Winter 2016

Furness Flyer

A Newsletter for Furness Beekeeper Members.

Front Cover photo of the winner of the 2014 People's Choice and Artist Choice awards at the 2014 St Paul's Winter Snow Sculpting Contest.
The sculpture was carved by hand from an 8x8x8 block of snow by Jim Krueger
find out more here: http://cbs.umn.edu/blogs/cbs-connect/all-buzz-winter-carnival

Letter from the Secretary

I have just finished treating my colonies with oxalic acid solution. It's an excellent winter mop up of any varroa left in the hive from autumn plus it gives the opportunity to feel the weight of the super and check if they need a feed. Weight wise they were fine, but some colonies were on the small side and it will be fingers crossed for their survival.

Are your bees in need of a feed ?

It is worth noting that, often, you can monitor the condition of your colonies without even opening the hives. And at this time of the year the most important check you can do is to heft the hive to see whether the stores are sufficient until that all important spring nectar flow comes along. This will be particularly important this year as the prolonged autumn and warmer winter has kept the bees active. The Bee Unit inspection team noted cases of starvation and were able to alert beekeepers to the need to supplement stores through feeding some candy However, many beekeepers appear to be unaware of the difficulties which their bees may suffer.

European Foul Brood.

Whitehaven and their surrounding coastline have seen some of their colonies decimated this winter by an outbreak of European Foul Brood. We have, it seems, been somewhat more fortunate on our peninsula with with the European FB outbreak of two seasons ago being contained and recent autumn inspections by our new seasonal bee inspector gave our hives a clean bill of health. We must all hope that the outbreak has been nipped in the bud and all will be well this next season

Membership Issues

By the time you receive this news letter you should have renewed your membership with us, if not, your insurance will become void. If you do not intend to renew please let Hazel know, as we can take your name from our members list. Of course, we hope you all stay with us.

The Beekeeping Courses

On **Wednesday February 22nd** starting 07.30 we have a talk that will give a guide on what to look for and do during your first inspection of the season

Wednesday March 15th is the first of three weekly talks on all aspects of beekeeping.

On **Wednesday April 26th** and **May 3rd** we have talks on what to do when you find queen cells in your hive and on how to make an increase. Anyone who would like to come, should come along at 7.30 p.m. To the Geenodd Village Hall Greenodd . No need to book in advance.

Beekeeping on Saturdays starts from the end of April till September as usual at the Apiary at Gleaston.

Beekeeping at the apiary will be from 10.30 till 12.00. The address is Gleaston Water Mill Gleaston. Nr Ulverstn.

This will appeal to all levels of beekeeping, not just the new beekeepers.

The good news from Pat Bentley and David Stewart is that they are both recovering well after their operations and hope o be about at the beginning of the season.

Edna is nearly through her six sessions of chemotherapy and seems to be responding well to the treatment

.My Best Wishes and A Happy New Year to everyone
David

January 2017

Times do not change (or do they?)

The B.B.J. of November 1891 reported that in parts of Northamptonshire it was supposed to be a certain omen of death if a bee entered a cottage. In Derbyshire and Lincolnshire it was generally held that if a swarm were to settle on a dead tree trunk within the garden then it was a sure sign of approaching death within the household. The same journal of August 1930 reported how a beekeeper once wrote to the newspaper stating that he knew that the superstition of bees landing on dead wood etc., was true, as a swarm had settled on a dead branch in his garden, and within a week his wife had died. The following week, he again wrote to the newspaper saying that he had received over a thousand applications for a swarm from that stock — all of them from unhappy husbands!

Perhaps times change, but men don't!!

Unhappy husbands apart, some of our members will have some bees for sale later this season, if anybody would like some bees please contact me on 01539 721501 and I will pass your requests on.

