



The

July 2010

BUZZWORD

West Sound Beekeepers Association <http://www.westsoundbees.org/>

Proudly serving bees, their keepers, and the public in Kitsap County, WA

(Editor's note: The interactive newsletter is will premier this winter)

Refreshments
20 July, 2010 Meeting
Drinks: Unknown
Snacks: Unknown

Meeting Schedule:
Apprentice Beekeeping Class
6PM Tuesday 20 July 2010

Regular Meeting
7 PM Tuesday 20 July 2010

Steering Committee Meeting
7 PM Tuesday 03 Aug 2010

Queen Rearing Group
Meets after the Steering Committee

Meetings at Stedman's
Beekeeping Supplies in
Silverdale

Beekeeping Class
6 PM Tuesday July 20, 2010

Regular Meeting/Apiary Event
7 PM Tuesday July 20, 2010
Queen Cells handed out, 6-7 pm Stedmans
Apiary Event! Double nucs to be made up in our apiary!

July 24 Beginner's Field Day, Mite Detection
Saturday at Noon

What's inside: (Bonus: Kitsap Rainfall Map page 3)
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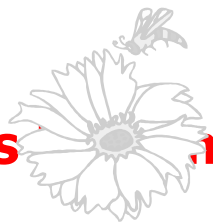
Conventions
Western Apicultural Society
Salem, Oregon
August 30 –September 2, 2010
[http://groups.ucanr.org/WAS/Conference Information/](http://groups.ucanr.org/WAS/Conference%20Information/)

Minutes from the June 15, 2010 WSBA meeting

Third Tuesday of each month at Stedman's, Silverdale, WA.
None Submitted

Minutes from July 6, 2010 Board of Trustees Meeting

Officers and Legacy Members – all welcome.
First Tuesday of each month at Stedman's, Silverdale, WA. Starting time 7:00 pm.
None submitted



Message From The President

No President

NorthWest Beekeeping Basics- July

July marks the end of the major nectar flow here in the West Sound. You should make your plans to remove your capped frames of honey from your supers and ready them for extraction.

The Association has an extractor available for member's use. You might want to consider asking another beekeeper to extract for you and save you the mess. But, there is certainly nothing quite as wonderful as the first of the honey from your own bees flowing from the extractor.

You should examine the supers frequently but don't leave empty comb on colonies that are light in stores in the brood nest. The best way to take off full supers is to use the triangular queen escapes. If you are taking your colonies up to the mountains for fireweed place a couple of empty, drawn supers above the brood boxes, place an escape board above those and replace the full, capped supers above the escape. Within two days the supers with honey should be empty of all bees. If you are not taking your bees to the mountains remove all supers by the end of July so that the bees can pack the brood boxes with any remaining honey that they gather to use for winter stores.

Don't tempt robber bees with exposed honey. When you remove your honey supers from the hive, keep them covered as you collect them. Not only will it make keeping the yellow jackets at bay a little easier, but also help prevent robbing from getting started. Once bees start robbing, it is very difficult to stop them robbing from other hives.

During July examine each colony every 10 days for queen-rightness. Use a sugar shake test to check for mite load. As always, be vigilant for signs of American Foulbrood. If you are planning on making nucs for late summer or fall requeening, order queens for July delivery. Requeening is a good management tool for failing hives or hives that have come down with mites or disease or hives with really bad temperament. Having nucs on hand will allow you to successfully requeen colonies late into the year if warranted.

HOW TO KNOW HOW TO LOOK FOR THE QUEEN BEE

WW. M'Neal, American Bee Journal 13th December 1900

Here is a little kink, dear reader, which I think may be worth your while to consider. It is in regard to finding a queen-bee easily and quickly when the hive is densely crowded with bees. When these conditions prevail, the queen's whereabouts may, to a very great extent, be determined by noting the position the ventilating bees occupy at the entrance to the hive.

