



WAX LYRICAL

From The Chair

Firstly, thank you everyone for supporting the Association during my first year as Chairman and for electing me for another year.



Thinking about the future, I want to ask 4 questions of members.

Our Constitution limits the Chairman, Secretary and Treasurer to a maximum of 3 years in office. One advantage is that anyone who takes office knows it will not be for more than 3 years.

On the other hand the Association must always be looking for new people who are willing to serve.

Would you be willing to serve on the committee or as an officer in future?

We currently have 46 members, 2 more than last year. Membership numbers are not an end in themselves but this increase is welcome. The bigger our membership, the more services we can offer which may encourage more to join and perhaps make the decision to take

up beekeeping easier for some. For example, I think it would be helpful if we had honey extraction facilities for members to use.

Do you know a suitable place we could use for honey extraction?

There continues to be a demand for a beginners course and participants are all potential members. Another course will run in 2015. By changing the timing of the course and including practical as well as theoretical sessions, I hope we can motivate most participants to start beekeeping. But we need to support them effectively afterwards.

Can you help by supporting a new beekeeper in your area?

We must also encourage and support all members who want to learn more. And the Association needs to know another generation of competent beekeepers is developing. One learning route is via the BBKA exam system.

As a first step, would you consider taking the *BBKA basic assessment*?

I look forward to your response.

Keith Hall

A Tale Of Lessons Learnt –

More Reflections On Our First Year As Ryedale Beekeepers

Anxious to ensure the bees had sufficient stores during winter, hefting became a weekly ritual but with no experience and both hives feeling the same, we decided to take a more scientific approach. Vine eyes were duly screwed into both hive floors to attach the scales and ensure the measurements were accurate.

Conscious of warnings in the press that Varroa was the number one threat to our bees, we had

decided to keep a log of the Varroa drop using removable wooden trays under the mesh floors. The bees had somewhat bizarrely taken to living half under the hive and half inside, or so it seemed. I was amazed a week

later at how well the bees had propolised the Varroa trays into place. Try as I might, the tray simply wouldn't budge. Knowing bees' propensity to stick everything together, I set about removing the inspection tray one sunny Saturday. Try as I might, it just wouldn't shift. I searched through the various internet forums seeking advice on what to do about the bees under the Varroa floor and muttered curses at the bees for propolising the tray in so well.



Having by now lined up half the garage tool kit in an attempt to prize out the Varroa tray, destroying the floor frame in the process, it finally dawned on me that I was the problem, not the bees (a common theme as you will, by now, no doubt have realized). I had managed to

screw the vine eyes not only through the frame of the floor but also through the removable tray itself.

Lesson 5 - Don't overlook the obvious when things are not as expected.

In late September, MAQS was applied, though the effect was upsetting with the outside of the hives covered by bees bearding and many dead bees outside the hive; robbing and attacks by wasps began in earnest.

Wasp traps were hung out by the dozen around the garden but in truth we could do little more than watch anxiously as our colonies fought to survive. Our normally placid bees were pretty

feisty and it was clear that the Queens had stopped laying. Fortunately they settled but it was a stressful time.

As the first frosts came, we took comfort that although we had no honey, our bees had plenty of stores. Weekly hive weighing continued with occasional peeps through the glass cover boards proving difficult to resist. Oxalic acid was purchased but no sooner had the bees finally stopped flying, they seemed to have disappeared. It was all very well for the instructions to tell you to dribble oxalic acid over the bees but our bees were nowhere to be seen. Seemingly the lure of a 'cellar' full of stores had proved irresistible and they had decamped to the super under the brood box. Not wishing to blindly pour acid into the hive, treatment was repeatedly postponed until eventually we missed the boat and it was too late to apply.

Lesson 6 - Don't delay treating with Oxalic Acid.

Like a soap opera's summary of last week's episode, here are Bruce's lessons to date:

Lesson 1 - The bees will do their own thing and are less fussy than you think.

