Combings

The newsletter of the York and District Beekeepers Association.

Issue No. 58

Summer 2016.

York and District Beekeepers 2015/16

President	Sue Hesp	01904 489449
Vice Presidents	Bill Bell	01904 744219
	John Fuller	01757 638388
Committee:		
Chair	Bruno Hannemann	07854 020879
Vice Chair	Paul Taylor	01759 305484
Secretary	Patricia Miller	01904 431542
Treasurer and Membership Sec.	John Thompson	01904 468466
Equipment Officer	Peter Crosby	01904 488362
Education	Adrian Burnside	01347 824668
Web Master & Publicity	Bruno Hannemann	07854 020879

Other committee members:

	John Fuller	01757 638388
	Margaret Langstaff	01759 380546
	Paul Appleton	01759 303248

Other post holders:

Apiary Manager	Martin Ainsley	
Librarian	Paul Appleton	01759 303248
Spray Liaison	John Hunt	01757 709588
Events and Groundsman	Janet Cole	01904 635677
Combings Editor	Kate Wallace	01904 778318
Bee Inspectors:	Dhonn Atkinson	07775 119437
	Adrian Wilford	07775 119444

YDBKA

York & District Beekeepers Association

The password for the members area of the YDBKA website is:
beesatyork

"Combings" is the newsletter of the York & District Beekeepers Association. Views expressed in the newsletter are those of the individual contributors and not necessarily those of the Association as a whole or of the editor.

Contributions to, and comments on "Combings" are always welcome. I would particularly appreciate your pictures for "Reader's Hives".

Please send any copy or comments to: Combings@gmail.com

Combings Editor: Kate Wallace

73 Keble Park South

Bishopthorpe

York YO23 2SU

Tel: 01904 778319

Assistant Editor is Alan Johnston

Combings is published quarterly.

Please note that the last date for copy for the next edition is:

18th August 2016.

Two Eds.

A mild winter and the late spring has meant lots of swarming activity, plenty to keep us all very busy! Continue with your weekly inspections until swarming mania has ended and things settle into summer routine. Alan gives some advice on page 9 on how to treat your swarm, once it's been hived.

Remember to take your mobile phone with you when you are out and about in your apiaries and make sure your "In Case of Emergency" contact knows where your apiaries are situated.

The image on the front page of the "Mitsubishi fit for a queen" from the CBC/Radio-Canada website, was spotted and sent in by non-member, Hannah Cutts. Many thanks, Hannah.

YDBKA is running a microscopy course, please see the advert below for details.

Ken Barran

YDBKA long-term member, Ken Barran, died on 26th February. Ken received his 50 year award from BBKA some years ago.

"Combings" visited his good friend of over 30 years, Bob Hirst, a former Chairman of this Association, to talk about Ken's life with bees.

Ken started keeping bees by accident! When he finished his National Service, he was talked into taking on 6 colonies by a Scot, who was returning north, so Ken had to read-up fast.

Bob told me that Ken was an exceptional beekeeper, he was a countryman who understood Nature and his craft. Ken was very patient and never lost his temper; he would never permit ill-treatment of bees, and any over-smoking of a colony or crushing of bees would be dealt with severely.

Ken and Bob spent a lot of time together and travelled widely, often staying with friends in the beekeeping community all over the world.

Ken was a keen "heather-man" and he knew where all the best sites were, as well as the best fish and chip shops on the way home! Bob told me of some of their adventures, such as the time they were returning with a trailer-load of hives and one hive fell off at the traffic lights in Knaresborough, the impact loosened the strapping and some very cross bees did some traffic stopping of their own!

Ken leaves a wife, Kathy, four sons, grandchildren and great-grandchildren.

The Association has lost his knowledge and good-humour. He will be sadly missed by many of us.

Thanks to John Thompson for this report on the auction.

ANNUAL AUCTION – 2016

The Auction was held on 22 May, and was a great success. For once the weather was fairly favourable for us. Thanks to all those who helped with the administration of it – Bruno Hannemann, Tricia Miller, Nigel Davies, Paul Appleton, Paul Taylor, Adrian Burnside, Martin Ainsley and Mike Coates. I hope that I haven't missed anyone out.

