

Buzzword



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Next Meeting

March 18, 2003

Treating With Formic Acid

by Paul Hosticka

7:00 p.m. Stedman's
in Silverdale

OFFICERS & COMMITTEES

- President:
Paul Hosticka 360-297-3614
- Vice President:
Kevin Wirth 253-851-4664
- Secretary:
Tricia Sullivan 360-779-1210
- Treasurer:
George Purkett 360-895-9116
- Educational Materials:
Barbara Stedman 360-692-9453
- Librarian:
Roy & Vickie Barton 360-613-0175
- Newsletter Editor:
Stephen Augustine 360-779-1210

The March Buildup
Message from the President

March, what can one say about March? It is not winter and it is not spring. It is not horrible nor is it wonderful. It is somewhat like November, a month we just need to get through.

In the bee yard it is quite a bit different. Colonies that have wintered well and that are strong and healthy are beginning their population explosion. Pollen is flowing in the door, the first spring bees are emerging and there are three or four frames of capped brood days away from emerging. The queen is hard at it and stores are in

great demand. These powerful colonies need close attention. Monitor for mites and disease. Feed if reversing or at least opening up the brood nest with an empty frame or two. It is too early to do splits but not too early to start thinking about it. Have a plan and get what equipment you need ready. Varroa strips, if used, should already be in but if you need to treat this spring you have no time to waste. Formic treatment can wait for a few weeks for better weather unless you have a critical situation. If so you

should treat now and hope for suitable conditions. If the weather does not cooperate repeat treatment later.

March can also be the make - or - break month for struggling colonies. Tracheal mite and nosema take their greatest toll about now. Small suffering colonies should be reduced to one box, protected from robbing and boosted with a frame or two of capped and emerging brood. Medicate as appropriate. Be careful about combining weak

(contd. on page 3)

New Liquid Honey Bee Diet Near

By Kim Flottum (kim@airoot.com) March 2003, Catch The Buzz

A new, improved honey bee diet developed by Agricultural Research Service scientists could provide bees with an early spring jump start as they prepare to pollinate the annual \$1-billion California almond crop.

Each year, California almond growers rely on tens of thousands of out-of-state bee colonies that are trucked into the state to pollinate almonds. But during winter in many parts of the United

States, honey bees are in a near-hibernating state, because of the cold temperatures and the lack of pollen and nectar, their main sources of food.

To stimulate colonies and prepare them for almond pollination, beekeepers now use patties made of corn syrup, soy flour and brewer's yeast. But placement of the patties is labor intensive and costly, and bees consuming them eventually stop producing

worker jelly, a substance vital for feeding the developing bees, called brood.

Entomologist Gloria DeGrandi-Hoffman, a specialist in honey bee research, and Allen C. Cohen, a pioneer in developing artificial diets for insects, worked with California orchardists last year to develop an improved honey bee diet. DeGrandi-Hoffman leads research at

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Elections/Nominations

Elections are coming up in April for:

- * President
- * Vice President
- * Treasurer
- * Secretary

If you would like to nominate someone, including yourself, please submit nominations to Secretary, Tricia Sullivan, phone 360-779-1210 or email: secretary@westsoundbees.org

I will arise and go now,
and go to Innisfree,
And a small cabin build
there,
of clay and wattles
made;
Nine bean rows will I
have there,
a hive for the honey
bee,
And live alone in the
bee-loud glade.

The Lake Isle of Innisfree
W. B. Yeats (1865-1939)

Experience Migratory Beekeeping in the almond groves of California

Spend six days with WSBA's near-commercial beekeeper Bob Martello as he moves bees to the almond groves in California starting on March 28th.

For further information
contact Bob at
360-830-5456

BASICS IN NORTHWEST BEEKEEPING

Adapted from Ron Bennett (<http://members.aol.com/beetools/>)

In March, we need to look at our colonies and make sure they are ready and helped to start building their population for summer vigor. Watch their stores and don't let colony stores get below 15 lbs. (3 full frames of honey). If they are low, feed the light colonies sugar syrup (1:1) or to balance out colonies with low stores, rob combs of honey from colonies with excessive stores and give them empty comb next to brood nest to expand egg laying.

To start rearing brood the bees need two things - honey and pollen. Some of the pollen sources are already in bloom (ornamental cherries, Pussy-willows), but poor weather

can keep the bees from these sources, so you may feel it's necessary to feed a pollen substitute if a colony has no access to pollen.