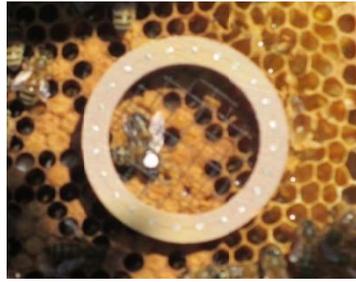
Lesson 2 - You never seem to have enough kit

Lesson 3 - Don't overfeed, leaving the Queen nowhere to lay

Lesson 4 - Check the exact venue carefully before setting off to meetings

In winter we attended the weekly beginner's beekeeping course run by Joe Jacobs at Kirkbymoorside. It proved a most useful opportunity to reinforce and increase our knowledge, as well as meet other beginners. Spring brought the excitement and great relief of seeing our bees emerge from both hives, though I did feel a pang of guilt observing yellow splats on our neighbour's cars and washing.

Early inspections failed to identify one of the previous year's Queens however, with eggs present, we were confident the hive was *Queen Right*. After many fruitless hours scouring the frames we



eventually spotted, trapped and marked her.

How we savoured the warm glow of satisfaction, basking in the knowledge we had finally managed to not only spot the Queen but had painted a large blob of white ink on her thorax. It wasn't until the following week, when the real Queen made an appearance, painted in her original green livery, that we realized we had actually caught and marked a drone the previous week.

Lesson 7 - Queens and drones look quite different.

Ann and Bruce Nelson

Hives through History...

As we saw in the last edition of Wax Lyrical, modern beekeeping had its origins in the activities and ideas of men such as Thomas Wildman [1734-81] and Ukrainian-born Petro Prokopovych [1775-1850]. These led the way but others soon joined in! Now read on as we move further into the nineteenth century and see how two key figures, Dzierzon and Langstroth, continued their



pursuit of an easier and more productive beekeeping-life in Europe and the USA for themselves and their fellow beekeepers!

Johann Dzierzon [above], [1811-1906], was born in Poland. He discovered the phenomenon of parthenogenesis [reproduction without fertilisation] in bees and designed the first successful movable-frame beehive. He combined his theoretical and practical work in apiculture with his duties as a Roman Catholic priest, something which resulted in his being compulsorily retired

by the Church and eventually excommunicated!

In 1845 Dzierzon published a ground-breaking paper which proposed that although queen bees and female workers were products of fertilization, drones were not, and that the diets of immature bees contributed to their subsequent roles. His results caused a revolution in bee breeding and influenced Gregor Mendel's genetic research. The theory, however, remained controversial until 1906, the year of his death.



In 1838 he devised the first practical movable-comb beehive [right], which allowed manipulation of individual honeycombs without destroying the structure of the hive. He introduced grooves, 8mm apart, into the hive's side walls to separate frames, a distance now

known as the *bee space*. His design quickly gained popularity in Europe and North America. On the basis of these measurements, others including



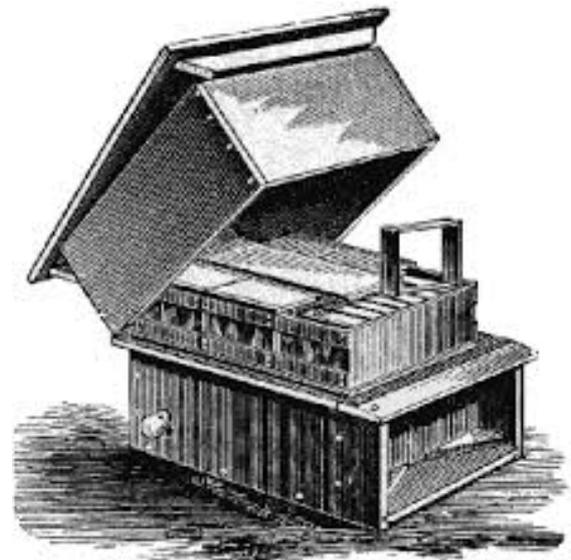
Langstroth [1852] (left) in the United States, designed their own frame-movable hives. In 1854 he discovered the secretory mechanism of royal jelly and its role in the development of queen bees.

His contemporary, Lorenzo Langstroth [1810-1895], was born in Pennsylvania, USA. Rumour has it that as a youngster he took such an extraordinary interest in observing the habits of insects that he was punished for wearing holes in the knees of his trousers while learning all he could about ants!