Twenty-four sellers came along together with 65 buyers, and there were 337 general lots on offer, of which 51 lots failed to sell either from want of a bid or failure to make the reserve. Two sellers brought 7 colonies of bees – the best price was £150, then 1 @ £100, 1 @ £95, 2 @ £80, 1 @ £75 and 1 @ £65.
The total receipts amounted to £3,401.48, which includes our 5% buyer's commission. At the moment, we do not levy a commission on the sellers.

We now move seamlessly onto the next project - the Beginners Practical Course for the next 5 weeks!

John C Thompson
Treasurer

MEMBERSHIP SUBSCRIPTIONS FOR THE YEAR 2016/2017

At the recent half-yearly meeting of the Association, and in view of our sound financial position, I proposed that the subscription rates for the next membership year should remain as at present. Unsurprisingly, my proposal was passed unopposed!

The next year starts on 1st October 2016, and runs until 30th September 2017.

Rates are:

Full member:	£25.00
Partner member:	£20.00
Junior member:	£25.00
Social member:	£12.50

As this year, you may pay by cash, cheque or direct electronic transfer to our Bank Account – details will appear on the membership form which will be updated by the end of July 2016.

John C Thompson
Treasurer

Top tip

If the queen should fly out during examination of the hive, quickly and carefully put everything back together but leave part of the crownboard, and all of the roof off, for about an hour, the aroma of the colony may guide her back again. However if she does not return, you will have a queenless colony, seek advice if you need to.

and the word for today is…

Guttation

Here's something else for beekeepers to worry about, but only a little bit! Under normal conditions, plants passively exchange carbon dioxide and oxygen through pores in their leaves, and water vapour exits in the process. These processes are,

however, sometimes unable to cope when moisture and humidity levels are high and the roots are still drawing in water. The plants need to discharge excess water to avoid damage tissue damage via the process known as guttation.
It occurs via a fringe of glands around the edges of the leaves known as hydathodes. It tends to occur at night, resulting in a ring of droplets around the leaf margin, being visible in the morning, before the sun evaporates them.

The beekeeping implication is that the plant absorbs water contaminated with toxins, these are present in liquid form in guttation droplets, and can be taken up by bees collecting water.
In reality, it's a small problem: bees tend to use regular watering sites rather than collect randomly, but it's a topic which is attracting some attention, and it's a great word for "Scrabble".

Fondant and syrup for sale:

David Bough has plenty of syrup and fondant in stock as usual: syrup is £18 per jerry can and fondant is £19 per box.

David is in Holtby. Contact him via email at david.bough@wardstheflorist.co.uk or by phone 07713 256522

Alan Johnston also has syrup and fondant for sale at the same prices. Alan is near Selby, his phone number is 01757 633202. For the one-hive beekeeper, Alan will sell a single 2.5 kg pack of fondant at £4.

Did you know?

The first form of the queen excluder was invented in France in 1865 by the Abbé Collin, who was the author of "Le guide du propriétaire d'abeilles" (1856).

Swarms – free bees but at what cost?

For some beekeepers, swarm collection is one of the highlights of the season. For others, it's simply a nuisance, particularly if there is some pressure on you, as the local "bee expert", to demonstrate your prowess whilst desperately hanging on to a wobbly ladder.

This season, with its delayed spring, is likely to see a significant number of swarms out, as the bees try to make up for lost time.

Ideally, beekeepers wouldn't lose swarms at all; colonies would be managed and split, *a la* Pagden, at the first sign of swarming, but the reality is that it does happen. If you see a swarm exit from one of your hives (and it's a spectacular sight!), or if you're certain that the swarm in the bush is one of yours, then its ok and arguably your duty to collect and re-house it. But bees attract bees, and swarms of unknown origin will hang up next to your apiary if it looks like there's a change of a "des res" going spare, and those incoming bees could carry disease.