The Beekeeper

Camilla dErrico

Profile:
I am a product of my split heritage, Italian and Canadian rolled into one: Italian fiestiness, Canadian politeness, and an early addiction to Saturday morning cartoons, comics and manga.
I have worked with Dark Horse Comics, Image Comics, Random House, Tokyopop, Hasbro, Disney, Sanrio, Neil Gaiman and also with video game and movie companies on character development. I have my own characters and properties, Tanpopo and Helmetgirls.

See more at:
http://camilladerrico.deviantart.com/

Beekeeping in Ethiopia

My Rotary Club in Millom, of which I am the current president, is developing a US$ 54,000 Global Grant project in Ethiopia which will train, equip and mentor 100 young people, 50 girls & 50 boys, in rural villages where no real employment prospects exist.
This help and ongoing support will lift them out of abject poverty, endow them with shareable skills for life and give the means to educate their future families enabling them to break out of the awful poverty cycle that pervades.
This link takes you to our website where you can click on the bee for full details
http://www.rotary-ribi.org/clubs/page.php?ClubID=1168&PgID=250469

I attach an image of Webnesh Kindu – a girl of 19 who has been assisted to start beekeeping by Bees for Development Ethiopia, our local partner. In her first year she earned ETB 1200. For some of us this may seem modest but this is just the start. And to put this into perspective – Webnesh was forced to forgo her place at secondary school because her family could not afford to pay for term-time accommodation (the school is too far to walk daily) – and yet term-time accommodation for one year would have cost less than ETB 1200. We know this new project we will be able to help more people like Webnesh.

The project monies will be spent locally and give a tremendous boost to the local economies.
In terms of cost /benefit and sustainability, your donation will achieve amazing value - yet more!

Rotary's Global Charity, The Rotary Foundation, will add half as much again to your donation - £10 becomes £15

Send me an email if you need more info - david@marshhouse.net
Send me a cheque if you want to be part of this wonderful project, payable to Rotary Club of Millom, address c/o David Friend, Horama House, Borwick Rails, Millom, Cumbria, LA18 4JU

Bill Turnbull, patron for Bees for Development, recently spoke about the work of the charity on Radio 4. You can listen again here: http://www.bbc.co.uk/programmes/b084tjt7

Bees for Development Ethiopia

We are an Ethiopian resident charity based in Bahir Dar, Amhara.

Our objectives

Delivering beekeeping training to vulnerable communities to build sustainable and resilient livelihoods

Helping beekeepers to secure best value for their bee produce by accessing strong market chains, which are fair and rewarding

Ensuring that honey bee populations thrive as a result of environmental protection and the use of sustainable methods

Enabling beekeepers to access high quality, relevant information about methods, market opportunities and policy development.

Our Mission is to teach best practices in beekeeping to secure sustainable and resilient livelihoods for vulnerable communities, at the same time as safeguarding and protecting the environment.

Skills training for men, women and youth

We provide in-depth training for farmers through a seasonal programme of three modules of training in year 1. We make sure new beekeepers have access to follow-up and refresher training in year 2. We train Development Agents where necessary so they have the capacity to provide on-going support to beekeepers in their working areas. This ensures new beekeepers always get the technical help they need.

“I was trained on how to graft improved mango. The trees will give me fruit to sell and my bees will collect nectar from the flowers and make honey”. New beekeeper in Dera

Find out more at: www.beesfordevelopment.org

Bumblebee numbers hit by 'unsettled decade'

Bumblebees and butterflies have seen their numbers plummet after another year of unsettled weather, according to a National Trust study.

The 10th annual wildlife report from the trust said mild winters and bad weather in summer created bad conditions for small plants.

But whilst insects suffered, grass growth rose, meaning a good year for livestock farmers.

Conservationists and farmers must work together, the trust said.

Warmer winter months and bad summers have become the norm, according to the report, which said the UK has not had a good summer since 2006.

Nature and wildlife specialist for the Trust, Matthew Oates, said: "2016 comes on top of an unsettled decade, with many species struggling in the face of climate change and more intensive farming practices.

"When you do get good weather during the brighter months of the year, it's almost inevitably short-lived and finished with something nasty.

