



Bee News

KINGSTON BEEKEEPERS' MAGAZINE

November 2010

APIARY MANAGERS' REPORT

The final Saturday of the season saw an excellent turnout of intrepid gardeners with their tools and the Apiary is now unbelievably tidy. The afternoon was nicely rounded off with tasting each others' honey on some wonderful home made scones. Thank you to everyone who came and helped - these sessions are just fantastic in keeping the blackberries etc under control for another year.

Bulk Ordering

Thornes' on line sale is 29th November 2010 and not at the beginning of the new year. To avoid postage costs and to benefit from bulk orders the Apiary will be placing an order for brood frames, super frames and premier foundation. Please let David and Avis know by 27 November if you wish to order any of these items. We have decided not to carry stocks for members and these items will not be available from the Apiary during the year.

Oxalic Acid

All hives in the Apiary will be dosed with oxalic acid in December when the weather permits. Chris Reid is organising the bulk purchase of oxalic and if you require this please let him know by the end of November. It will not actually be purchased until just before we use as it must be stored in a refrigerator.

Queen Rearing

Andy and his team are already planning for next year. There are so many variables and so many different choices that making decisions are difficult. The aim is to supply Apiary hives and hopefully members with queens or nucs or even queen cells if we have a surplus and not enough nucs and apideas.

Tips from the National Honey Show

An explanation was given about obtaining drawn foundation for the Bailey comb change in the Spring. A brood box with foundation should be placed above the queen excluder after the honey is removed in August and the bees should be fed. It must be removed before the bees fill it with stores, although extra stores can also be very useful in the Spring. We are certainly going to do this on the Apiary hives.

Apilifevar

This is a relatively new thymol treatment for varroa, which does not require an extra super, but is placed directly in the hive. We are going to experiment on our own hives and if successful, then we will use in the apiary. There are also some interesting comments about not treating for varroa at all and breeding from the surviving colonies who can either control or live with the varroa. Rather drastic – does anyone have the courage to do this?

Winter Feeding

40 lbs of stores were recommended, which leaves only 3 frames for brood in a national. We find this ideal very difficult to attain, the bees certainly do not want to store that amount in their brood box and over wintering on two broods or brood and a half is difficult. It was also stated that bees over winter very well on ivy honey, must experiment more with this one. Any one have any comments to add?

Enjoy the brief respite from beekeeping, the planning for next year will soon start!

Avis and David

The White House Honey Harvest

By Sarah De Heer

Last Thursday, KitchenDaily got the rare honor of receiving an exclusive invitation to the White House to harvest honey. In March of 2009, First Lady Michelle Obama planted a victory garden with fruits and vegetables, some to be used in the White House kitchen and some to be donated to local food banks. Soon after, a beehive - the first one on the White House grounds - was placed near the garden on the south lawn so the bees could help pollinate the garden crops.

Who's heading this sweet venture? Charlie Brandts - best known around the White House as a carpenter, a post he's held for 26 years - has been the official beekeeper for the past four years. It was previously a personal hobby, but word spread quickly among the staff and before he knew it, White House Chef Sam Kass was asking him to bring in his hives and produce honey for recipes.

Since last March, the bees have produced more than 134 pounds of honey, which has been used as Presidential gifts as well as in the

kitchen. When we asked Charlie what his favorite use for honey was, he responded: "Any dessert made by our pastry chef is delicious, but I love honey in pie."

Many believe that honey is a healthier - and tastier - alternative to refined sugar. Brandts hopes to spread the word about the positive uses for honey, while helping to save the at-risk population of honeybees. Since 2006, beekeepers have seen a significant loss to their hives - anywhere from 30 to 90 percent of their bees have dropped off due to a phenomenon called colony collapse disorder.

We're very excited about Mrs. Obama's passion for growing local produce, as well as harvesting local honey. We can't thank Charlie Brandts, along with the White House staff, enough for taking the time to teach KitchenDaily about honeybees and the process of extracting of honey.

