

# The Amateur Beekeeper



### From the Editor

Varroa destructor is now a part of beekeeping in NSW. I almost can't believe I'm typing that.

After a very difficult 14 months or so, the attempt to eradicate Varroa has been abandoned and we are now moving to management. While I would be happier saying "we eradicated it" – don't despair too much. Varroa is not going to be the end of recreational beekeeping... it's just going to be different.

The rest of the world has been managing this pest with amateur beekeeping communities thriving. I can only hope we find the path through this quickly, identifying treatment regimes that work for our climate and beekeeping styles. While some treatments are approved and available from beekeeping stores now, there is much to learn. Education is coming; in the meantime we suggest you read up on what you can, and try to look at official sources, not opinions broadcast on social media.

Til next issue, keep on buzzing... Doug Purdie

### Varroa Updates

The Varroa emergency response continues in NSW. To keep yourself informed and up to date with the current situation, visit the DPI website: <a href="https://www.dpi.nsw.gov.au/varroa">https://www.dpi.nsw.gov.au/varroa</a>.

There is a recently released fact sheet on dealing with Varroa available from the <u>DPI here</u>.



### **Biosecurity Buzz with Mike Allerton, ABA Biosecurity Officer**

### Transition to Management

### What does that mean?

The Varroa Eradication Program ceased 19 September 2023. We are currently in the "Transition to Management" phase.

During this time the goal is to manage existing infestations and suppress the spread, while a national plan for our new reality is established.

Managing infestation is essentially reducing the mite count using miticide strips issued by the DPI to those in the Management Zone (Orange). Note that at this time, there are no other treatments approved. There are products currently undergoing the approvals process.

### Will I Euthanise My Bees?

For a time, Management Zone beekeepers have the option to euthanise their hives and receive the reimbursement. This is a personal choice. You may consider your hives are too heavily infested to restore to full strength.

All beekeepers are still required to do mite checks at least every 16 weeks and report the results within seven days. You are required to keep a time/date stamped photograph of each test for five years. We can now use soapy water for washes as an alternative to alcohol.

The requirements for moving hives in the Suppression Zone (Green) are essentially the same as for the previous Blue Zone.

Bees can't be moved out of the Management Zone. Properly prepared equipment can cross zones.

Please <u>CLICK HERE</u> for the latest details from the DPI website including the current order.

### **Education**

A part of the process will be beekeeper education. At this stage, we don't know what the Australian standard for Varroa management will be. That will be forthcoming during the transition phase.

Once the standard is established, the ABA will have a clear path to create and obtain complying educational material to support our clubs and members.

I encourage clubs within the Management Zone to conduct field day education of their members and perhaps visitors from outside their zone. Strict biosecurity protocols must be practised to prevent mites hitching a ride across zones.

I recommend the New Zealand book, Control of Varroa – A Guide for New Zealand Beekeepers 3rd Edition by Dr Michelle Taylor and Dr Mark Goodwin. Note that the chapter on treatments is not legal in Australia at this time, but has the latest researched information on Varroa destructor.

The ABA supplied every club a copy for their library.

It's also a good investment for your own bookshelf. Several Australian beekeeping suppliers stock it and may offer a discount to ABA members. Previous editions may be available at discount or free, but I consider it unwise to rely on outdated information.

### Varroa Sample in Resin

My predecessor, Bruce White gave me the idea of getting samples of Varroa destructor set in resin for education purposes. He had run into a brick wall with the DPI, though. Most of us have still never seen a real mite. The photographs in books and online are beautiful, but don't give real perspective.

It hasn't been an easy path to tread. That brick wall is pretty high and solid. Varroa is a forbidden material requiring authorisation to have and store with strict rules to follow. I eventually gained permission from the Federal government, NSW DPI, NT, QLD and hopefully other states and territories to follow. I have now imported and distributed educational samples to all our clubs.

### Where did I get them?

One of my teachers at the University of Florida Master Beekeepers Program, Professor Cameron Jack is a Varroa researcher.



Mike with Prof Cameron Jack

He was recently keynote speaker at the Queensland Beekeepers Association Conference. Cameron has generously dedicated his lab resources to produce resin casts with several mites each. The mites were harvested from the research apiary. Once in the laboratory, they were euthanised by freezing, then dried and set in resin. It took months.

Get along to your club meeting to see them for yourself.

I presented the Hasting Valley Club their sample at the club Apiary Showcase Breakfast 19th September.