It is a little early to get good queens, so you could unite queenless colonies to those needing bees. A weak hive will grow slowly and not produce a good honey crop, but by combining it with another colony, you will build a strong colony right away. However don't combine a diseased colony with another colony.

If we have a warm day, now is also a good time to clean the bottom boards.

If you have indications of foulbrood in some colonies dust those colonies three times in seven day intervals

with a 3/4 oz. portion (about as much as you can scoop with a hive tool) of terramycin in powdered sugar, concentration TM-25. To make your mixture, combine one 6.4 oz package of terramycin with 2 lbs. of powdered, not granulated, sugar in a one-gallon zip-lock bag and mix well. Store unused mixture in the sealed zip-lock bag in a 3# coffee can in the freezer. Terramycin turns tan to brown when it goes bad.

If you used Apistan strips remember to remove them after 42-48 days of treatment. Look for colonies with nosema, usually hives are streaked with brown feces on the front, and treat with Fumidil-B per the supplied instructions.



Minutes of the February 18th Meeting:

- * George Purkett gave the treasurer's report. Our bank balance as of February 18 was \$5727.35. We had 68 final paid members for 2002. So far we have 51 paid members for 2003.
- * Call Barbara Stedman if you'd like to purchase packages of bees delivered in April.
- * Tricia will bring copies of the WA state hive registration forms to the Mar. mtg.
- * We had a discussion about how the pro-

ceeds of the auction would be spent. We raised about \$964. The group asked chair of the committee, Chris Williams, to consider options that are 1/3 charity and 2/3 education. Stephen, Betty and Wayne agreed to be on the committee.

- * Jim Willman and Dennis Heeny reported on the Master Bkpr. course that they attended at Simon Fraser Univ. Roy Barton also gave a brief review of Spring Hive Management.

... NEW LIQUID HONEY BEE DIET (CONTD. FROM PAGE 1)

ARS' Carl Hayden Bee Research Center in Tucson, Ariz., while Cohen recently retired from ARS' Biological Control and Mass-Rearing Research Unit at Mississippi State University.

The two scientists developed a recipe for an artificial diet

that would give honey bees the whole package of nutrients that they need in an easy-to-feed liquid. The recipe took five months to complete and went through nearly 80 formulations before the right mix was found. It combines the sweetness of nectar and the nutritional

punch of pollen in a formula that the domesticated honey bee, *Apis mellifera*, readily digests and enjoys. Nectar is rich in carbohydrates, and pollen is packed with protein, vitamins, minerals and fats--all essential for bees' development and survival.



...THE MARCH BUILDUP (contd. from page 1)

colonies with strong, you don't want to introduce disease or parasites to a strong colony simply to save a few weak bees. Colonies that are going to make it will turn the corner in April and start getting stronger offering hope and reward to the diligent beekeeper. Those whose fate is sealed will perish, leaving a sadder but wiser beekeeper to carry on and learn from bitter experience. All beekeepers hate chemicals, all beekeepers hate mites, all beekeepers pine for the old days when we could tend our flock in peace and harmony with nature. We do not enjoy those blissful conditions today. Too much of beekeeping is doctoring and fretting about resistance and what trouble lies around the next corner. We have hope, and work toward a better future, but today we can only play the hand we have been dealt. Fluvalinate-resistant mites are a reality today in much of the country, maybe here. Coumaphos-resistant varroa are a reality in parts of the country and we are only marking time until they arrive in our apiaries. We can wring our hands, stamp our feet, kick the cat and cry to the heavens that it is not fair but if any solution is to be found it is up to us.

One avenue that deserves investigation for resistant varroa is formic acid. Formic acid is not illegal in the U.S. It is an unregulated product, it is similar to using borax to control ants. It can not be sold as a registered pesticide and beekeepers use it at their own risk. It is unlikely that any company will assume the liability of seeking registration in these litigious times. A lot of good research on the use of liquid formic acid as varroa control has been going on in Canada, where coumaphos is not legal. The exact way formic acid fumes kill varroa is not known but it is probably asphyxiation. Mites will not develop resistance to breathing. It is a tool at our disposal and we will talk about it at this month's meeting and watch a good video on a new "slow release" evaporator now available from Canada. We will also review other application methods and hear about the latest research on the subject.

So go out on a sunny day and spend some good quality time with your best colonies. Revel in the beauty and wonder of it all and fill your spirit with joy. Then put a clothes pin on your nose and do what must be done to help the unfortunate struggling colonies get on the road back to health.