I have not yet found it otherwise that when these bees were stationed at one side of the hive-entrance, the queen was not to be found upon the combs at the other. No doubt you have many times noticed that the bees upon the lighting-board, that are engaged in ventilating the hive, frequently change their position from that of one side of the entrance to that of the other side. Of course, when the entrance is small, not being the full width of the front of the hive, this becomes no longer a means of judging of "internal conditions by external signs".

If the hive contains nine frames, or ten frames, or possibly more, and these frames are self-spacing, it is a wonderful saving of time to be enabled to confine your search to half that number, with a reasonable degree of certainty of finding the queen upon one of the number you have selected.

THE BEEKEEPER'S HYMN

All things bright and beautiful, all creatures great and small,
All things wise and wonderful, the Lord God made them all.
But what we never mention; beekeepers know it's true,
Is when He made the goodies, He made the baddies too.
All things spray and swatable, disasters great and small,
All things we don't like - the Lord God made them all.
The EFB on the larvae, the big moth in the wax,
AFB that fills our noses, Nosema in the tracts.
The fungus causing Chalkbrood, the spraying on the beans,
The slugs inside the hives and earwigs on the screens.
The drought that kills the flowers, the frost that nips the buds,
The rain that washes out nectar, the deluge causing floods.
But still we beekeepers labour, throughout so many hours,
And pray what hits other apiaries will somehow bypass ours.

Stuart Ching

The Temperment of Bees By Judy Gunther

I love being married to a beekeeper. I have learned many things that a non-beekeeper would have no idea about. Beekeeping is not as easy as it might appear. There is so much more involved than just enjoying fresh, organic, honey. Because of the many diseases and other complications involved with beekeeping, it can be difficult just keeping your colonies alive. But if you ask any beekeeper, they will all agree that it is worth it.

Another interesting thing about bees is that each colony has its own temperment. Knowing the temperment of the bees not only can make your enjoyment of beekeeping better, but can influence how your neighbors feel about bees. It is important to classify the bees temperment because public opinion matters.

Extremely gentle:



The Extremely Gentle bees don't bother defending themselves against anything. If you accidentally drop the frame, they don't get upset. When you open up the hive and are looking at a frame, the Queen isn't nervous, she doesn't even notice. It is just business as usual.

Because the bees like to keep their hive at a comfortable 98 degrees they don't like it when you lift the lid and let all the heat out. That is why warm sunny days are optimal. But, with the extremely gentle bees, they are not as offended when you lift their hive on a cloudy day. They don't seem to even notice, let alone consider stinging you.

Normal gentle:

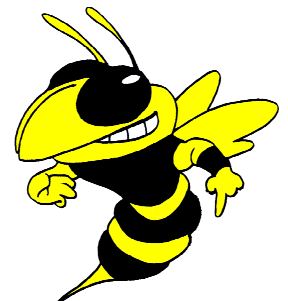
The Normal Gentle hive you have to treat with a certain amount of respect. They too are not bothered if you work them when the conditions are not ideal. Because bees don't like it when you move around too quickly, they prefer to give you a "warning nudge" rather than sting you. They are training you on how to move. Bees have a very good memory and know if you have been to their hives before, banging and knocking things around. They don't like it.

It can be tricky when there is more than one person working the hive. If the first person that works the hive has gloves on, he might be a little more rough, since he can't really "feel" what he is doing. Then, the next person who isn't wearing gloves gets the revenge, because the first guy upset the bees with his rough handling. The bees remember the first guy. They think this new, "non-armored" person is him so the new guy is the one that gets the "retaliation sting."

Sporty:

The Sporty bees have more of an edge to their hive, and need to be treated with "kid gloves". You can still work them with bare hands, but make sure you don't agitate them. If one bee gets agitated, it becomes the "ring leader" and gets the others to join in.

When you lift off the lid there can be a slight feeling of apprehension. The bees are more aware and are keeping an eye on you. The bees on top of the frame have a more "spirited" step. Their bodies are held aloft and alert. Their wings are flexed, ready to be used shortly. If a shadow passes over the sun, or there is a puff of cold wind, their stingers will come out. This is when you give them a puff of smoke to calm them down.