Mike with President Stuart Redman Hasting Valley Club – Events Trailer

### **AFB Minimisation Project**

The most recent round of tests were all negative for AFB. There are still a few clubs that have not opted in yet. Now's your chance. Email me at biosecurity@beekeepers.asn.au to get your test pack of three specimen jars and return post pack.

### **AFB Presentation at Your Meeting**

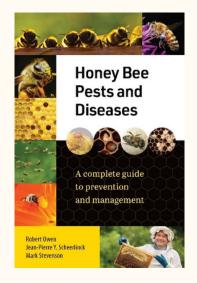
I've been doing the rounds of several clubs talking about AFB. Drop me a line if you'd like a free guest speaker at one of your meetings. It can be AFB or any topic of concern to your members. Yes, even Varroa.

### **Book Review by Mike Allerton ABA Biosecurity Officer**

Honey Bee Pests and Diseases - A complete guide to prevention and management Robert Owens, Jean-Pierre Y. Scheerlinck and Mark Stevenson Release date: Print Book 4 October 2023 \$69.99 eBook 1 February 2024 \$45.49

Many in the Australian beekeeping sphere are familiar with the Australian Beekeeping Manual by Robert Owen. I consider it an essential book for every Australian beekeeper library. The third edition is about to be released. Robert, in collaboration with two other beekeeping scientists, has written another book with which beekeepers can arm themselves to help keep their bees healthy and vigorous.

As the title indicates, the book narrows in on the topic of bee pests and diseases. Not the sexy part of beekeeping by any stretch, but if you want to be a successful apiarist at a time when our insect wards are under attack from more sides than a Chiliagon, your superpower is knowledge.



Honey Bee Pests and Diseases promises to take the information locked away in difficult-to-read academic journals and synthesises, updates and clarifies the current knowledge in an interesting, readable form needed by everyday apiarists to keep their colonies healthy and strong.

Does it succeed in that promise? It's not often scientists can translate complex data and concepts into an informative, easy read for us mere mortals. I believe Robert and his partners deliver the goods.

Each chapter details a specific topic, making it easy to find answers. Integrated pest management is an important system applied to all areas of agriculture, though has been a challenging concept to apply to beekeeping. It is well explained here.

The high-quality photographs and diagrams marry with the text to explain each chapter simply and fully. This book is aimed at the global market, so be aware that references to certain treatments may not yet be approved for use in Australia.

I've already pre-ordered my hard copy and recommend it to anyone wanting a current and relevant reference book in their bee library. You can pre-order here: https://exislepublishing.com/product/honey-bee-pests-and-diseases/



### Membership Pack 2023/24

Finally, after some hiccups along the way, we lodged 2678 membership packs on 27 September with Australia Post and most of you should have received yours by now.

Due to various requirements of the state laboratories conducting AFB testing, we have two different sets this year, based on your postal address on file:

- For members with a NSW postal address, your pack includes the membership card, a log book and an AFB Sampling Kit. Remember, slides should only be sent to the lab if you have indications in your brood that you might have AFB.
- For members outside of NSW, your pack includes the membership card, a log book and a hardcopy of the Bee Biosecurity Manual for Beekeepers. This booklet provides a great overview of endemic and exotic pests and diseases.

For those who need an additional logbook, AFB Sampling Kit or Biosecurity Manual, have a look at our Shop <a href="https://www.beekeepers.asn.au/shop">www.beekeepers.asn.au/shop</a> where all items (plus more) are available. The Bee Biosecurity Manual for Beekeepers can also be downloaded as a PDF file from <a href="https://www.beeaware.org.au">www.beeaware.org.au</a> website.

We would like to thank all volunteers who helped in the process, especially those who assembled the AFB Sampling Kits and packed the membership packs. Without these volunteers we would not have been able to get the packs out.

### **President's Report - Dr Lamorna Osborne**

### What a turbulent year it has been!

First some good news - the secretary and editor have been working on our new membership system and are starting to do a planned shift over to the "Member Jungle" system where club secretaries and membership officers will have much better access to their own clubs' details and be able to fix things.

The membership survey has been done and is being finalised. It will be sent to every member prior to the AGM and is informative about what members want from the ABA as an association. The Col. Pulling inter-club competition is back after being dormant since Covid. This is an annual event and each club is able to enter this competition re honey, wax, a cake, photographs and a club report. The details are in the newsletter but you don't have to enter all sections. There is a trophy for the winning club and one (the Bruce White Shield) for the smaller clubs (that's the third of clubs with smaller memberships). While they are still historically labelled NSW ABA – we'd love to see the SE Queensland or Alice Springs take out a trophy.