KitchenDaily is an American web site, the above article was lifted from that site.

Hives destroyed by stolen tractor

A Cornish beekeeper says he's grateful for offers of help after nine hives were destroyed by a stolen tractor.

The police are investigating the attack on the colony at Trerulefoot in south east Cornwall. An estimated 180,000 bees perished when a tractor was driven through the hives. The bees owner, David Barriball, says other beekeepers have offered help to rebuild the colony. Nine of David's hives have been destroyed

"I'm very grateful, that fellow beekeepers have taken such a great interest in the disaster of these nine hives. Much of the advice I have been given is what I am already doing, trying to



David Barribel and his daughter Sarah try to save as many of the bees as they can

collect and save as many of the bees as I can. All that is left of the hives are piles of timber and wooden frames, flattened by the tractor.”

“Allegedly it is suspected the tractor ran over the hives at 2 or 3am on the Wednesday morning and unfortunately I didn’t know about this until the following Thursday night, so I couldn’t start saving my bees until the sun came up on the Friday morning.”

David’s daughter, Sarah Kitson, has also been left shocked by the tragedy. She says: “I have found it really, really upsetting, the whole family works with my dad doing this. My cousin and I help with the candles and my dad

works really hard making the hives each night and now he’s got to work extra hard to replace everything that has been damaged.”

The process of rebuilding the colony is now a long and hard task for David. “All we can do is put the bees with no queen, amalgamate them with other hives on another site and then next year we’ll start again.” David explained that it could however take up to two years for the bees in their new hives to start making honey again.

The police are now investigating the case and David has told them that he will give a year’s supply of honey to anyone with information that leads to a conviction.

THE BEE INSPECTOR

Radio 4 broadcast this series in 2003, it gives a brief insight into the work of the Bee Inspector

Who do you call when your bees stop buzzing or the honey goes off? Why, the Bee Inspector of course. He may be the man from the Ministry, but David Kemp is the saviour of many a bee-keeper. What’s more he’s full of fascinating facts about these extraordinary little creatures.

This series follows David through the seasons, from spring, through summer, autumn and winter. And along the way we learn something of his full life from keeping bees as a boy, to finding his vocation as a bee inspector. He explains how beekeeping has reflected the changing nature of the British countryside. Before the war farming was in the doldrums, but “bad farming was good beekeeping” - overgrown hedges, abundant wild-flowers and the like assured plentiful honey crops. Intensive farming after the war was



Left to right: Mike Hally (producer), Brian Wilde (beekeeper, Victorian apiary) and David Kemp (bee inspector) © Mike Hally, Pennine Productions

terrible for bees, but they were saved in the seventies when flowery crops like the vivid yellow rapeseed became popular. And now lush suburban gardens attract well-fed bees!

1. Spring

The first programme finds David in the spring, checking how well bee colonies have survived the winter and looking for the first signs of disease as the days get warmer. One of the

highlights is a trip to Hodsock Priory, most famous for its spectacular display of snowdrops in February, but also home of rare, beautifully-preserved and working Victorian beehives. Designed like little houses, unlike the modern functional box hive, the most striking is a white tower, with a genuine gold-leafed portico for bees to come and go through. "If I was a bee, that's where I would want to live" says David.

2. Summer

The second part is summer-time, with a round of County Shows to add to the numerous individual inspections. Bad weather keeps the growing colonies inside their hives until, like mischievous children on a rainy day, they break out and swarm in places they're not wanted. We hear the sound of "roaring" bees ripening off the honey - they buzz furiously inside the hive while clinging on with their feet to create an air-conditioning system that drives the excess moisture from the stored nectar. The draught is strong enough to blow out a candle held at the hive entrance. And we hear the rare sound of "piping" queens, calling to each other prior to a fight to the death that leaves just one survivor, the new queen. By August the female worker bees are at it again, killing all the male bees in what has been known for centuries as "the slaughter of the drones".