Langstroth has been popularly credited with discovering the *bee space*, although as we have seen this was already being implemented in European hives by Dzierzon and his contemporaries by the late 1830s. Langstroth, however, verified that by leaving an even, approximately bee-sized space between the top of the frames holding the honeycomb and the crown-board above, he was able to easily remove the board, which was normally well cemented to the frames with propolis. He used this information to make the frames themselves easily removable; less than 6.5mm the bees filled the space with propolis and more than 9.5 mm they filled it with comb, Dzierzon's spacing of 8mm provided the perfect answer for Langstroth and all of us! Langstroth also discovered that several communicating hive boxes could be stacked on top of each other, and that the queen could be confined to the lowest, or brood chamber, by means of a queen excluder [sound familiar?] This made hive inspection and many other management practices possible and

turned the art of beekeeping into a full-scale industry.

In 1852, Langstroth received a patent on the first movable-frame beehive in America (below). Henry Bourquin, a fellow bee enthusiast, made Langstroth's first hives for him and later the same year Langstroth had begun selling them. He never earned any royalties from his patent, however, because it was too easily infringed!



At the time of Langstroth's contributions, honey was the chief sweetener in American diets, so Langstroth's new beekeeping techniques were of great economic importance allowing beekeeping to be done more cost-effectively on a large scale.

Finally we must not forget Moses Quinby [1810-1875] who became one of America's first serious, commercial beekeepers following Langstroth's developments and is also credited with the invention of the modern bee smoker with bellows!

Next time we have a look at our very own William Broughton Carr, and move into the twentieth century, but until then be safe...

Queen B Sting

Bees Boles in Ryedale

Earlier in the year, a BBC Countryfile programme included a piece about restoration of some bee boles in Glaisdale. The work now complete, I recently went to have a look.



Straw or wicker skeps needed protection from the weather. This could simply be a cap of straw like a wigwam, a wooden shelter or niches in a wall, usually called bee boles. They could be elaborate stone structures like at Dale Head Farm Westerdale (left), or cruder affairs as in Glaisdale (below) ¹.

In Glaisdale, the boles are built on the south side of a very ordinary dry stone wall. Someone has found around 200 substantial dressed stone blocks, carted

them to the isolated site and used them as columns and lintels to form a series of about 77 niches of varying size over a distance of 100m, the biggest bee wall recorded to date. A skep would not have been completely covered, the niches are not deep enough, but there would have been substantial protection from the weather.

Some have doubted whether these are bee boles. But they meet the size criteria for bee boles suggested by Eva Crane ² and are not features sometimes she says are sometimes confused for boles.

They are good big stones, maybe walling stone left over from a building or recovered after demolition. Building them must have been a considerable investment for someone. It must have been a substantial beekeeper or group of beekeepers.

Bees would only have been sited here during heather time. They would not survive through winter as the wall would disappear under snow at times and there is no spring nectar source nearby.

Where the bees came from is a mystery. Most

places in Glaisdale would be close enough to the heather for there to be no need to move skeps. Based on the location and access, I would start looking at lower Eskdale, between Egton and the coast.

A register of bee boles in UK³ and a few in other countries was started in 1952 and now includes 1568 sites. There are 135 sites in North Yorkshire but only 8 in or near our area. Most of these are on private land but the one in Westerdale can be seen from a public footpath.

If you know of any other possible bee boles, let me know because they should be recorded.

Keith Hall

Bee Boles in or near Ryedale

*Dale Head Farm, Westerdale, Whitby,
Hollins Farm, High Farndale
Stonegrave House, Main St, Stonegrave
Howe House, Old Malton
Loand House, Cropton Lane, Cropton
The Lund, Hutton-le-Hole
Cropton Lane, Pickering
Ryedale Folk Museum, Hutton-le-Hole*

¹ The grid references are: Glaisdale - NZ 770 035 Westerdale NZ 677 044

² The Archaeology of Beekeeping; Eva Crane

³ <http://ibra.beeboles.org.uk/>

Bee Inspectors Report for 2014

Varroa levels in the area were high all through the season, in some colonies showing signs of doing much damage. I have been advising those beekeepers to treat as soon as possible. However the good news has been very few foulbrood cases in the north east.

There were many more swarms than usual in most areas, possibly due to the reasonable spring and summer weather. Some beekeepers ran out of equipment and it was sometimes difficult to obtain new brood boxes and foundation.

Honey crops have been reasonable to good in most cases. The main difficulty was the *June gap*, with some bees



Bees inspect the inspector

needing feeding especially where a few days of inclement weather after the rape and early season crop was removed, left the bees without stores. There was a noticeable coastal factor due to periods of sea fret/mist with cold, damp conditions failing to clear for a few days.