The most obvious problem would be Foul Brood, a notifiable disease and a sure visit from the bee inspector who may choose to destroy that colony and any others which may have contracted it from your "free bees". It could be American Foul Brood (even worse – non-negotiable destruction), or if you are lucky, you may just get away with a really bad dose of varroa. So, how should you manage your free gift?

Beekeepers should try to find an additional site to use as an isolation apiary, beyond the flying distance of their own, or any others known apiary. That way, if there is a problem, then the risk of it spreading to other colonies is reduced. The swarm should be kept there for at least one brood cycle (three weeks) and ideally two so that any problems can show up, particularly in developing brood. After that, it's probably safe to move them back home.

Swarms should be put onto clean frames and new foundation. Traditionally, swarms are fed syrup immediately on hiving, as an average swarm only carries enough honey in their collective gut to draw out one or two frames of foundation. There is, however, a strong counter-argument for not initially feeding swarms: if they do carry disease spores in the gut, these will come out during the drawing out of these initial frames. These frames can be removed and destroyed, along with the pathogens which have gone into the wax. Then, with clean, empty guts, the bees can be given a second batch of frames and foundation, and be fed copiously. The risk is that the swarm may abscond due to the perceived shortage of food.

The period whilst new combs are being drawn, and before any significant quantity of brood has been produced, is also an ideal time to treat bees with oxalic acid, against varroa.

And finally, don't try to house a big swarm in a small box! I've seen beekeepers housing a two foot long swam in a single National brood box, and look surprised when they abscond the next day. One of the triggers for swarming is overcrowding, and they're not going to stay put in conditions which are no better than the ones they've just left. Give space appropriate to size and do not insert a queen excluder between brood box and any supers until they are established.

So good luck with the swarm collection, but remember that there are risks and act with appropriate caution.

Alan Johnston

Up Close and Dangerous, a talk by Claire Waring

Claire Waring spoke to us after the Half-yearly meeting on 13th of April.

Claire is the editor of "Beecraft", a founder member of the charity "Bees Abroad", is a member of BIBBA and CBA and she is an award-winning photographer.

Claire's talk mainly focused on her very extensive travels, visiting the beekeeping communities of many countries. However, she also passed on some hints on how to improve our bee photography. The talk featured many races of bees and the environmental problems that they face, from the stingless bees of Mexico to the cliff-dwelling giant bees of Nepal, famous for the local people's "honey-hunting" expeditions.

Did you know?

Queen honey bees can live up to around four years, unless she is replaced earlier, by either the bees or the beekeeper. Research indicates that vitellogenin, which is a protein important in reproduction, is in higher concentrations in queens than in workers, especially as they age. Vitellogenin is believed to reduce oxidative stress to honey bees by scavenging free radicals that can lead to ageing or illness.

Apiary meeting Saturday 2nd April for "Combings"

John Fuller sent me a report on his apiary visit in Howden.
This was the first apiary visit of the new season.

There was a good turn-out considering that it had rained all morning but the weather improved for the afternoon.
There were some old hands at the meeting and some people from this year's Beginners Course - and a mix of all those in between!

John's demonstration began with a description of the equipment he uses and some of the reasons for his choices.

The demonstration went on to transferring frames from the old hive into the fresh, scorched one, and showing frames of stores and brood. This was followed by a Bailey Comb Change and the reasons for doing so, and then onto demonstrate a "shook swarm" with John discussed the reasons for using the process.
During the shook swarm, the queen could not be located but finally she was found, dead, on the floor of the hive. There was another colony nearby so the demonstration was completed using the second colony.

John was ably assisted during the afternoon by Alan Johnston.

Many thanks to Bruno Hannemann for this article.

Travelling with bees from Europe to Brazil in 1867

Some of you might remember an article published in "Combings" (Spring 2013) about my connection with

beekeeping being a family tradition that spans a few generations.

