

2019 Issue 2

# Furness Flyer



A Newsletter for Furness Beekeeper Members.



## Letter from the Secretary

This year has been a summer of contrasts. Record breaking hot days and equally so very wet weather.

I have had a very good year for honey. Strong spring colonies with the best spring blossom I have seen for many a year produced large quantities of spring honey which I extracted. Around five weeks ago there was another honey flow which produced autumn crop which I am about to extract. Very rare I get two crops of honey and I hope that our members have had the same good fortune.

The Convention was enthusiastically-attended again, and was very good I thought.

Many thanks to all in helping to make the convention successful, particularly Dick Smith and Stuart Beattie who both gave very interesting talks .

I must not forget the ladies that looked after the kitchen and to Aiden who ferried the delegates to the Old Mill for their lunch.

I have booked the Malt Kiln for March 21<sup>st</sup> next year, plus two very good speakers.

I will be sending out more information after Christmas.

We attended the North Lonsdale Show this year for the first time since the very untimely death of Chris Sandham who was a driving force for going to the shows

Our stand looked very good and our observation hive produced a lot of interest. We also had a honey tasting

with six different honeys from members apiaries.

The idea was that the public should choose the one they liked best and buy it.

We also took names of people that would like to come to our spring bee-keeping lessons. We collected over 30 and we hope to see a good percentage of them next spring

The weather was kind and a very good day out was had by every body.

We shall be attending the Millom and Broughton Show on August 31<sup>st</sup>.

We have been for three years now and always had a great day. It's always good to see people and say hello, so please come along to see us.

Both Apiaries have been busy, but manageable numbers have turned up and having both apiaries has proved to be very worth while and can easily be justified.

We didn't lose any colonies over the winter and we now a six colonies in each apiary, this is very useful as we always have a hive which needs inspection..

The season is slowly coming to an end and I expect the apiaries to have closed the end of September

Julia Hoggard the seasonal bee inspector call to inspect the Gleaston apiary.

She was very pleased with what she saw and it was very gratifying knowing that we are doing things correctly.

I hope to see you all soon DJW

## Kendal pupils create a buzz to protect bees and pollinators



Inspiring school children from Kendal, Cumbria, were buzzing around London's Carnaby Street today (8 July) as they won a government award for their work to protect bees and other pollinators, such as hoverflies and moths.

The pupils from Heron Hill Primary School in Kendal were presented with a Bees' Needs School Champion Award certificate by Defra Biosecurity Minister Lord Gardiner, and George McGavin, environment ambassador for the Year of Green Action, entomologist and author.

The children received their certificates at the official launch event of Bees' Needs Week 2019 which kicked off on Carnaby Street, renamed Carnabee Street for the week-long campaign (8-14 July).

The students from Heron Hill Primary School were recognised for their work caring for honey bee hives and becoming certified junior beekeepers by the British Bee Keeping Association (BBKA).

The students received their award outside the 'Hive' – a pop-up space off Carnabee Street – that showcases

the innovative work from the Bees' Needs Week partners such as the Bumblebee Conservation Trust and Kew.

Visitors to the 'Hive' will be able to get up close to the bee action with a live Bumblearium from the University of Reading, a virtual reality experience from Kew Gardens, and a honey sampling station.

Lord Gardiner, Minister for Biosecurity, said of the award winners: "Pollinating insects are an essential part of our lives as they provide the food we eat and also contribute to our beautiful landscapes.

"I am delighted to award the Schools Champion Award to Heron Hill Primary School to recognise their wonderful work in helping our pollinators.

"Raising awareness of what we all can do to help pollinators is essential and I hope these outstanding children will inspire others to do the same and do their bit to help this Year of Green Action."

Year of Green Action Ambassador George McGavin said: "I'm hugely encouraged to see such a high level of engagement from the next generation of bee champions.

"Children understand about environmental issues better than most adults – they know their future depends on it.