Instead of just enjoying time with your bees, your visit becomes a bit less relaxing. For whatever reason you have opened the hive, you need to take care of it more quickly. Things can go south very fast. It can all hinge on a moment. If things aren't going your way, use more smoke. Sporty but still workable, you might take a few stings, but it will be ok. You might even find yourself putting off the task until later when it's a little warmer outside.

Defensive:

The Defensive bees are more alarming to work with. Definitely have a smoker going on maximum efficiency level before you even consider opening the hive. You might even be smoking yourself down a bit. You will definitely want to wear a veil and some type of bee jacket.

Many people wear a full suit and gloves. Even wearing a veil, you are careful how you breathe. The bees know that the carbon dioxide is coming from somewhere and that it needs to be investigated, or "attacked" right away.

If any bee shows an excited behavior, there is immediate back up. They have strong pheromones and are extremely reactive to them. For example, if you wave your hand, a dozen or more bees will be bumping, if not stinging, it.

You don't want to stand in front of the hive or they will sting you. If you get stung there is an alarm pheromone that goes off that is basically an invitation for the other bees to join in the fun.

All hives have guard bees in the front. They keep bees from other hives, or wasps, from trying to steal all of the good stuff (nectar, babies, and pollen.) Only the hives residents are allowed in, almost like a pass card. But, in the "defensive" hive, the guards step it up a few notches. They sit out front and look at everything with suspicion. If you enter "their zone" they might have a high pitch buzz and move with an agitating motion.

Downright Ornerly:



Practically impossible to work. When you take the lid off, half of the bees are trying to get out. It looks like a big cloud. If you wave your hand and they happen to be on it, they will try to sting you through the glove. The prepared beekeeper will use duct tape to cover any possibly entry. It is not uncommon to see the bottoms of pants legs that are already elasticized, have duct type wrapped around them, attached to the shoe. The smoker is usually oversized and two people are using it. One person to operate the smoker, the other one to do what needs to be done.

These bees will hold a grudge. If you work them one day, the next day they will be looking for you. You could be minding your own business walking on a path and one will sting you while the others join in, just to make sure you got the message. When you walk away from a hive like this, the bees will continue to pester you for unreasonable distances.

They are hellacious to work with, and they are a menace to neighbors, pets, and kids. Sometimes this temperment occurs when you don't want it, so you have to replace the queen. Since the lifespan of a bee is six weeks, that is how long it will take for the hive to change temperment.

Luckily this type of temperment isn't very common, unless the bees are Africanized. They have this kind in Panama and the bees have been known to follow a person for hundreds of feet.

People decide what kind of bee temperment they prefer by considering the area where the hive will be. If you have a hive in the mountains, it might be better to have "defensive" bees that will protect the hive from people or things that are trying to bother it. Since no one is around, and there aren't any neighbors, you don't have to worry about them attacking anybody. But defensive bees are not nearly as much fun as gentle bees.

Who wants to put on a hot sticky bee suit every time you work your bees? It is quite rewarding to commune with the bees, having them land on you. It is a different kind of communion when they land on you and sting you mercilessly, while your dog hides behind a stump quivering.

Beekeeping without a suit on is surprisingly a relaxing experience. But for the beekeeper who like to show off his beekeeping skills, the sporty bees are a nice compromise between terror and total Zen. Where we live, in "downtown" Indianola, we couldn't possibly have anything more than "gentle."

The Queenless Hive by George Purkett

There will be a time when you will get this question asked of you or you will be asking it yourself. I will lead you though how I would answer it in the comfort of my living room. No telling what I would do with it on any given day in my apiary.

Question:

I think my hive is queenless; what should I do?