**Now the bad news (with a sweetener at the end).** I visited the clubs in the Hunter Valley, Taree and Central Coast where the pain of the eradication process was palpable, both emotionally and financially. Your pain is still here and recognised. Mike Allerton, Biosecurity Officer, came to some of those meetings with me and is doing a good job of visiting a lot more clubs. Also visited Macleay Valley and Hastings Valley.

The attempt at eradication of Varroa mite was invasive, costly and ineffective and was based on the AHBIC plan established in 2014. Doug Somerville had written a report in 2008 – lessons to be learned from NZ and Varroa, yet wasn't consulted in the response. There was no provision for inclusion of education about treating Varroa in that report. That's just starting to be organised now.

Unfortunately the execution of the eradication plan had faults at many levels, the most fundamental being alcohol wash instead of drone uncapping as a diagnostic tool. Both amateurs and professional beekeepers resented being asked to do this inappropriate test. This was discussed at AHBIC level where Doug Purdie represented us, but the discussion fell on deaf ears.

The executive was consulted once by DPI about this programme during the entire time – and that was less than 24 hours before the switch to management of Varroa. There were many contacts (as opposed to us actually being consulted), many of which were from us to DPI with either no reply or replies that were not helpful. However we now have the DPI's factsheet to go on (enclosed in this newsletter) and we live in hope of better cooperation with DPI in future. However they have stopped working on the "AFB near me" site and appear to have given up on tackling that problem altogether.

At the Apimondia meeting in Chile, Randy Oliver said that the Australian government had an opportunity to go with organic treatments, rather than miticides, and thus keep its clean and green status for honey and bee products – but it appears that we are copying the UK and NZ experience of miticides which will leave residues in the honey (for which there are legal limits for human consumption) and that will be an issue for packers. Miticide strips will lead to resistance if left in too long. Many overseas beekeepers at that conference could not believe that Australia was killing bees to try and eradicate Varroa when it had already been established for so long.

However – surprisingly to us here in Australia, the Europeans were panicking about small hive beetle in Italy, which seemed odd to us as we've had it so long.

For those of you with no bees at all: when the dust settles and we know where we are and when it's legal, I would like to offer those in areas affected by the euthanasia of their bees, to make nucleus hives available from my hives at Taree... at no cost other than you bringing a nuc box. Clubs could do this over a weekend on my property. Any of you who are interested in this can contact me at the AGM or text me on my mobile – 0419731684. As I am a working GP text doesn't interrupt my work.

Lastly don't forget the Gold Coast Field Day in Oct and the Nov AGM in Paramatta, where you have the chance to stand and get elected to be on the executive – details in this newsletter. A big thank you to the executive who have worked extremely hard to get things improving within the ABA – the fruits of their work should start to be evident beginning next year.

Looking forward to better days, Lamorna Osborne.



# Beekeeping Field Day





The Gold Coast Regional Beekeepers are delighted to invite you to the ABA Beekeeping Field Day. All beekeepers and people interested in beekeeping are welcome.

Saturday November 4, 2023

9:00am to 3:00pm

18 Leagues Club Drive, Nerang 4211

**Gold coin admission** 

Trade suppliers on site

Beekeeping equipment sales

Beekeeping equipment demonstrations

Industry updates

Specialist beekeeping presentations

Product demonstrations

Native bees

Tea, coffee and drinks

Barbecue



Trade enquiries to Drew Maywald at gcrb.secretary@beekeepers.asn.au

Field Day site is 3 minutes from Nerang train station. Lots of parking within a couple of minutes of the site.







