
<td>$4536.03</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>July 2020</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning Balance</td>
<td>$4536.03</td>
</tr>
<tr>
<td>Deposits</td>
<td>20.00</td>
</tr>
<tr>
<td>Sub Total</td>
<td>$4556.03</td>
</tr>
<tr>
<td>Debits</td>
<td>362.72</td>
</tr>
<tr>
<td>Total R/C 8/27/20</td>
<td>$4437.61</td>
</tr>
</tbody>
</table>

Advertising space (3” by 2”) is available here and need not be bee-related.

Advertising rates are $7 per year for NCBA members and $16 per year for non-members.
The Nevada County Beekeepers Association is dedicated to apiculture education and promotion of the art and science of beekeeping among beekeepers, agriculturists, and the general public. This is a “not for profit” organization. Donations are welcomed.

Meetings are held the first Monday of each month at 7 PM at the Grass Valley Veteran’s Memorial Building at 255 South Auburn Street in Grass Valley. All visitors are welcome. Use the back entrance.

The newsletter is published monthly as a service to the membership. Articles, recipes, commentary, and news items are welcomed and encouraged. Contributions should be received by the 20th of the Month to be included into the next issue. Submit to garyg@newpress.com

Advertising space (3” by 2”) in this newsletter is usually available and need not be bee-related. Advertising rates are $7 per year for NCBA members and $16 per year for non-members. Please email Janet Brisson at rubes@countryrubes.com

Nevada County Beekeepers Association
www.nevadacountybeekeepers.org

c/o Janet Brisson
20693 Dog Bar Road
Grass Valley, CA 95949
First Class Mail

All area codes are 530 unless noted otherwise.