Options:

- Do nothing and hope the bees work it out in time.
- Add a frame with eggs on it to the broodnest and then hope the bees work it out.
- Acquire a queen cell or virgin queen from a queen breeder in your area and put it into the hive.
- Get several queen cells from the queen breeder and break the hive into multiple mating nucs.
- Perform a shook swarm procedure to eliminate a laying worker.
- Purchase a mated queen and put her into the hive.
- Combine the hive with another queen right hive.
- Dismantle the hive and build up multiple other hives with the resources.

All of the above options have pros and cons, and some have advantages over others at different times of the season. Before choosing which option, you first need to accomplish a thorough hive inspection to determine the condition of the hive and then make an assessment of how to proceed. It can be discouraging to purchase a queen only to have the hive kill it during the introduction. And if the problem is disease rather than a failed queen, you can spread the disease. And if there will be no drones flying around, then making nucs is a wasted effort.

Inspection:

Before opening the hive, watch the bees at the entrance. The bees at the entrance will tend to be in disarray rather than working together as a group when queenless. Compare the entrance to another hive nearby if available.

When you first open the hive, a queenless hive will generally hum louder than a queen right hive. A hive that recently swarmed will generally not have the loud hum as they would be content with the queen cells. They will acquire the loud hum as their patience in waiting for a new queen makes them restless.

A suddenly failing queen does not affect the population much. A hive swarming is generally large even after the swarm. If the population is smaller than you would expect given the time of year and weather you should consider re-queening.

If it is a double deep hive with honey supers on top, remove the honey supers first making sure there is no brood in the honey supers. Most easily checked by tipping the super up and looking at the frames from beneath. Use smoke to move the bees out of the way. Also tip up the brood boxes in the same manor and look at the bottoms of the frames for queen cell activity. Do not damage any queen cells you find at this stage. After tipping up the bottom brood box, look at the bottom board. If it is covered in debris, set the brood chamber to the side for a moment and clean up the bottom board. Make a note of what you are scraping away. Be quick about this as returning foragers will be confused when looking for a hive entrance.

Put the brood chambers back in the same orientation and start your frame by frame inspection. A queenless hive is more defensive and reactionary to frames being removed for inspection. Move more slowly and use more smoke if the bees become severely agitated. Start the inspection by removing an easily removable frame, and then work both directions looking at both sides of each frame. Also check the corners and bottoms for queen cells paying attention to any clumps of bees. If you cannot see the surface of the frame because of the bees, gently blow on the bees and they will scatter. Or gently pat the backs of the bees and they will move for you. (do not pat them with thick gloves on or you will be crushing them accidentally). Once done going through the brood chambers, you can move quickly through the supers if you haven't found any assemblage of a brood chamber. If you have two or three brood boxes, make sure you look at both sides of each frame and make sure you check the bottoms of the frames for queen cells. You are looking for evidence of queen activity or no queen activity and anything else you may notice. If you find queen cells with larva intact or capped, mark the frames they are on. Do not damage them at this time.

In a queen right hive, you should find 4-8 frames of brood, both capped and uncapped worker larva and eggs around the uncapped brood. The surface of the brood areas should be relatively flat and even looking. Expect a small percent of the cells in the brood area to be empty. The queen, if present is generally walking around the area with the eggs. Outside of the eggs, you find a band of pollen, a band of nectar, and then honey above to fill in the corners. If this is what you find, you do not have a queenless hive. If you continue inspecting and find supersedure cells, swarm cells, easily agitated bees, divided brood areas, disease presence, or any other unwanted condition, then the hive is not queenless, but the queen should be a prime candidate for replacement.

As you look at each frame here is what you are looking for and what it should mean to you:

- capped worker brood...laying queen within the last 21 days.
- open worker larva...laying queen within the last 9 days.
- eggs ... laying queen within the last 3 days,
- eggs...multiple per cell on sides of cells...laying worker, queen missing for a long time.
- queen...does she look large and old, or young and virile. An old queen or a new queen?
- multiple queens...could be mother daughter pair, or multiple virgin queens. You will also find old queen cells.