## Beekeeping Field Day

## **Programme of Events**

Beekeeping Presentations  Located in the Lunch Room accessed from the lawn area			
Time	Topic	Presenter	
9:15 am	Apitherapy as practised in China	Bridget Goodwin. AAA	
10:00 am	Varroa Update	Rob Stevens. DAF	
11:00 am	Mathematics in Beekeeping	Phil Baxter. Comm. B/k	
11:45 am	Slovenian Bee Hives	Steve Hill. GCRB	
12:30 pm	Reportable Bee Diseases	Mike Allerton. ABA	
1:15 pm	Rooftop Beekeeping	Doug Purdie b ABA	
2:00 pm	ABA Open Forum	ABA Executive	

Beekeeping Demonstrations				
Located in the GCRB gazebo in the car park				
Time	Topic	Presenter		
9:30 am	Extracting Honey from a Flow Hive	Drew Maywald		
10:00 am	Making Beeswax Candles	Kevin Finn		
10:30 am	Cleaning old Frames	Steve Hill		
11:00 am	How to Use an EpiPen	Greg Foster		
11:30 am	Using a Screened Top Tray for SHB Control	John Crawford		
12:00 pm	DIY SHB Traps	Drew Maywald		
12:30 pm	The Basics of Frame Making	Mike Hynes?		
1:00 pm	Measuring the Moisture Content of Honey	Fiona Fernie		
1:30 pm	How to Make Mead	Steve Hill		
2:00 pm	How to Make Lip Balm	Waree & Angela		

Tea, coffee, food and drinks available all day on the Lawn area.

First Aid available at the entrance gate.

### SPRING Management - Arthur Garske

The way hives kick off in spring depends on the temperature, both days and nights. DO NOT OPEN HIVES too early in spring as brood and bees can become chilled and die.

### The thing to do early is:

- · Observe bees flying, to see how many and how much pollen is being brought in
- Feel weight of hive by back handle method. If light, stimulative feed, i.e., 1 part of sugar to 1 part of water. Feed warm and don't give large amounts as whatever is not eaten quickly can start to ferment and alcohol kills bees.

After a couple of weeks of warm weather, both days and nights:

- · Inspect hives in the middle of the day
- · Look at the brood, observing the number of eggs, pattern of laying, larvae and sealed brood
- · Look for signs of disease E.F.B., A.F.B., Chalk brood, Sac brood, Nosema and spring dwindle
- Available food supplies
- · Do compulsory VARROA WASH

Now is the time to FIND and MARK the queens

Depending on brood and conditions

- How much pollen
- · How much available nectar, shake frame to gauge
- How many bees. If it is necessary add additional super, lifting up frame of sealed brood. Put drawn comb into space left vacant.

Look at the bees EVERY 3 WEEKS, unless wanting to breed queens. Eliminate drone comb by removal. In its place put worker drawn comb. The drone cells on bottom bar of frames should be scraped with the hive tool. Bees will clean them out. The queen will lay again but as it takes 25 days for drones to hatch out, and providing you are looking every three weeks you just go through the same process again and again.

• This is also the time to inspect for disease. In times of great stress, bees often call on their reserves of STORED HONEY. During lean times bees are always poking about, looking for sources of honey and if they find a hive that could have died out through American brood disease, they might rob some honey and take it home and store it for later use, which happens to be when they are on rapid increase, raising lots of brood. The nurse bees are calling on these reserves, they take up some honey with A.F.B disease and feed it to larva that is 24 to 36 hours old and bingo – that larva has A.F.B. It dies but the spores are there and the hive will eventually die because of it. This is why you should look at your brood every time you look at your bees, training your eyes on what good brood looks like so you can see anything that does not look like good brood: it stands out because it looks different. Anything that looks like AFB can be sampled using the kit and instructions in your membership pack. You should also do your Alcohol Wash which is compulsory every 16 weeks.

### REMEMBER THE CAUSES OF SWARMING ARE:

- · Congestion of brood nest. DRONES help to do this
- Insufficient room for queens to lay in
- · Plentiful supply of pollen and thin stimulative nectar. Remember 1 of sugar, 1 of water to stimulate feed hives
- · Old queens
- Queens bred or swarms gathered at swarming time (this genetic trait is bred in them)

As the season moves into late spring or earlier, depending on weather conditions, the signs to look for indicating bees preparing to swarm are:

- Queen cells (drawn out of face of combs are usually emergency cells) Queen cells mainly at bottom of combs if two boxes of brood always at the bottom of the second box are swarm cells
- Congestion of brood nest
- · Maybe eggs in queen cups

### **PLAN OF ACTION**

- Break down queen cells
- Expand brood nest
- Remove all sealed brood frames into a new super. In their place spread out the other frames and interleave frames of foundation so you have brood, foundation, brood and so on
- Place the new super containing the brood frames that have been taken out and repeat the same brood, foundation, brood process in that box. Then add a super of foundation on top of that box

As a result conditions of ABNORMALITY have been created in the hive and the bees that were thinking of swarming have to repair what you have created after this interference. The whole hive has to work to get their hive back into shape again and there is no time to think about swarming and queens in full lay cannot swarm. In a couple of weeks look at the brood again, as well as the condition of the hive, and if the bees are preparing to swarm repeat the process all over again.