My ancestor Friedrich August Hannemann was responsible for introducing *Apis mellifera* to Brazil in 1867, when he emigrated from Germany with his wife and two nucs of bees. But how do you travel from Europe to Brazil on a sailing ship with bees? They boarded the vessel 'Kosmopolit' in Hamburg, and the following is a translation of his own account of the journey:

"The ship was due to sail on the 31st May 1867, so on the previous afternoon I went to collect the box where I accommodated the two skeps from the 4th storey of the building where they were left for the previous 14 days. From there I took them on board myself, without much of an idea on how to proceed. As there was no one with previous experience in the matter to get some advice from, I first assumed the temperature at the bottom of the hull would be around 10°C. What a mistake. Seawater has almost the same temperature as the air, for example around the Equator at 6am the temperature was 20.5°C. The highest was 24°C.

Without option, I brought the bees to the deck. The first few days they become quite agitated, as it is against their nature to be locked in, without going out to fly. I put them on top of a lifeboat and strapped them firmly to prevent from toppling over with the ship's movement. I covered the skeps with hessian sacks and opened them to allow the bees to come out and have some fresh air, but they didn't really like that arrangement. In the days before setting sail, I noticed the colonies were growing considerably, almost to the point of swarming. I had to find a way to reduce their numbers, especially because the workers wouldn't have much to do in the following 9 to 10 weeks, and large number would mean the stores wouldn't last very long. I concluded the best way to solve that would be opening the hives and letting them fly, but at the same time I was worried they would sting the crew or

passengers, which would inevitably meant I would be ordered to throw them overboard. I took the chance, and the bees went out flying and ended up returning to the hive after realising there wasn't much for them to do.

They soon resumed their normal activities at the entrance, and evicted the drones. I had taken two large sponges to provide them with water, and they got used to collecting it from there, as the seawater was useless for them.

In a few days they stopped flying too far from the hive, but as soon as I opened the entrances in the morning they would go straight to the sponges for water. In some days, when the wind was strong, I would block the entrance to prevent the bees from being blown away by the wind, without possibility of returning. After all the brood had hatched, the water usage reduced considerably, and in some days they wouldn't come out at all. This way I managed to keep them alive for the whole nine weeks of the trip. I was very pleased that in the end no one was stung.

When we arrived to Rio Grande harbour, the hive numbers were considerably reduced. One of the hives was so small that similar nucs in Germany wouldn't have survived. Despite that, they recovered quickly, thanks to the mild winter, and by August they were already bringing in some pollen. In September the orange trees blossomed and the bees made most of the abundance of forage, the stronger of the two hives building comb and stores. The smallest was still weak, despite working hard for four weeks, so I used one of the brood combs from the larger to increase the numbers. That made a considerable difference and by 2nd of October I got the first swarm from hive number one and on the 21st of October hive two also gave me a swarm."

These two hives were the first European bees to arrive to Brazil, and Friedrich had a long and successful career as a farmer and beekeeper. He died in 1912, at the age of 93, and

is regarded by many as the father of modern beekeeping in Brazil.

His farm can still be visited to this day and houses an exhibition of beekeeping equipment, including the first honey extractor in Brazil (or what remains of it), designed and built by Friedrich himself.

One of Alan's beekeeping heroes:

The Rev. Charles Butler 1559-1647 – "the father of English beekeeping"

Charles Butler led a privileged life; he went to Magdalen College, Oxford, sang in the choir, took his MA in 1587, and after several junior clerical positions, became the vicar of Wooton St. Lawrence, near Basingstoke in 1600, where he remained until his death.

In addition to his interest in beekeeping, he wrote books on music and devised a system of phonetic spelling, but it is for his "Feminine Monarchie" (published 1609, revised 1623) that we remember him.

He kept bees in skeps of varying sizes, driving colonies in August into empty skeps to collect the annual honey crop. He gave accurate advice about apiary sites, recommended a range of trees and flowers for a bee garden, designed hive (skep) stands, and recognized the benefit of altering entrance sizes according to the season.

He gave accurate descriptions of the three castes and recognized the queen as female (which not all writers did) and drones as males. He described the behaviour of "scot bees", who dance on the outside of swarms, and gives sensible advice about the hiving of them. The entire book is a joy to read:

facsimile copies are readily available, but you'll have to dig deep for an original, which will come in at £1000 - £1500.