3. Autumn

As late summer merges into autumn in programme three, many beekeepers have moved their hives onto the moors to take advantage of the late crop of heather honey. David still keeps bees and takes the opportunity to harvest his own honey, and we eavesdrop on the process. With the pace of inspections slowing down, David also finds time to reminisce about his own start in beekeeping at the age of just 9 years old. He also reflects on how beekeeping has been affected by the changing face of farming since World War II.

4. Winter

Winter is a time of consolidation. A chance to go round the beekeeping groups, advising them how to keep their colonies alive through the winter, and how to watch out for disease next spring. Highlight of this final programme is a rare chance to go inside the Government's Central Science Unit at York, home of the specialist bee research unit. David is a regular visitor, but access for this programme is something rather special. The programme ends with the beekeeping year turning full circle as he checks his own colonies have survived the winter in Chatsworth Park and looks forward to the return of spring.

Scientists and Soldiers Solve a Bee Mystery

Since 2006, 20 to 40 percent of the bee colonies in the United States alone have suffered "colony collapse." Suspected culprits ranged from pesticides to genetically modified food. Now, a unique partnership - of military scientists and entomologists - appears to have achieved a major breakthrough: identifying a new suspect, or two.

A fungus tag-teaming with a virus have apparently interacted to cause the problem, according to a paper by Army scientists in Maryland and bee experts in Montana in the online science journal PLoS One.

Exactly how that combination kills bees remains uncertain, the scientists said - a subject for the next round of research. But there are solid

clues: both the virus and the fungus proliferate in cool, damp weather, and both do their dirty work in the bee gut, suggesting that insect nutrition is somehow compromised.

Liaisons between the military and academia are nothing new, of course. World War II, perhaps the most profound example, ended in an atomic strike on Japan in 1945 largely on the shoulders of scientist-soldiers in the Manhattan Project.

And a group of scientists led by Jerry Bromenshenk of the University of Montana in Missoula has researched bee-related applications for the military in the past - developing, for example, a way to use honeybees in detecting land mines.

But researchers on both sides say that colony collapse may be the first time that the defense machinery of the post-Sept. 11 Homeland Security Department and academia have teamed up to address a problem that both sides say they might never have solved on their own.

"Together we could look at things nobody else was looking at," said Colin Henderson, an associate professor at the University of Montana's College of Technology and a member of Dr. Bromenshenk's "Bee Alert" team.

Human nature and bee nature were interconnected in how the puzzle pieces came together. Two brothers helped foster communication across disciplines. A chance meeting and a saved business card proved pivotal. Even learning how to mash dead bees for analysis - a skill not taught at West Point - became a factor.

One perverse twist of colony collapse that has compounded the difficulty of solving it is that the bees do not just die - they fly off in every

direction from the hive, then die alone and dispersed. That makes large numbers of bee autopsies - and yes, entomologists actually do those - problematic.

Dr. Bromenshenk's team at the University of Montana and Montana State University in Bozeman, working with the Army's Edgewood Chemical Biological Center northeast of Baltimore, said in their jointly written paper that



Members of a joint United States Army-University of Montana research team that located a virus that is possibly collapsing honeybee colonies scanning a healthy hive near Missoula, Mont. Photo: Kirk Johnson

the virus-fungus one-two punch was found in every killed colony the group studied. Neither agent alone seems able to devastate; together, the research suggests, they are 100 percent fatal.

"It's chicken and egg in a sense - we don't know which came first," Dr. Bromenshenk said of the virus-fungus combo - nor is it clear, he added, whether one malady weakens the bees enough to be finished off by the second, or whether they somehow compound the other's destructive power. "They're co-factors, that's all we can say at the moment," he said. "They're both present in all these collapsed colonies."

Research at the University of California, San Francisco, had already identified the fungus as part of the problem. And several RNA-based viruses had been detected as well. But the Army/Montana team, using a new software

system developed by the military for analyzing proteins, uncovered a new DNA-based virus, and established a linkage to the fungus, called *N. ceranae*.