"If you start out understanding the importance of bees there's a good chance things will get better."

[www.cumbriacrack.com](http://www.cumbriacrack.com)

## Bees for Development

I recently picked up a leaflet in the bee section of the Great Yorkshire Show “The Power of Bees”. It went on to explain how bees were providing a better future for people living in desperate poverty in some of the poorest places in the world.

Bees for Development have been helping people for over 25 years in Africa, Asia, Central and Southern America as well as Eastern Europe through practical and community based projects that help families create a reliable income from bees. Part of their work also promotes awareness of the link between bees and the wider environment and providing sustainable livelihoods.

The people the project helps are provided with an opportunity to generate valuable income through honey and beeswax and what struck me was the scale of that income and what it meant to those families. For example selling honey might give a family the money to buy vegetable seeds that will in turn help feed their family. I find that quite humbling.

People are shown how to build hives from materials they can find around the villages and they then catch swarms of wild bees. One family made



£80 from harvesting their honey and were able to buy new clothes and send their daughter to school. Things we take for granted.

Part of the project also plants trees so that forests are restored and sustained providing a food source for the bees and other environmental benefits. For example in Ghana bee keeping has helped increase cashew nut harvests through pollination.

Bee keeping starts young with Buzz Clubs in schools where apiaries have been created to teach children about bees. Can you imagine this being added to our National Curriculum?

You can find out more about the project at [www.beesfordevelopment.org](http://www.beesfordevelopment.org)

This year was the first time I have visited the bee section at the Yorkshire Show and it is well worth a visit.

By Carole Barr

## This tiny insect could be delivering toxic pesticides to honey bees and other beneficial bugs



A common pesticide may be causing more collateral damage than thought. According to a new study, neonicotinoids can kill beneficial insects such as honey bees, hoverflies, and parasitic wasps by contaminating honeydew, a sugar-rich liquid excreted by certain insects.

Researchers already knew neonicotinoids could harm honey bees and other beneficial insects when applied to important crops such as cotton, potato, and citrus. A 2017 study, for example, found the chemicals can poison bees, causing symptoms like paralysis, vomiting, or death when they eat contaminated nectar or pollen, or even crawl over sprayed surfaces. Yet neonicotinoids still account for more than 20% of the world's insecticide market.

In the new study, scientists wanted to see whether the chemicals could harm these and other insects more indirectly. They looked to the invasive mealybug (pictured), a 6-millimeter-long insect that eats plants typically contaminated with pesticides. As they nosh, the bugs excrete a sticky substance called honeydew, which pollinating insects like hoverflies and parasitic wasps consume.

The scientists applied two of the most commonly used neonicotinoid insecticides (thiamethoxam and imidacloprid) to clementine trees grown in a greenhouse. They added the chemicals to the soil in one group and sprayed it on leaves in another, mimicking the ways farmers control pest infestations today. The team sprayed a third group of trees with distilled water as a control. Then they infested the trees with mealybugs and fed their resulting honeydew to hoverflies and parasitic wasps.

All of the hoverflies that ate honeydew from trees sprayed with thiamethoxam died within 3 days, while just 10% of the control group died, researchers report today in the *Proceedings of the National Academy of Sciences*. In the soil-treated trees, nearly 70% of the hoverflies died from the same chemical, compared with about 14% in the control group. More than half of the wasps also died after eating honeydew from the soil-treated and sprayed trees (with thiamethoxam), whereas less than 20% died in the controls.

The study suggests honeydew could be another way beneficial insects are exposed to deadly insecticides. This can devastate more insects across the food web than nectar contaminated with insecticides could, the team says, because honeydew is more abundant, especially in agricultural fields.

## What is honeydew honey?

Honeydew is a sweet and sticky liquid excreted by certain insects, usually aphids. When these insects pierce the phloem of a plant with their needle-like mouthparts, the sap—which is under pressure—shoots into the food canal of the insect, forcing the previously ingested sap out the other end. Yes, you read that right. Honeydew is fast-tracked bug poop.

