Clinch Valley Beekeepers Association Newsletter

Next Meeting: August 18, 2022 Treadway Fire Hall 189 Hwy 131 Treadway, TN 37881 CVBA Newsletter Volume 13, Number 7 August 1, 2022 Candy Halford, Editor

Email: cvbanewsletter@gmail.com

Speaker: To Be Announced

Food Theme is POTLUCK!

Upcoming Events:

It is time to begin thinking about the festivals upcoming in October. Can you help us with our booth? We usually attend 3: Sneedville (begins first Saturday in October), Rogersville (begins 2nd Saturday in October), and Morristown (begins the last Saturday in October).

Also, please begin to think about taking an Office in our club. Officers of the club for the October election will be President, Vice-President, Secretary (Candy is not able to take it back.) Treasurer, and Librarian. If you have a nominee, please fill out the form or let a current officer know so they can fill one out for you. Nomination forms and a nomination box will be provided for the August meeting.

Notes from the last meeting:

Clinch Valley Beekeepers Association had their Annual Fellowship Picnic in July. Thank you to everyone who came, enjoyed, and cleaned up!

Beekeeper's Calendar:

August-Other than keeping an eye on things and completing mite treatments by the 15th there isn't a lot to do this month. Hive populations fall off. Robbing continues with any nectar source getting mobbed by out of work foragers.

Bee Funny: (answer on last page) Why did the honeybee go to jail?

Club News:

Support:

T-shirts are available Small, Medium, Large, XL sizes \$10 and XXL and larger sizes are \$12

Hats are \$8

Cookbooks are \$10.

These can be purchased at any regular bee meeting; they are in the building onsite.



Membership:

CVBA dues: Renewal Dues become payable January 1st of each year. Dues are not pro-rated.

Single membership \$10; Family (one vote per family) \$15; Youth Single (No vote) \$5.

Please see the club Secretary, to pay your dues at any meeting. Checks should be made payable to CVBA. Please let us know if any of your information has changed. You can mail checks to the Secretary and address on the last page.

Bee Insights:

(adapted from: carolinahoneybees.com August 1, 2022)



Beekeepers Want Fat Bees for Winter

Nature has given honey bees strategies to survive the cold months. But things can and do go wrong One strategy beekeepers use to help increase survival rates is to concentrate on honey bee health. Making sure the hive is full of fat bees for Winter is an important

goal. But we are not talking about the size of the bee – rather the size of the fat bodies inside.

Healthy Fat Bees Increase Winter Survival

First, let's think about next Spring. The bee colony starts preparing for Spring much earlier than humans. They do not go into hibernation but just become less active.

The calendar may say we have a few more months of Winter. But, inside the hive, worker bees are already raising babies. Unless, these nurse bees are fat and healthy, they cannot do a good job of feeding the developing young.

Perhaps, only a small amount of bee brood is present but the cycle has begun. It may be late January with snow on the ground and cold winds blowing, but the beehive is full of life.

And that's a very good thing. Our hives need a population of new baby bees in the works. Spring is coming. The Spring workforce needs weeks to mature before they are able to take advantage of the early bloom.

Life inside the Winter Beehive

Honey bees (Apis mellifera) overwinter as a colony-while in many other bee families (like the Bumble bee species) only the mated queen lives until Spring.

In late Fall-Winter, fewer eggs are laid by most queens. Brood rearing is greatly reduced and many queen bees will cease egg production for several weeks.

Honey bees do not do very much during Winter-in regions with cold weather. The honey bee is an insect that is cold-blooded. They are not very active when the temperatures fall into the lower 50's F. The colony survives throughout the cold months by clustering together inside the hive and eating some of their stored honey. This important food storage will also be used to raise that first generation of new bees.

Good Winter survival depends on plentiful stores of food, a good population of bees and the right kind of bees. Healthy fat bees give the colony its best chance for survival.



Otherwise, the colony would fail before enough new bees emerge to sustain the colony. By mid-Winter on the calendar more older bees are reaching the end of their life cycle. Population growth must get under way before warm weather arrives.

Winter Bees vs Summer Bees

Winter bees are the female workers that are produced in late Fall and usually live until late Winter/early Spring. They can survive for 5 -6 months – an unusual old age for a worker. Winter Bees are different than Summer Bees. This is because the workers destined to live out the Winter months in the hive has a different set of duties.

Summer Workers

Female workers reared in the warm months of the year, only live about 6 weeks. The first 3 weeks are spent on duties inside the hive, the last 3 are spent foraging for food. And collecting all the resources needed by the colony.

Summer workers literally work themselves to death for the benefit of the colony. Wings become tattered and the fuzzy hairs wear off their bodies. These insects do not repair broken parts through cell repair. Once their bee body parts fail, they are finished.

Winter Workers

The tasks of Winter bees are not as focused on gathering food. Foraging outside the hive is not a major Winter task. Though they may fly out short distances on warm days. They can live up to 6 months spending most of their lives inside the hive.

They spend time tending to the queen bee and helping regulate hive temperatures. This is a vital task for the colony but does not wear out body parts as quickly. They also care for the brood to produce the new spring population.

Role of Fat Bodies in Honey Bee Health

Bees that live during Winter are physiologically different than those produced in Summer. Winter bees have enlarged fat bodies in their abdomens.

These fat bodies produce vitellogenin. Vitellogenin increases the lifespan of bees and boosts their immune systems. Bees with high levels of vitellogenin are better able to store protein reserves.

This enables the colony to begin brooding up (raising young) without as much pollen. A good thing if the colony is low on stored bee bread.

Nurse bees with large fat bodies are not required to eat as much pollen to produce food for the growing young. The quality of jelly fed to larva is determined by the vitellogenin levels of the nurse.