The following quote is well known: its memorization and recitation should certainly form part of any basic beekeeping course:

"If thou wilt have the favour of thy Bees that they sting ye not, thou must not come among them smelling of sweat or having a stinking breath caused by eating of Onions, Garleeke and the like. Thou must not be given to surfeiting and drunkenness; thou must not come puffing and blowing, neither hastily stirre among them, nor violently defend thy selfe when they seem to threaten thee, but softly moving they hand before thy face, gently put them by. Lastly thou must not be no strangers unto them. In a word thou must be chaste, cleanly, sweet, sober, quiet and familiar: so they will love thee, and know thee from all others".

Many thanks to John Fuller for this article

Wasp depredation

Wasps can cause serious damage to honeybee colonies in August and September, through robbing. You can leave a colony and go back in a weeks' time to find you have no bees and no honey - they have been robbed out by wasps.

It is said that the beginning of this bee season starts the previous autumn. So it is with wasps, when mated queens go into hibernation, they emerge the following spring to found a new nest. The workers go about their business through the summer and it is only when the colony is in decline that they become a pest, when they seek sweetness where ever they can get it. We are all familiar with sitting outside, a drink in hand,

with wasps buzzing around you, or picking plums off the tree only to find you have a hand full of wasp! Bee hives supply an abundance of tasty pickings.

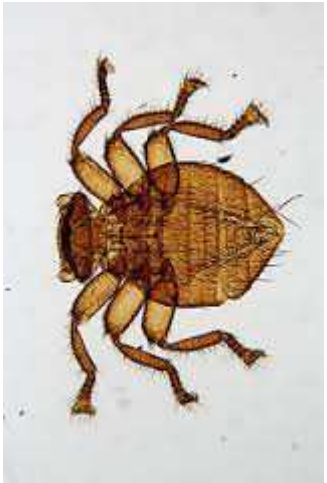
Wasps are very persistent and sooner or later they will get into a poorly defended colony. Once half a dozen have got in then the rest will follow and unless you spot it quickly, your colony may be lost. Colonies that succumb to wasps are usually weak, and with large entrances that the bees have difficulty defending. So, keep strong colonies and reduce the entrance size in early August. Should you be in the situation where robbing is well underway, then move the colony to another apiary away from the wasps.

Wasp traps dotted about your apiary and in your bee shed will help by distracting wasps from your hive. Bait the traps with watered down jam - on no account use honey – it will attract bees and you will be defeating the object of putting up wasp traps.

Wasp traps can be obtained from Southview Smallholder & Pet Supplies, Mill Lane, Ellerton, York. YO42 4PA.
Telephone: 01757 289817. Cost is £9.99 each.

Whatever happened to *Braula*?

We are probably familiar with the names varroa and wax moth as bee problems, even though we may not have actually seen them, but *Braula* may be a less familiar name.



Braula cocca to give it its full name, is technically a wingless fly, but it is described as "the bee louse". At about 1.5 mm long, it is roughly the same size as varroa, and red-ish. It has six legs and hairy feet which allow it to hang onto the plumose hairs of the bee.

When seen, it is often found hitching a ride on the bee's thorax.
Unlike varroa, it does not damage the bee by feeding on haemolymph, in fact it causes virtually no physical harm at all – they feed exclusively on honey and pollen. The female louse, however, does lay her eggs below the wax cappings: the young larvae then proceed to hatch out and leave tunnel trails below the cappings, similar to wax moth but much finer.

The reason that newer beekeepers are unlikely to have seen *Braula* is that the Apistan and Bayvarol strips that were widely used to combat varroa early on, also put pay to *Braula*. However now that varroa have shown resistance to the two afore mentioned products, and beekeepers have been encouraged to use other chemicals and varroa control methods, *Braula* has been very gradually returning – I've seen four or five individuals over as many years – not a huge problem, just a reminder that they're still about.