But it's not that bad. Trust me. Aphids are dependent on sap for all their nutritional needs, including protein. But plant sap is mostly water and sugar with just a fraction of protein—about 1 to 2 percent of the volume. So the insect must eat large amounts of sap to get enough protein, so what comes out is very similar to what went in—minus a few amino acids. Technically, the substance cannot be called honeydew unless it's been run through a bug's digestive tract. Sap that just oozes from a plant is called sap.

The honeydew that is expelled lands on leaves, branches, needles, or even on the ground under the plant. This processed sap is coveted by other creatures, including ants and bees. Although honey bees prefer floral nectar, during times of dearth—especially in the late summer—they will often collect the honeydew, transport it in their honey crop, and process it just like nectar. Yum.

The liquid in honeydew evaporates quickly, so honey bees are more likely to collect it in the mornings or evenings. The bees treat the substance like

nectar so it is often mixed together with the nectar from flowers. As such, it is not really noticeable in the finished honey.

Honey made almost exclusively from honeydew is known as honeydew honey, forest honey, bug honey, flea honey, or tree honey. Sometimes it is named after its primary component, such as pine honey, fir honey, oak honey, etc. It is generally dark, strongly flavored, less acidic, and less sweet than floral honey. It is prized in many parts of Europe and in New Zealand,



often commanding high prices.

Oddly, honeydew honey is not considered good winter feed for bees because it can be quite high in ash, a primary cause of honey bee dysentery. Beekeepers often remove honeydew honey from their hives before the onset of winter.

The amount of honeydew in your honey depends on the plant species that live nearby, the climate, and the local weather. If floral nectar is plentiful all year long, honeydew collection will

remain insignificant. In some regions, however, such as Germany and northern California, honeydew honey is quite common. Like floral honey, honeydew honey varies remarkably with its source. Its flavor, color, sweetness, consistency, nutrient content, and tendency to granulate are dependent both on the plant and the insect that collected it.

Plants that produce the sap that feeds

the insects are mostly trees. Certain species of ash, basswood, beech, cedar, chestnut, elm, fir, hickory, larch, maple, oak, pine, poplar, spruce, sycamore, and willow produce honeydew, as does black locust. A few forbs produce honeydew as well, including alfalfa, cotton, currants, grapes, gooseberries, and sunflowers.

[www.honeybeesuite.com](http://www.honeybeesuite.com)

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Would you like to see your story in our newsletter?

Have you seen a story that would interest our members?

Perhaps you're an artist or photographer and would like to share your bee/honey related work?

Have you read a beekeeping book that you would like to review for us?

If YES, then contact us at Mail: [info@furnessbeekeepers.co.uk](mailto:info@furnessbeekeepers.co.uk)



## 'It's a miracle': hundreds of thousands of bees survive Notre Dame fire

Following the tragedy of the fire at the Notre Dame Cathedral in Paris, news came of a miracle as sweet as honey. The hundreds of thousands of bees that lived in hives inside Notre Dame's roof are alive and well, according to the beekeeper, or apiculteur, that oversees them.

"Thank goodness the flames didn't touch them," Nicolas Géant, the hives' 51-year-old beekeeper, told CNN. "It's a miracle."

Three hives that are home to an estimated 60,000 bees each – 180,000 bees in total – are located on a lower roof atop the cathedral's first floor.

The flames of the fire – which investigators say was probably caused by an electrical short circuit – took down the cathedral's spire and a large portion of its roof.

For a few days after the fire, Géant was worried about his beloved bees, and the French police and firefighters wouldn't let him go up on the roof to check on them. Hopes that the bees survived rested on aerial photos of the cathedral's roof, which showed the hives still intact.

"You see that everything is burnt, there are holes in the roof, but you can still see the three beehives," Géant told NBC News on Wednesday.