While checking your colony for honey stores in late Fall, also check the pollen stores. Likely the hive will have all the pollen they need. But it is a good idea to check.

Poor quality nurses are unable to provide sufficient food to new larva. This may result in the colony perishing before the end of Winter. This is yet another reason to get varroa mites well under control before Winter bees are produced.

Lack of healthy nurses to raise healthy fat winter bees is not something that can be put off until Fall. Be proactive. If varroa are a problem in your hives, treat early. Waiting until late Fall may kill the varroa on the bees.

However, the damage has already been done and you may be going into Winter with skinny bees. Ensuring your colonies are healthy and full of the right kind of bees is as important as other tactics of winterizing your hives. With proper planning, Winter beekeeping tasks should be minimal.



FAQs

What are Winter bees called?

The technical term for winter bees is "diutinus". This term applies not only to honey bees but other types as well. These are colony members that are capable of surviving long past the normal life span of the species.

How are Winter bees different than Summer bees?

Honey bees produced in the late season have larger fat bodies in their abdomen. They are capable of living all through the long Winter until early Spring.

When are Winter bees born?

The production of winter bees takes place during the last few brood cycles of the year. (September-October) The exact time will vary somewhat depending on your climate.

How long do fat Winter bees live?

Bees produced for the Winter hive can live up to 5 or 6 months. But, the important fat bodies located inside the abdomen will shrink once brood feeding begins.

The health and lifespan of your winter bees can be affected by nutrition deficiencies and heavy varroa infestations. Studies have found that colonies with varroa mite infestations do not fully develop into typical long-lived Winter bees.

Can bees get obese?

The fat bodies located inside the body of a honey bee is much different than what we perceive as being overweight. These important anatomical structures store fat and nutrients that help the colony make it through Winter.



Recipe of the month:



20 Minute Honey Garlic Shrimp

 $(adapted\ from\ https://sallysbakingaddiction.com/quick-healthy-dinner-20-minute-honey-garlic-shrimp/\}$

Prep Time: 15 minutes Cook Time: 5 minutes Total Time: 20 minutes

Yield: serves 4

1/3 cup honey

1/4 cup soy sauce (we usually use reduced sodium)

2 garlic cloves, minced (or 1 Tablespoon jarred minced garlic)

optional: 1 teaspoon minced fresh ginger

1 lb medium uncooked shrimp, peeled & deveined

2 teaspoons olive oil

optional for garnish: chopped green onion

Whisk the honey, soy sauce, garlic, and ginger (if using) together in a medium bowl. You will use half for the marinade in step 2 and half for cooking the shrimp in step 3.

Place shrimp in a large sealable container or zipped-top bag. Pour 1/2 of the marinade/sauce mixture on top, give it all a shake or stir, then allow shrimp to marinate in the refrigerator for 15 minutes or for up to 8-12 hours. Cover and refrigerate the rest of the marinade for step 3. (Time-saving tip: while the shrimp is marinating, we usually steam broccoli and microwave some quick brown rice.)

Heat olive oil in a skillet over medium-high heat. Place shrimp in the skillet. (Discard used marinade.) Cook shrimp on one side until pink, about 45 seconds, then flip shrimp over. Pour in remaining marinade/sauce and cook it all until shrimp is cooked through, about 1-2 more minutes.

Serve shrimp with cooked marinade sauce and a garnish of green onion. The sauce is excellent on brown rice and steamed vegetables on the side.

Notes

Thicken the sauce? Some readers add 1 teaspoon of cornstarch to the second half of the sauce that will be used for cooking in step 3. This thickens the sauce so it isn't as watery. To do this, use a fork to mix 1 teaspoon of cornstarch with 1 teaspoon warm water. Once cornstarch has dissolved, stir this into the sauce before using it in step 3.

Garlic: If using fresh garlic that you mince yourself, use 2 cloves which is about 2 teaspoons minced. If using refrigerated jarred minced garlic, use 1 Tablespoon.

Shrimp: You can remove the tail or leave it on. We recommend using fresh shrimp, but you can use frozen. Thaw before marinating and cooking. If using frozen cooked shrimp, thaw, marinate, and cook as directed. You'll really just be heating the shrimp up in the sauce.

Consuming leftover marinade is a debated topic. While you could boil it to rid any contamination, the flavor could possibly change. Do what you'd like. In this recipe we only use half of the sauce for the marinade, so we have more for cooking. (We discard the used marinade in step 3.)



CVBA Board of Directors and Officers:

President: Lloyd "Jr" Snelson 432-626-5538 Cell 423-526-7742

Vice President: David Sams 423-693-6846 Board Members: Tim Andrews 423-272-5492 Bobbi Smith 865-360-7373

Secretary: Candy Halford 865-310-0120 Treasurer: Lynda Eskola 423-733-2017

Bee Inspectors for CVBA:

Claiborne County: Lloyd "Junior" Snelson 423-626-5538 Debbie Clayton 865-310-2421 Bill Clayton 423-626-8786

Club Addresses:

CVBA President Lloyd "Jr." Snelson PO Box 736 Sneedville, TN 37869 CVBA Secretary Candy Halford 188 Davis Road Luttrell, TN 37779

CVBA encourages each person to further their education by reading books, checking out various websites, and watching the videos that are available on bees and beekeeping. We also encourage everyone to have a mentor, especially if you are new to beekeeping. If you need a mentor, please let Jr. Snelson or David Sams know at the next meeting and they will try to find one.

Remember all apiaries must be registered with the State of TN. Forms are available at the meeting or they can be downloaded from the internet. https://www.tn.gov/agriculture/businesses/bees/forms.html



Answer to Bee Funny- She was caught robbing.