The adults were traditionally killed by the use of tobacco smoke and the larva destroyed at the tunnelling stage by freezing the fames for a few days, hence the practice of keeping cut-comb and sections refrigerated.

From the BBC news website 28 April 2016

The largest field study so far in to the group of pesticides called "neonicotinoids" has concluded that each acts differently on the brains of the bees.

One of the chemicals widely considered as being the most toxic wasn't shown to affect bees at a level found in the countryside. However other "neonics" were shown to cause significant harm to bumblebees.

The results of the study are published in the journal “Scientific Reports”.

This study examined the three types banned by the EU in 2013. It shows that different types affect the brains of bumblebees in distinct ways. Two (imidacloprid and thiamethoxam) were shown to be highly toxic to bumblebees when they were exposed to levels of the chemicals found in the countryside. They affected their brains, impairing their memory and ability to forage for pollen. The toxic effects also included altering the make-up of the colony, changing the ratio of males to females and in some cases reducing the number of queens. The third (clothiandin) - a close chemical relative that has not been tested before is shown not to be harmful to bees in the low doses given during field trials. The number of queens in the colonies actually increased.

Dr Chris Connolly, from the University of Dundee, said: "There has been growing concern over the risk to bee populations from neonicotinoid insecticides and their long-term consequences to essential ecosystem services and food security." He said: "We can clearly see that the banned neonicotinoids are not the same, so they should be considered independently when considering risk and legislation. "From our findings, we consider that it is premature to place a permanent ban on the use of clothianidin. That said, a moratorium on its use should continue until the knowledge gaps are filled on its wider impact on other species."

This data was gathered from what the researchers say, is the largest field trial of its kind. They established 75 colonies at five different sites in Scotland. Almost no insecticides were being used in nearby farmland. The bees were isolated in boxes and given an untreated sugar solution containing the neonics. They assessed the progress of the colonies over five weeks between June and September last year by counting and weighing the bees.

Dr Mike Garratt, an ecologist at the Centre for Agri-Environmental Research at the University of Reading, said: "This is an important and timely study. As the body of evidence for negative effects of neonicotinoids on non-target species mounts, it is important to consider the differential effects of these chemicals and this new research clearly demonstrates not all are equally harmful. This work once more highlights the clear evidence gaps regarding the wider effect of this type of insecticide. Much more work needs to be done if these serious policy decisions, with wide-ranging impacts on our food supply and environment, are to be based on the best scientific evidence."

Dr Peter Campbell works for Syngenta, which manufactures and sells the neonicotinoid thiamethoxam.