On Thursday, the French urban beekeeping company Beepic Apiculture posted a picture on Instagram that confirmed the Notre Dame bees were

OK.

"Our bees from the Cathedral Notre-Dame de Paris are still alive!! Confirmation from site officials!!" read the post's caption.

The bees probably survived because the hives are located about 30 meters away from the main roof where the fire spread, Géant told CNN.

Beekeeping on rooftops is one of Paris's best kept secrets. Besides Notre Dame, hives are also kept atop the roofs of other notable structures, such as the Opéra Garnier, Musée d'Orsay and Grand Palais. More than 700 hives are kept across the city, one beekeeper told Atlas Obscura in August.

Though the fire at Notre Dame brought destruction to one of Paris's beloved landmarks, Géant said he was "overjoyed" to hear that his bees were still alive.

"I was incredibly sad about Notre Dame because it's such a beautiful building, and as a Catholic it means a lot to me," Geant said. "But to hear there is life when it comes to the bees, that's just wonderful."

[www.theguardian.co.uk](http://www.theguardian.co.uk)



## Forest conservation project converts bee-burners to beekeepers on Príncipe Island



On the small island of Príncipe in the Gulf of Guinea, a community beekeeping project is empowering communities to obtain honey in a way that doesn't risk their lives. This initiative is already restoring forests and enriching livelihoods.

Traditionally, honey collectors on Príncipe Island extracted honey from wild colonies found in the forest by burning their nests. Not only does this method kill most of the bees and risk starting forest fires, but it is also dangerous for the honey collectors themselves, who must scale tall trees with minimal safety equipment.

That's why CEPF grantee Fauna & Flora International, in partnership with local non-profit organization Fundação Príncipe Trust (FPT), is helping to support COOPAPIP, the only community beekeeping organization on the Island, located in the community of Ponta do Sol. The CEPF-funded project expands on a

successful pilot project by FPT that built apiaries for the safe production of honey. The project uses agroforestry - where trees are grown among crops - to restore degraded areas, guarantee bee pasture and contribute to islanders' food security by improving horticultural yields.

"This project has made our life easier. Previously, we used to burn bees for honey, and now we no longer burn them," said participant Jose Antonio Mendes. "We feel safe in our work thanks to the equipment provided to us by the project."

The project has contributed extensively to the scaling up of commercial beekeeping on the island, though the community cooperative cannot yet meet the demand of visiting international buyers.

"We are already selling the honey to the general community members, and now we are also selling to the tourists," said Manuel Delgado, the President of the nascent bee-keeping cooperative known as COOPAPIP.

There is strong hope that other beekeepers on the island still using the traditional method will soon transition to sustainable beekeeping with the help of COOPAPIP.

[www.birdlife.org](http://www.birdlife.org)

## A common honey bee disease is spread through flowers

James Cook University scientists have discovered a common honey bee disease can be deadly to native Australian wild bees and can be transmitted by flowers—the first time this link has been made.



*Australian native stingless bees*

JCU's Associate Professor Lori Lach oversaw the study investigating the susceptibility of Australian stingless or "sugar bag" bees to *Nosema ceranae*—a parasite that causes European honey bees to become less active, develop an increase in appetite, and die prematurely.

"Pathogen spillover from bees kept by bee keepers to wild bee populations is increasingly considered as a possible cause of wild pollinator decline. Spillover has been frequently documented, but not much is known about the pathogen's virulence in wild bees or how long pathogens can survive on a flower," said Terence Purkiss, the honors student who conducted the study.

The scientists found that just over two thirds of the wild bees exposed to the disease caught it, and those that did died at nearly three times the rate of those without it. Most European beehives have been found to contain the disease to some extent.

The scientists also found that flowers can transmit the disease.