"During the brightest months, we do seem to be getting more extreme weather events, most of which aren't nice."

Specific sites have now seen a big change in their wildlife, especially due to the surge in grass growth.

Observations at Lytes Cary, in Somerset, showed the number of bumblebees had fallen by 85% on the previous year as wildflowers that attract the bees in field margins were outgrown by grass.

At Purbeck, in Dorset, meadow butterflies also saw a drop in numbers, with volunteers recording a fall in sightings of marbled white numbers by 73% and 23% fewer common blue butterflies.

But the grass growth meant good hay and silage harvests for tenant farmers on Trust sites and improvements on other sites.

Among birds, in Cornwall and Devon rare cirl buntings saw a rise in numbers

by 800% since 1989.
And the grazing conditions for rare-breed Longhorn cattle in the Lake District's Ennerdale Valley led to the right wet grassland habitat for marsh fritillary butterflies, with larvae numbers up 560% in 10 years.
Mr Oates said the effect of grazing on rare species signalled the need for conservationists and farmers to work together when it comes to managing the land.
Other areas saw mixed results for their wildlife.
At Blakeney Point, on the north Norfolk coast, the grey seal population went from 100 pups being born in 2004, to 2,342 born by January this year. The Farne Islands also saw 1,879 pups born in 2016, which was up on last year.
There was also a larger apple crop, especially in the south west, because of the warm autumn and rain late in the season. The extended growing season also saw better conditions for damsons, acorns and hazelnuts.

However, there were falls in the number of field voles, which could lead to problems for barn owls and kestrels who feed on them.
And whilst slugs have benefited from the mild and wet weather, gardeners have had to suffer the effects on their plants.

From http://www.bbc.co.uk/news

FBKA Spring Lesson Series

Opening the Hive After Winter
Wed Feb 22nd

Basic Beekeeping
Wed March 15th
Wed March 22nd
Wed March 29th

I have Queen Cells in my hive. What do I do?
Wed April 26th

Making an Increase
Wed May 3rd

All lessons are held from 7.30 - 9pm

At

Greenodd Village Hall,
Greenodd,
Nr Ulverston

New bacterium discovered that may kill honey bees

A University of Wisconsin-Stout biology professor and his students, including one from Bloomer, may have made an important discovery in the effort to determine why honey bee hives are dying out during the winters in the Upper Midwest.

Biology Professor Jim Burritt and his students have published research about a new strain of the bacterium called Serratia marcescens strain sicaria. With evidence of its killing power, they chose the name sicaria, which means assassin, and Ss1 for short.

The research, with student co-authors Anna Winfield, of Bloomer, and Jake Hildebrand, of Menomonie, was published Dec. 21 in PLOS One, a peer-reviewed, open-access, online publication for science and medicine research. The study, "Sepsis and Hemocyte Loss in Honey Bees," can be found at http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0167752.

Winfield developed two screening tests to identify Ss1 based on its biochemical properties. She graduated with honors in May 2016 in applied science and is a microbiology graduate student at UW-La Crosse.

"Our results indicate that Ss1 may contribute to the wintertime failure of honey bee colonies. We believe this is important because most beekeepers in our area lose over half of their hives each winter. In Dunn County, the percentage of winter hive failure rates has been as high as 80 percent recently," said Burritt, himself a longtime beekeeper.

The bacterium came to light under a microscope at UW-Stout as researchers looked for a different organism in blood drawn from sick bees in Dunn County. They saw something unexpected.

"It was clear we were looking at something different. As we did more testing on the organism, we began to realize we may be working with a new threat to honey bees," Burritt said. "We then collaborated with experts in bacterial genetics and biochemistry at the University of Wisconsin-Madison, who used mass spectrometry and three independent, whole-genome methods to confirm this organism had not been previously described in the literature."

With evidence of a possible new disease in bees, UW-Stout then recruited beekeepers in eight west-central Wisconsin and eastern Minnesota counties and received support from the Wisconsin and Minnesota beekeeping associations to provide samples from 91 hives for testing.