See you Tuesday. - Paul



BEE MENTOR PROGRAM

WSBA has an established mentor program. Following are the people who have signed up as volunteers to assist new beekeepers with advice and on site assistance. They will also respond to most calls for swarm capture. Please don't hesitate to call them.

South Kitsap:

George Purkett, (360)895-9116, purkettg@nwinet.com

Central Kitsap:

Mike Johnson, (360)830-0295, mlj@hurricane.net
Roy Barton, (360)613-0175, honeyhill@tscnet.com

North Kitsap:

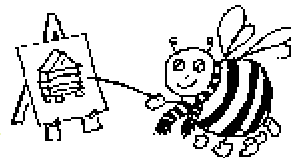
Paul Hosticka, (360)297-3614, phos@tscnet.com
Paul Lundy, (360)297-6743, lundyknox@att.net

Bainbridge Island:

Jim Willmann, (206)842-5991, jwillm4622@aol.com

Poulsbo and environs:

Stephen Augustine, (360)779-1210, saugusti@krl.org



If you would like to be added to the mentor list please contact Paul Hosticka at (360)297-3614

Refreshment Schedule

Mar: Betty & Walter Schicker, Chanette Ludwig
Apr: Tricia Sullivan, Chris Williams
May: Joe Grubbs & Pamela Tarver
Jun: William Biehl, Joseph Higdon
Jul: -open-
Aug: Summer Picnic
Sep: Mike Hoey, Betty & Walter Schicker

If you are unable to fulfill your commitment to provide refreshments for a meeting please notify Barbara Stedman by giving her a call at 360-692-9453

Package Bees Available for Pick Up

First or second Saturday of April at Stedman's Bee Supplies in Silverdale

Packages will cost about \$40 each. Choice of either Italian or Carniolan queens.

Call Al at 692-9453
For more information

Editor's Note:

Articles of interest to beekeepers and announcements of interest to Association members are welcomed and encouraged.

Submit articles and announcements to Stephen Augustine:

Email: saugusti@krl.org
Mail: 401 B Liberty St NW
Poulsbo, WA 98370

Formic Acid for Varroa And Tracheal Mite Treatment

Understanding How Formic Acid Works

- * Mixing 3 parts 85% acid with 1 part water will create a 65% concentration; this concentration makes queen and brood losses rare. Formic acid fumes, at a concentration below the level causing damage to adult bees, kill mites but not bees.
- * Bees are somewhat capable of regulating a minor overdose through hive ventilation.
- * Slight mortality of emerging bees, drones and larvae are signs of this mite killing concentration of fumes. This concentration must be reached by evaporating a sufficient daily dose of acid; mites will survive if this level is not reached. A lot of dead brood is a sign of an overdose.
- * A formic acid treatment kills 70-90% of the mites in each 7-day mite brood cycle. Treatment over several mite cycles is required. The required daily dose may vary with local conditions and equipment used.

Standard Treatments For Varroa and Tracheal Mites

- * **For Tracheal Mites:** Soak an absorbent pad with 30ml of 65% formic acid and place on top bars. Three treatments at intervals of five to seven days. Remove used pads each time. Daytime temp should be above 50F.
- * **For Varroa Mites:** Soak an absorbent pad with 40ml of 65% formic acid and place on top bars. Five to six treatments at intervals of five to seven days. Remove used pads each time. Daytime temp should be above 50F.

Safety Precautions When Handling Formic Acid

- * Keep the acid in the original container. Do not pour the acid into other soft plastic containers.
- * Use rubber gloves, boots, pants. If available use a mask and goggles, when handling the acid.
- * Always have plenty of clean water on hand to wash equipment and clean up spills.
- * Use common sense and follow government and manufacturer's instructions on handling acid.
- * Temperatures below 20 degrees C (68 degrees F) are recommended for work with Formic acid. High temperatures may cause dangerous exposure from acid fumes to humans and bees alike.

For further information on using formic acid for mite treatment visit the following websites:

Allen Dick's Formic Acid Page - <http://www.internode.net/honeybee/Formic/Default.htm>

MiteGone - <http://www.mitegone.com/>

MiteAway - <http://miteaway.com/>



West Sound Beekeepers Association

10982 NE Tulin Rd

Kingston, WA 98346

<http://www.westsoundbees.org>

Next Meeting —

Using Formic Acid for Mite Control

Tuesday, March 18

7 p.m. at Stedman's