"About two thirds of the flowers exposed to infected European honey bees

were found to be carrying *Nosema ceranae* spores. In every case, at least one stingless bee that foraged on the flowers contracted the pathogen. What this means is that wild bees can be infected with the disease by sharing a flower with an infected European bee," said Dr. Lach.

Five out of the six stingless bee hives the researchers monitored over five months tested positive for the pathogen at least once.

Dr. Lach said species' geographic distributions are changing rapidly due to habitat loss, climate change, and through new species being introduced by humans.

"This leads to novel combinations of interacting species that share no evolutionary history. Introduced species may bring with them their pathogens and parasites and provide an opportunity for these to spread to new species," Dr. Lach said.

Cont on p13...

## Bees have set up a hive inside a cello

There are 20,000 honey bees living inside this reclaimed cello – and it’s all part of a musical project by a university professor.

Martin Bencsik, a professor from Nottingham Trent University, has encouraged a swarm of bees to set up hive inside his cello.

Bencsik, whose wife is a professional cellist, has used the reclaimed instrument to research vibrations and sounds made by bees.

At the end of the project, Bencsik will record the noises in order to create a musical soundscape, which will culminate in a performance later this year. He hopes his project will raise awareness about the decline of the pollinating insects.

“Bees need a cavity,” he told the BBC. “We have run out of enough hollow trees in this country for them to make a good living, and it feels like a sacrifice to give honey bees such a beauti-

ful, splendid object for them to develop.”

The cello currently stands in Dr Bencsik’s garden in West Bridgford, where he often sits and watches the bees at work.

“When we put them in the cello, they all crawl up to the very top and they start building their structure, the honeycomb, from the top and they make their way down.

“Within a few weeks, the entire cello will be full of honeycomb.”

Bencsik, whose father was a beekeeper, admits he used to hate the insects because they stung him. But for the last ten years, he has enjoyed spending his working life researching honey bees.

“I can sit here and watch the bees in the cello for hours. I don’t need a beer or wine, I just need to watch my bees in the cello and I am absolutely satisfied.”

[www.classicfm.com](http://www.classicfm.com)



## Five year old qualifies as beekeeper, becoming Britain's youngest

Five year old Archie Cridland, from Guildford, Surrey has become Britain's youngest certified beekeeper.

Little Archie keeps a colony of 60,000 bees, despite apparently being stung by one at the age of two.

Archie received his British Beekeeping Association (BBKA)'s Junior Certificate in Apiculture last month. To qualify, he was required to submit a portfolio of three months' work, and a diary, to an external examiner.

Archie's grandmother, Lorraine Rago-sa-Rout, is one of the directors of Surrey Bees Training, set up in 2013 to provide training to new and existing beekeepers.

Lorraine said: "This was quite a task for someone who is just starting to read and write.

"To learn the BBKA syllabus meant a lot of repeating topics but like a sponge he sucked it all in. I'm so proud of him for learning so much and passing exam, but also how he cares about the environment and supporting the bees."



When asked about his passion for beekeeping Archie said: "They're important because they pollinate. They pollinate our trees, food and crops.

"We do microscopy and I like to look at bees close up under the microscope."

Becky Payne [www.smallholder.co.uk](http://www.smallholder.co.uk)

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Cont from p11...

Dr. Lach said more work had to be done outside the laboratory setting and within different seasons to get a clearer picture of how dangerous the pathogen is to wild bees.

Dr. Lach said it was the first study to find a spillover of the pathogen from European bees to Australia's stingless-bees.

"Reducing risk of pathogen transmission from managed to wild bees presents multiple challenges and must involve the beekeeping community for any real change to occur. Development of rapid effective diagnostic tools and reliable means of preventing and treating infection will be important advances too," she said.

James Cooke University [phys.org](http://phys.org)



Furness Beekeepers Association  
will be at

**Millom and Broughton Agricultural Show**

Saturday 31<sup>st</sup> August

<https://www.millomandbroughtonshow.com/>

*Come along and enjoy the fun!*





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