Keep in mind, during a nectar dearth the queen may stop laying.

In a strong nectar flow, all cells may get filled with nectar and the queen may not be able to find cells to lay eggs in.

A productive queen should maintain at least 4 deep frames for a brood nest. If you find less than this, you should consider re-queening even if you find a queen.

- pollen stores...bees tend to keep some pollen stored to keep them through the rainy days. Usually a frame partially full on the outside of the brood chamber.
- nectar and honey...Do they have food to keep them from starving? is there nectar being brought in?
- Capped queen cells, open queen cells with larva present...swarm just occurred or is about to occur.
- Queen cells where the bottom was opened with a perfectly round hole...a virgin queen has emerged.
- No queen...you may easily miss seeing a queen, a virgin queen could be on a mating flight.
- Empty queen cells with hole in the side or partially torn down...virgin queen was removing the competition.
- Quantity of bees...Do you think this hive should have more population than it does?
- temperament of bees...Do they appear easily agitated or start running around on the frame when you have it in your hands.
- Smelly brood, AFB mummies...American Foul Brood.
- Spotty brood frames...beginnings of disease, failing queen, very high nectar flow.
- chewed up bees or crawling bees outside the hive...mite damage

Discussion:

What makes you think your hive is queenless? You have an opportunity at hand to learn a little bit more about your bees. Think about what you have or have not done recently to the hive to make you think it may be queenless. Do the bees think they are queenless. How much time, money and effort do you want to put forth? Maybe a pest, disease, the weather, or your expectation is the real problem and you queen is perfectly fine.

Time to consider the calendar. It takes 16 days for a queen to mature from an egg. The virgin queen takes 10-14 days to mature, mate and start laying eggs. The worker eggs take 21 days to mature into bees. If the hive has lots of brood, they can wait longer before they need a queen. If they have no brood, their need of a queen is more urgent.

Choosing Options:

- Do nothing and hope the bees work it out... **Page 6**

- (if nectar flow still going, and capped queen cells or virgin queen(s))
- Add a frame with eggs on it to the broodnest and then hope the bees work it out...
(If you want to know if they are queenless or not. A queenless hive will start growing queen cells. If they start to grow queen cells, you should probably get a queen or ripe queen cell to save some of the 26 - 30 day span without a laying queen.)
- Acquire a queen cell or virgin queen from a queen breeder in your area and put it into the hive...
- If you inadvertently scraped away all of your queen cells before realizing you are queenless, get several queen cells from the queen breeder and break the hive into multiple mating nucs.
Great times for this is just after end of the main honey flow, or one to two months before the main honey flow. This assumes you are trying to collect honey.
- Perform a shook swarm procedure to eliminate a laying worker .
Generally not a viable solution unless you have resources available from another hive. Works very well if you want to re-queen another hive, and use the old queen to save this hive. You need to increase your hive inspecting duties if you let a full size hive end up with a laying worker. It is more likely to occur in mating nucs where a queen was not successfully mated.
- Purchase a mated queen and put her into the hive...
Best if you find the old queen and her brood quantity or laying pattern in not adequate.
- Combine the hive with another queen right hive...
Best if near the beginning of the nectar flow where the other hive could use the boosted population. Also good late summer to build up colonies before winter.
- Dismantle the hive and build up multiple other hives with the resources...
viable anytime.

Rambling at the end

Keep in mind that a queen provides both eggs and pheromones to the hive. We beekeepers cannot smell the pheromones and we have difficulty seeing the eggs. We have to base the quality of the queen on the quality of the hive. If there is some trait that you do not like in your hive, replace the queen, give the new queen a couple months to replace the current queens offspring and evaluate the replacement. I hate to think if I am not satisfied with any of the queens, maybe the queens are not the problem.

George.

Queen Rearing group Update:

West Sound Beekeeping Association by David Mackovjak, Queen Rearing Group Leader

Purpose: The Queen Rearing group is to provide an opportunity for members of WSBA a venue to learn and explore the art of queen rearing.