Once a honey flow is found or the main honey flow has commenced then the bees will forget about swarming, the bees will get down to gathering.

Thanks to Arthur for providing this. Many beekeepers have different views about swarms and swarm management - there is always something new to take away from how other beekeepers manage their bees.

### AGM EVENT Sunday November 19, 2023 James Ruse Agricultural High School, Carlingford

Your club is invited to enter the Col. Pulling Competition and Bruce White Shield.

### Col. Pulling Competition

While the Executive are aware this year some clubs may not have bees, there are multiple classes that your club can enter. For example:

- -The club report, including adversities your club has experienced and how you plan to overcome them.
- -The cake section has re-entered the competition.
- -If you don't have a club apiary you can still compete using members products... any one member can only enter two exhibits.

### **Bruce White Shield**

The smallest Clubs (bottom 30% by member numbers of affiliated clubs at the end of 2022) are eligible to win the Bruce White Shield.

No matter how small your club is you can win BOTH trophies.

ENTRY FORMS: Request an entry form from grace.jerrett@beekeepers.asn.au

ENTRIES CLOSE: Friday November 10 2023

EMAIL: to grace.jerrett@beekeepers.asn.au

EXHIBITS: Received on the day of the AGM between 8-9am in the Agricultural Classroom, Baker Street entrance.

JUDGING: Commences 9am

### **ENTRIES Total points 100**

Apiary products 2x 500gm jars of honey in each category = 8 jars **20 points** HONEY categories Light - Medium - Dark - Creamed - F/D frame capped honey WAX 500gm block

Candles 2 Rolled; 2 molded 10 points

Cake - Honey

Entry can be any shape or size. Recipe must be displayed 10 points

Club Logo

Exhibited on an A4 page 10 points

Club Report (typed, no longer than 2 x A4 pages, can include photos) **20 points** TOPIC: To include – membership, activities, promote beekeeping, education; what challenges your club has found and what strategies you are going to try to resolve the issue.

Photography (2 categories exhibit 2 photos per category) **10 points** Beekeeping Scene Beekeeping Activity

Quiz (Club team of (3) participants). **20 points** Quiz will be a total of 20 questions

### So who was Colonel Pulling?

Colonel Guy Harris Pulling died in Orange, NSW on 18 August 1971.

He was educated at Sydney Church of England Grammar School, North Sydney, where he was distinguished as an oarsman and on leaving school he was engaged in surveying in Central Queensland.

On the outbreak of World War I he joined the AIF and saw active service in Gallipoli and in France and was seriously wounded.

After the war he joined the Indian Army in the 6th Gurkha Rifles where he spent most of his army career, finally commanding his regiment and subsequently in other duties as Brigadier.

On his retirement in 1949 he and Mrs Pulling returned to Australia and made their home at Turramurra where he became interested in beekeeping and attended the Apiary Summer School at the Hawkesbury Agricultural College.

For some years he operated apiaries at Turramurra and produced very high-quality queen bees.

During this period, he became aware that the beekeeping industry in Australia was not recognising the help which might be gained by advances in science and technology.

As a result of this realisation, he sought the support of some members of the industry and formed the Bee Research Society which helped to focus the attention of leaders in government and the industry on the needs of beekeeping. His work ultimately bore fruit in the Research objectives of the Australian Honey Board and in the visits to this country of overseas scientists and apiculturists.

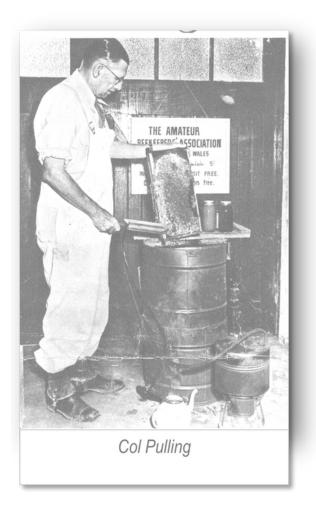
At much the same time it became apparent that there was no organisation to cater for those who found, in bees, a worthwhile and fascinating hobby. He realised that the bee culture attracted people of all skills and walks of life and that this interest could be of benefit to all concerned in beekeeping.