“Our mission is to have detection capability to protect the people in the field from anything biological,” said Charles H. Wick, a microbiologist at Edgewood. Bees, Dr. Wick said, proved to be a perfect opportunity to see what the Army’s analytic software tool could do. “We brought it to bear on this bee question, which is how we field-tested it,” he said.

The Army software system - an advance itself in the growing field of protein research, or proteomics - is designed to test and identify biological agents in circumstances where commanders might have no idea what sort of threat they face. The system searches out the unique proteins in a sample, then identifies a virus or other microscopic life form based on the proteins it is known to contain. The power of that idea in military or bee defense is immense, researchers say, in that it allows them to use what they already know to find something they did not even know they were looking for.

But it took a family connection - through David Wick, Charles’s brother - to really connect the dots. When colony collapse became news a few years ago, Mr. Wick, a tech entrepreneur who moved to Montana in the 1990s for the outdoor lifestyle, saw a television interview with Dr. Bromenshenk about bees.

Mr. Wick knew of his brother’s work in Maryland, and remembered meeting Dr. Bromenshenk at a business conference. A retained business card and a telephone call put the Army and the Bee Alert team buzzing around the same blossom.

The first steps were awkward, partly because the Army lab was not used to testing bees, or more specifically, to extracting bee proteins. “I’m guessing it was January 2007, a meeting in Bethesda, we got a bag of bees and just started smashing them on the desk,” Charles Wick said. “It was very complicated.”

The process eventually was refined. A mortar and pestle worked better than the desktop, and a coffee grinder worked best of all for making good bee paste.

Scientists in the project emphasize that their conclusions are not the final word. The pattern, they say, seems clear, but more research is needed to determine, for example, how further outbreaks might be prevented, and how much environmental factors like heat, cold or drought might play a role.

They said that combination attacks in nature, like the virus and fungus involved in bee deaths, are quite common, and that one answer in protecting bee colonies might be to focus on the fungus — controllable with antifungal agents — especially when the virus is detected.

Still unsolved is what makes the bees fly off into the wild yonder at the point of death. One theory, Dr. Bromenshenk said, is that the viral-fungal combination disrupts memory or navigating skills and the bees simply get lost. Another possibility, he said, is a kind of insect insanity.

In any event, the university’s bee operation itself proved vulnerable just last year, when nearly every bee disappeared over the course of the winter.

A version of this article appeared in print on October 7, 2010, on page A1 of the New York edition.

Mike Albans for The New York Times
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The following articles were extracted from 'Healthy Bees Plan' a quarterly newsletter on progress with implementing the Healthy Bees Plan (www.defra.gov.uk/foodfarm/growing/bees/news/plan.pdf) which the Food and Environment Research Agency (Fera) is implementing on behalf of Defra and the Welsh Assembly Government (WAG)

The National Trust, jointly with the BBC, have this year launched the 'Bee Part of It' campaign. The National Bee Unit (NBU), its inspectors and York staff have been assisting with various parts of this project, including BBC Radio and



Television interviews across the country and providing advice and assistance on all aspects of beekeeping.

Contributions from the NBU can be found on BBC iPlayer, to access a list of contributions and quick links to the relevant area of iPlayer please visit the RSS feed on BeeBase (www.nationalbeeunit.com).

Additionally Fera hosted a visit from National Trust gardeners who are involved with Bee Part of It. Which included a tour of the NBU apiary and labs. This visit further strengthens our working relationship with the Trust.

As we approach the end of the summer season the NBU has created an advisory document entitled '**Preparing Honey Bee Colonies for Winter**' Preparing honey bee colonies for winter. We hope this is of use to you as a beekeeper; the document will also be available

on the BeeBase advisory leaflets page for future reference.