Burritt and his students tested 3,219 honey bees and 1,259 Varroa destructor mites, found in the hives, between December 2014 and September 2016. Ss1 was found in bees and mites from every participating county.

Of the hives sampled for bees, 48 percent tested positive for the new bacterium, including one package of bees shipped from another region of the country. Of the hives sampled for mites, 76 percent tested positive. Of the hives that died during the winter, 73 percent had the bacterium.

The UW-Stout discovery is a positive step toward a possible solution.

"Though our study does not provide information on how winterkill can be stopped, we believe it will create a clearer picture of the diseases and challenges that honey bees face," Burritt said. "This view will be important in eventually developing strategies to help bees survive the long months of winter."

"The well-being of honey bees and other pollinators is crucial to our ecosystem, a wholesome environment and our economy," he added.

Along with finding the new strain of bacterium, also groundbreaking within the study is confirmation that Varroa destructor mites carry the Ss1 bacterium, Burritt said. Previously, mites were known only for transmitting viruses to honey bees.

The eight-legged Varroa mites are about the size of a poppy seed, Burritt said.

"With the help of the students, we developed a method to efficiently obtain culture information from many individual mites," he said.

A culture plate shows the colorless bacterium Serratia marcescens strain sicaria (left) and another type of bacteria (right).

Hildebrand, a senior, led the testing of bee blood, hemolymph, for infection and identified proteins in the blood that are important to their immune system.

Five other UW-Stout students are recognized in the published research. They are Morgan Ingold, of Waterford; Matheus de Jesus, of Brazil; Viviane Oshima, of Brazil; Brooke Sommerfeldt, of Park Falls; and Amber Thums, of Butternut. Professor Steve Nold provided help with bioinformatics.

"The honey bee studies at UW-Stout have required the research ideas, interest and hands of a lot of students, and we had plenty of each," Burritt said.

The research also found the Ss1 bacterium has 65 genes not found in other strains of the Serratia genus, suggesting Ss1 has been successful borrowing

genetic information from other bacteria.

In 2014 Burritt and his students published another study in PLOS One describing their new technique of hemocyte profiling of the blood cells of honey bees. The latest research builds on the previous effort by using the new profiling method; bees infected by Ss1 were found to have fewer of the blood cells that defend against bacterial infections, suggesting Ss1 may weaken bees' immune systems.

The honey bee project at UW-Stout, led by Burritt, is in its sixth year and has involved hundreds of UW-Stout students doing research in microbiology classes, courses within the applied science major and in locations beyond the classroom.

Student Jacob Hildebrand takes out tiny amounts of hemolymph - the equivalent of blood, from chilled bees

From ww.chippewa.com

Northern Bee Auctions

Saturday 22nd April 2017
Village Hall Houghton, Carlisle Just off junction 44 M6

Unfortunately, Peter Harris, the owner of Cumbria bee supplies and Northern bee auctions, is suffering from a long term illness and is no longer able to carry out his business. Peter's family are planning to go ahead with the auction on the above date.

Devastating mites jump nimbly from flowers to honeybees

Mites that infest honeybees may be blind with tiny brains, but make no mistake: When a bee sidles up next to them, they are surprisingly quick-footed.

A study, published Dec. 12 in PLOS One, describes for the first time – and documents with video footage – how Varroa mites can nimbly jump from flowers onto bees.

The finding is important because Varroa mites are linked with massive honeybee colony deaths, as they infest nursery cells in honeybee nests and feed on developing bees while also transferring deadly viruses.

The mites are known to readily spread through both managed and wild colonies. In managed colonies, Varroa mites are thought to spread by riding on bees when they rob weak colonies or drift between hives. But widely spaced wild colonies also suffer from mite infestations, even though wild bees rarely venture into other hives. It was suspected that mites could attach themselves to bees when they visit flowers, though this means of transmission has been rarely studied.