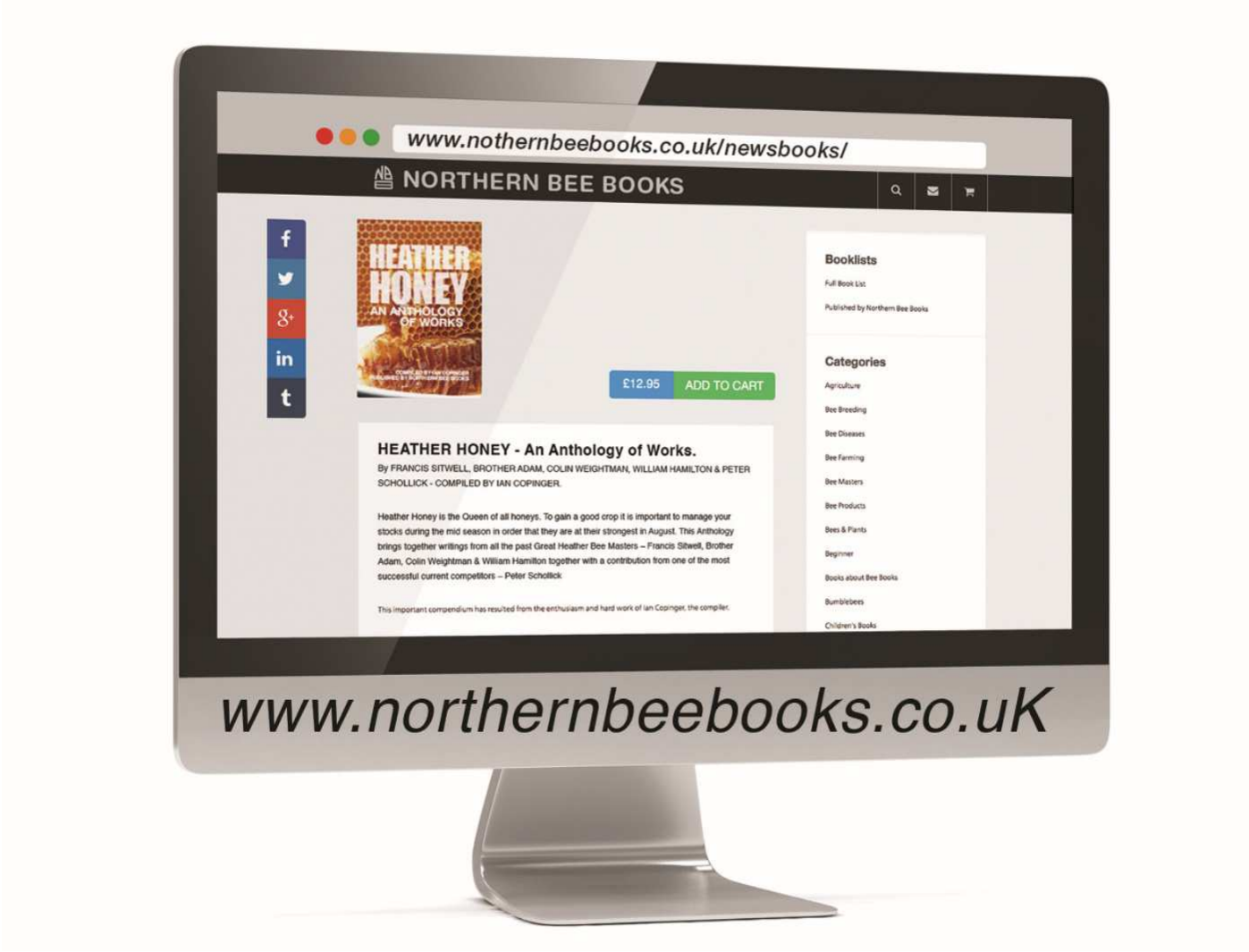
He commented: "It is important to note that the colony studies were conducted by directly feeding colonies with spiked sucrose, which is not representative of exposure of wild bumblebees under normal field conditions. The colony level results reported from these studies are also inconsistent with other reported colony studies with bumblebees."

Paul de Zylva, from green campaign group Friends of the Earth, said: "This study confirms that two of the restricted pesticides are harmful to bees. But this latest research does not give a clean bill of health to the third, clothianidin. A number of other studies raise serious concerns about the impact of this pesticide on bees."

This report comes as the National Farmers Union (NFU) has applied for an exemption to the EU-wide ban on the insecticides.

Friends of the Earth wants the ban to remain in place, and for the government to reject the NFU's application.

Neonicotinoids are the most widely used insecticide in the world. They are deployed to kill a range of pests including aphids and grubs.



CLARO BEES LTD. for all your beekeeping supplies

Opening times:

Saturday mornings from 9am – 12.30pm on the following dates:

Beekeeping Season: March 21st to October 31st (inclusive)