Further to the confirmation in May of Small Hive Beetle (SHB) in Hawaii which was reported in the last newsletter, the EU Commission has now amended the Regulation to remove Hawaii from the list of approved countries for queen imports. To view the amendments see the following web site: <https://secure.fera.defra.gov.uk/beebase/downloadNews.cfm?id=80>

The NBU are reviewing the contingency plan for exotic pests including SHB and are in the process of updating the SHB leaflet. The current leaflet is still available on BeeBase as it's important for beekeepers to be vigilant and check their hives regularly for SHB.

Medicines for bees:

The Veterinary Medicines Directorate (VMD) continues to implement its action plan to increase the availability of authorised medicines for honey bees and also to ensure their correct use, which is paramount for food safety. Residues in honey, due to improper use of medicines, could undermine its image as a healthy natural product. Further details are given in the VMD Action Plan -

www.vmd.gov.uk/VetSQP/Bee/actionplan.pdf

which is regularly updated. Optimal use of available medicines by beekeepers is also important to sustain their effectiveness in treating pests and diseases.

A sub-group of the Science and Evidence Advisory Group (SEAG), which is a working group of the Healthy Bees Plan, met in September to discuss medicines for bees. The sub-group will meet again this coming quarter where further discussions on medicines and treatment options will be considered. Further details of the sub-groups work will be available in the next quarterly newsletter.

Some Interesting and Useful Web Sites

Photographs of beekeeping on the BBC web site

http://www.bbc.co.uk/nature/species/European_honey_bee#p007vs6c

John Cleese and Rowan Atkinson on Beekeeping

<http://www.youtube.com/watch?v=OGFz9gt0-Fc>

Honeybee Blues tells the story of the world's disappearing honeybees and the efforts of Australian scientist Dr Denis Anderson to save them from annihilation.

<http://www.screenaustralia.gov.au/showcases/honeybeeblues/>

This will be the last Bee News I edit, I've been the editor for the past six years and I want to thank all of you who have sent in articles and given me encouraging words throughout the years. I've tried to make Bee News a newsletter that was enjoyable to read and also kept the club up to date with what is going on in the beekeeping world. A bit ambitious but our membership as well as the internet have been invaluable sources of information.

I'm not very good at dates and time-lines but in the eight years I've been keeping bees there have been a lot of changes. Our awareness of the pests and diseases that attack the bees have become much sharper and the buss words 'integrated pest management' (IPM) have entered our vocabularys in a big way. The simple ways of the previous generation of beekeepers have gone for ever, or have they? Recent press reports of disease resistant hives look encouraging - but will they translate to the wider population of British beekeepers?

Not only has beekeeping become popular in recent years but it has also become a useful resource for naming aspiring pop bands. Here are a couple who keep popping up when I do an internet search for beekeeping information. I can't vouch for their musicianship and what's 'garage punk'!?

The Hives are a Swedish rock band that first garnered attention in the early 2000s as a prominent group of the garage rock revival, playing garage punk. Their mainstream success came with the release of the "greatest hits" album *Your New Favourite Band*, featuring their most well-known song "Hate to Say I Told You So". The Hives are known for performing in ever-changing black and white suits.

Read more at Wikipedia

The Bees (known in the United States as A Band of Bees) are an English band from Ventnor on the Isle of Wight. Although their sound is generally classified as indie rock or psychedelic rock, the band have a colourful range of styles and influences, such as 1960s garage rock, country, reggae and jazz.

Read more at Wikipedia

It's been encouraging also to see beekeeping gaining in popularity and the Kingston Division of the SBKA grow in numbers. As club (and I know that strictly speaking I shouldn't call the Kingston Division of Surrey Beekeepers Association a club but it's much shorter than any other name) we are doing much more in the way of training and raising the awareness of beekeeping in the area. We've increasingly become a lively, well organised group thanks to the commitment of our committee and the members. I'm pleased to be leaving a thriving club and wish all well in the future, may your bees always exceed your expectations!