"No one has ever shown that bees flying naturally and freely, arriving at flowers and then leaving as they wished, presented a large enough opportunity for Varroa mites to make these jumps," said David Peck, the study's first author and a graduate student in the lab of senior author Thomas Seeley, the Horace White Professor in Biology. Michael Smith, a graduate student in Seeley's lab, is a co-author.

To test whether mites could travel from flowers to bees, the researchers took colonies of honeybees to the Adirondack mountains in upstate New York, where there are very few wildflowers, so the bees' foraging could be controlled. They placed mites on feeders of sugar water and on potted flowers and observed the mites detect bees and deftly navigate their way onto the bees' backs.

"A noteworthy result that we didn't originally expect was that once the mites get onto the bees, they show some pretty sophisticated behaviors to avoid getting groomed off," Peck said. They quickly climbed onto the top of a leg or onto the very center of a bee's back, where the bee could not reach. Eventually, when mites reach a hive, they reproduce in nursery cells in honeybee nests and feed on larval bees.

The findings offer evidence of another mode of transmission of mites to bees, which is important for better understanding the disease risks Varroa mites present and for preventing colony deaths.

But the results also raise concern about shipping cut flowers and spreading

Continued on page 14

A French beekeeper makes mead in the Paris catacombs

Deep below Paris is a web of crypts and tunnels, former quarries that were excavated to build some of Paris's most famous buildings hundreds of years ago. They're collectively known as the catacombs.

And somewhere in that network — the exact location will remain a secret — is where Audric de Campeau's mead is aging.

"We are 20 meters under Paris," says de Campeau, below the metro, "and absolutely nothing comes to trouble us and my barrels. So it's the perfect place to grow mead."

Mead, sometimes known as honey wine, is a mix of water and honey that, like wine, must be fermented in a cool, quiet place that is humid and perfectly still. Down in the catacombs, the humidity hovers around 90 percent and the walls and ceiling are damp to the touch.

Mead is the perfect combination of de Campeau's two passions: Beekeeping and winemaking — which he began experimenting with as a teenager.

"My parents had a house in Champagne," he explains. "They're not winemakers, but it was a dream as I was thinking, maybe, if I do one or two bottles would be fun."

His tiny vineyard grew over the years. De Campeau went on to study philosophy at the Sorbonne in Paris but returned to Champagne every weekend to tend his vines and growing garden.

"Then, naturally, I thought about bees. So I asked my parents [for permission] to install my first bee hive," he says, which posed a problem, "because my father was absolutely allergic to bee venom."

While this might have given others pause, de Campeau persisted, installing his first hive in the woods far from the house. They multiplied while de Campeau, still living in Paris, began dreaming about raising bees in the city.

Beekeeping has something of a tradition in Paris. A beekeeping school has operated in the Luxembourg Gardens for more than 100 years.

But de Campeau, who you can probably tell by now has a bit of a taste for the dramatic, set his sights on a building in his neighborhood, Les Invalides, the site of Napoleon's tomb. Today, he has hives on many of the best-known monuments in Paris, including the Musee D'Orsay and the Paris mint.

"I grow my bees 20-25 meters above Paris and I grow my mead 20-25 meters under Paris," de Campeau likes to say (or about six to eight stories).

The honey, which he sells, has become his regular day-job. He's also experimenting with making honey-based candies and nougat, another sweet French specialty.

"I have other ideas," de Campeau adds, unsurprisingly. While his next batch of mead slowly ages below the ground, he should have no trouble keeping busy.

By Emma Jacobs www.pri.org

Continued from page 12

Varroa mites to areas where they do not exist, such as Australia.

"If a mite could jump from a flower onto a bee that tried to visit one of these flowers at an open-air flower market, the result could be disastrous," Peck said, adding that stricter safeguards for shipping flowers should be considered. These could include spraying flowers, refrigeration or limiting shipments to flowers raised in secure greenhouses.

Next steps for this research will be to better understand mite behaviors on flowers, such as how often and under what circumstances they end up on flowers.

By Krishna Ramanujan www.news.cornell.edu