These thoughts developed in the formation of the Amateur Beekeepers' Association of NSW (on 3 December 1954) with branches now in many parts of the State.

After a visit to England, Colonel and Mrs Pulling lived in Orange, NSW and his interest in beekeeping continued until his health failed. Throughout a long illness he kept a lively concern in its progress.

It is not often the fortune of any industry to be served by someone so completely without self-interest as was Guy Pulling. His integrity, vision, with his tolerance and understanding of other peoples' problems, has been an example to all.

In Col Pulling's honour, the ABA commenced the Col Pulling Competition in 1986. The competition was initiated in 1986 as a tribute to Colonel Pulling, and collectively tests the beekeepers' knowledge of apiary products including liquid and creamed honey and beeswax, beekeeping photography (which replaced an apiary inspection component held in the past), branch reports and a 20 question quiz.





### We need your help

The ABA needs volunteers to help with the following roles:

IT Support Web design / Graphics Accounting / Treasurer

If you can help with any of these roles please contact: secretary@beekeepers.asn.au

### A New York City Beekeeper's Thoughts on Varroa Destructor

By Tom Wilk

Cornell University Certified Master Beekeeper

Eight years ago, I was fortunate to be able to visit Australia as part of my job in the wine industry. While there I sought to meet a local beekeeper. Happily, Doug Purdie had time to meet me on my day in Sydney. Sitting with Doug talking honey bees was the first time I found out that at that point in 2015, Australia had not had to face the challenge of the pesky Varroa mite.

I started beekeeping in New York City in 2012 and dealing with Varroa destructor has always been a part of being a beekeeper. At first as a new "beek" with just 2 hives, I really paid it no mind. As I continued to grow and attend lectures, Varroa control became a part of the way I take care of my apiaries. I read that hundreds of hives are being destroyed in Australia to try to prevent the spread of Varroa mites. Personally, I don't believe it is possible to eradicate Varroa mites.



These mites are a somewhat controllable problem. While it will raise costs of beekeeping, I suggest controlling it instead of killing so many colonies. The cost of Varroa control has to be much less than the destruction of colonies and equipment.

Money would be better spent preventing Tropilaelaps Mites (Tropilaelaps mercedesae) from entering Australia. They have been found in Papua New Guinea. Because of their shorter reproductive cycle there are no treatments for them as effective as the ones used for Varroa. Tropilaelaps are also harder to detect as they do not feed on adult bees only on the brood.

One advantage you have in the fight against Varroa is the abundance of scientific data available from the USA and EU.

**How do I deal with varroa?** In the spring I start monthly checks with an alcohol wash on 1/2 cup of nurse bees. These 300 bees are put into a jar of alcohol and shaken briskly for a couple of minutes. Sadly, these bees die, but I have found this method to give me the most accurate mite counts. The shaking dislodges the mites and they fall through a screen with the alcohol in the test jar. I hold the liquid up to the sunlight and count the number of mites in the liquid. When divided by 3, I get the mite percentage of the colony. Most months no treatment is needed if the levels are below 3%. If one hive in an apiary has 3 or more mites per 100 bees, I treat the whole apiary.

How I treat depends on what time of the beekeeping year it is. I base my treatment protocols on temperature, if honey supers are on the hives and personal preference. There is an abundance of information available outlining the variety of methods used to treat for Varroa mites. I am not certain which treatments are approved by the Australian government.

We only use chemical treatments as allowed by the US Department of Agriculture. When treating for mites it is important to follow the manufacturer's label on whichever treatment you chose to use. Whether it's an organic style treatment or a chemical-based treatment, it will ensure your honey is residue free.

If you don't want to use chemicals there are also some beekeeping methods to help minimize Varroa levels. At times I use drone frames since Varroa prefer breeding in drone cells. I also play with brood breaks. No new brood being laid equals no place for the mites to reproduce.

Varroa mites are a vector for different viruses that can affect our bees. By lowering their numbers, we can still raise healthy hives that produce honey for us as long as Mother Nature does her part supplying us the weather and nectar producing blooms.

I asked Tom to write me an article on Varroa and how it affected his operation and he kindly sent me this. At the time we were still under eradication, hence his comments about destroying hives. It's interesting to note that many beekeepers consider Varroa treatments to just be routine and not a thing to be scared of.