2010 Goals for the Queen Rearing group of West Sound Beekeeping Association (WSBA):

- 1. Explore and document different physical methods of queen rearing**
- 2. Educate both the Queen Rearing group and the WSBA on queen rearing**
- 3. Provide quality queens to the Queen Rearing group and WSBA**
- 4. Investigate and conduct hygienic testing**
- 5. Explore drone management methods**
- 6. Invite at least two other local beekeeping associations to our queen rearing meeting**

A quick recap of last month's queen rearing. On Sunday 6 Jun, we had a number of training and demonstrations going on. The focus of this practical was to test several of the hives with hygienic testing based on Paul's class during the queen rearing meeting earlier in the week. We used the liquid nitrogen killed brood test (LNKB) to test three hives for



Paul Lundy demonstrating the liquid nitrogen method to check a hive's hygienic characteristics.

hygienic characteristics. A colony is hygienic if it completely removed at least 95% of the frozen pupae within 24 hours. None of the hives tested were considered hygienic. (See the Jun 2010 Buzzword for the complete study.)

George demonstrated a "smoker" which has unconfirmed reports that the mist has the ability to reduce veroa and trachea mites. Additionally Jason demonstrated how to check for American Foul Brood (AFB) and we found one hive which exhibited properties of this disease and the equipment was later destroyed.



Jason Deal handing out queen cells during the regular WSBA meeting.

And finally we grafted approx 90 queen cells. We used the Cloake board method to draw out the queen cells. Nine days later, during the regular club meeting we handed out these queen cells to WSBA members.

During the meeting we spent most of the time at the club's apiary. And as luck would have it (depending on your point of view) we got to discuss swarming and how to capture a swarm. One of our club hives had swarmed and the main swarm had decided to hold up in one of the large pine trees adjacent to the

apiary. This swarm was for the most part out of reach. However a second much smaller swarm was located right next to the shed and was perfect for a demonstration on how to capture a swarm. The entire event was captured on video but as of yet, National Geographic has not requested publishing rights. The demonstration did show everyone that everyone should be able to capture a swarm.



David Mackovjak capturing a swarm during the club's monthly meeting.

The queen rearing group met on 10 July to hold another grafting session. This was the smallest turnout this year most likely due to the fact that we didn't decide on holding this practical until after the 4th of July. We choose to use the Cloak Board method again since we have had good success with this method. Jason set up the hive on Friday and then the final manipulation of the hive was done on Saturday. (Refer to the April 10 Buzzword for discussion on Cloake Board Method.)



Cloake Board hive on the left



George looking for brood <24 hrs old



Stan carefully grafting the young larva



George showing his skill as a master grafter



Jason demonstrating good technique



Judy having fun grafting



Basil setting up the equipment to graft



David with 45 queen cups ready to be put in the hive

A good time was had by all. Everyone felt very comfortable grafting as this was our 4th practical. Practice makes perfect. We grafted approx 135 queen cells this time. It is our intent to set up approx 40 nucs for the new queen cells. The remaining queen cells will be distributed at our next WSBA meeting, on Jul 20th.

We are hoping that we will get several WSU queens this month. If so, the intent will be to graft their daughters next month and then set up several to over winter. I believe George has commented on this before on Yahoo Groups and may have also included an article in this month's buzzword; but this is the time to start thinking about how you are planning your Fall and Winter management. Are you going to requeen your hives this year in the Fall or Spring? Have you been happy w/ your hive's performance? Did they swarm? Are you looking to do splits? All these questions are predicated on you having a good quality queens. Just one more reason you should consider being part of the queen rearing group!

The Queen Rearing group is open to all members who are interested in learning about the art of queen rearing or would just like to learn more about bee keeping.

Thanks,

David Mackovjak
Queen Rearing group leader
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360-340-0381

West Sound Beekeepers Association