Fondant & Oxalic Acid Winter Special Dec 5th

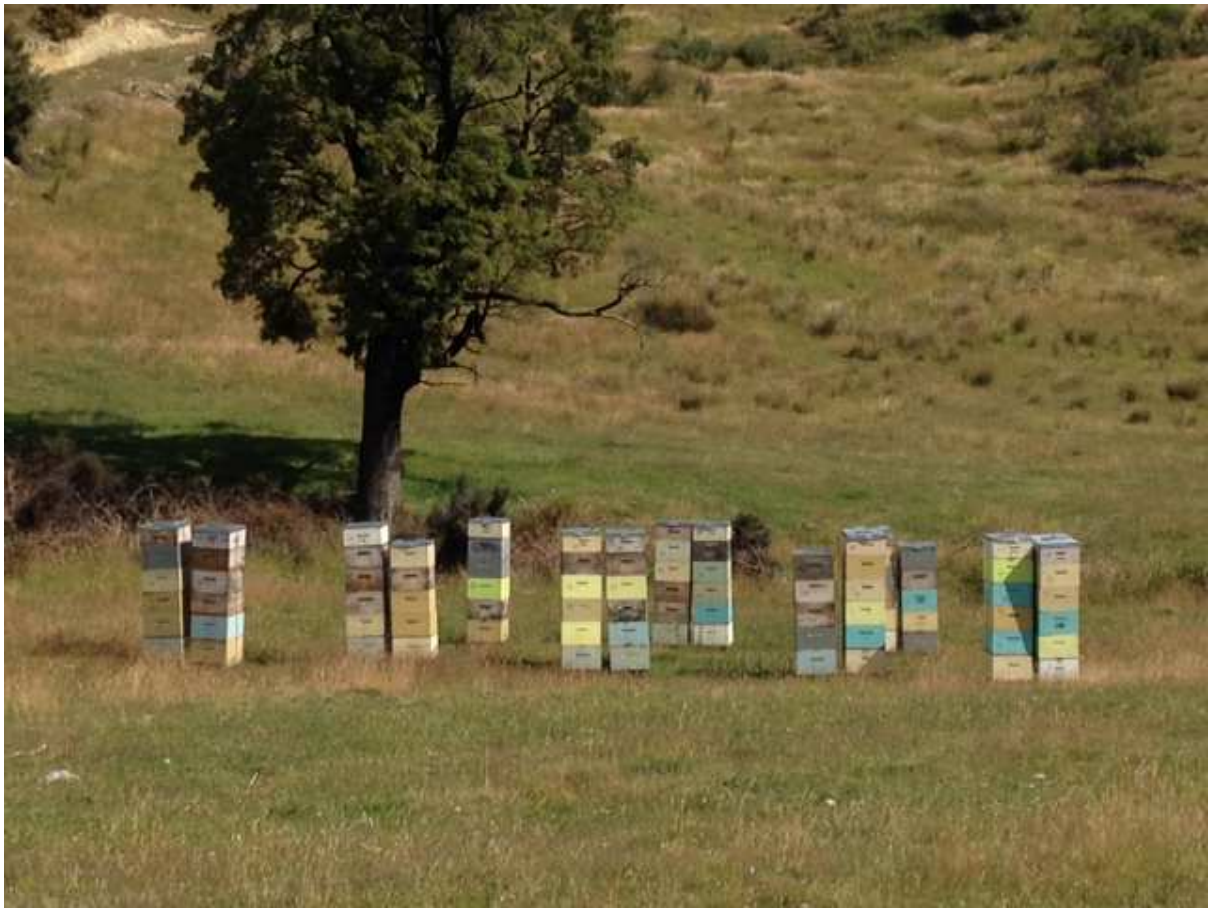
- Very keen prices on all items.
- Comprehensive stocks of hive parts & accessories, foundation, tools, smokers, clothing, queen rearing equipment, medications, jars & lids, candle making equipment and books.
- Ample FREE parking adjacent to shop.
- Knowledgeable beekeepers are always present to offer impartial advice on suitability of equipment prior to purchase as well as beekeeping problems.

In order to keep our prices low, **CLARO BEES LTD.** continue to handle payments by cash and cheque only.

Find us: first left after the RHS Harlow Carr Gardens, Crag Lane, Harrogate, HG3 1QA

e-mail: ClaroBees@hrbka.org.uk

Reader's Hives



Many thanks to Alison Gould, who took this shot whilst in New Zealand.

Alison told "Combings": "They are a small fraction of the hives put out for the Manuka harvest. These were in South Island

near Mount Lyford. Unfortunately I didn't see any of the beekeepers but it's obviously done on a commercial scale!”