Adrian Wilford

Winter task - Treating Varroa with Oxalic Acid

Oxalic acid kills around 90% of adult mites that are on adult bees at the time of application - not those inside sealed cells. Hence the time to use it is when there is no brood in the hive, around Christmas time. Do not delay too long, we just could have another mild winter!

Oxalic acid can be applied in various ways but the simplest is to buy a sugar syrup solution.



may not see the seams of bees and will need to split the 2 boxes. Using a syringe or bottle applicator, trickle 5ml of the solution onto each seam of bees.

Thorne's solution has a short shelf life but you can get some with a longer life at <http://cwynnejones.com/>. I bought some recently that has a use by date of December 2015.

I have used oxalic acid for 5 years now with no adverse effects. At first I was reluctant to open hives in December but the bees tolerate it and do not break the winter cluster.

Consider using oxalic acid as a second treatment to further reduce mite numbers if you have already applied thymol or other autumn treatment. If you have not applied any autumn treatment, then you should consider 2 or more applications of oxalic acid.

Before using oxalic acid, read the advice and precautions in the NBU booklet, "Managing Varroa" which, if you can't find your copy, you can download from:
<http://www.nationalbeeunit.com>

On a mild dry day, but not when a lot of bees are out on a cleansing flight, open the hive and count the number of seams of bees. If you are overwintering on a double brood or brood and super, you

Keith Hall

Reports of recent meetings

Tuesday 9th September

Open Forum—Swarms; how did you do?

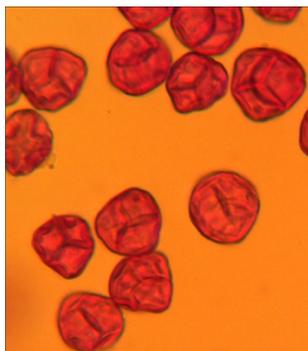
18 members joined in a lively discussion centred on swarming experience but broadening out into various other aspects of beekeeping this summer.

The meeting concluded by breaking into 3 groups, each being given a scenario to discuss and decide their response.

Tuesday 14th October

John Chandler—Pollen microscopy

The meeting was well attended with 40 present including both Ryedale members and guests from Malton BKA.



Erica carnea pollen
Photo: Rhona Sutherland

John's talk was illustrated by many slides from his collection showing both pollen grains as well as the other things that turn up in honey including fungal spores, nematodes bits of bee and other things.

On occasion the slides looked more like works of art.

He also talked about his experience of forensic work - proving that honey was not what it said on the label. However pollen from exotic plants can turn up legitimately in UK honey.

Afterwards Janice demonstrated the preparation of pollen slides to some while others tucked in to the spread of food, for which my thanks to members.

Tuesday 11 November

Annual General Meeting

The AGM was attended by some 25 members including both our life members.



Subscriptions for 2015 were set at:

Full Member £25

Partner Member £19

Associate member £4

Your officers and committee for 2015 are:

Chairman Keith Hall

Secretary Claire Mortimer

Treasurer Rick Colman

Committee Adrian Wilford

Barry Wilton-Middlemas

Bruce Nelson

John Sutherland

Rhona Sutherland

Thanks were extended to:

- Joe Jacobs who stood down from the committee after more than 10 years service including 3 years as Chairman
- John Sutherland for his 3 years service as Treasurer

Ryedale Beekeepers Association

Dates for your diary

19:00 Thursday 11 December	George and Dragon Kirkbymoorside Contact rhona.sutherland@btinternet.com before 30 November for booking	RBKA Annual Dinner
19:30 Tuesday 17 February	Kirkbymoorside Methodist Room Joint meeting with Ryenats	Moth Recording Dr Robert Wood
19:00 Wednesday 11 March	Old Malton Memorial Hall Joint Meeting with Malton BKA	To be advised
19:00 Tuesday 14 April	Wombledon Village Hall	Hive Husbandry Mike & Judy Rowbottom

2015 Beekeeping for Beginners Course

Rhona Sutherland will be leading the beginners course starting on 18 March 2015 in **Oswaldkirk Village Hall**; A copy of the flyer is attached; please pass it on if you know anyone who might be interested.

If anyone would be willing to help with providing practical sessions, please let Rhona or Keith know.

Officers

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