



# BURTON and District BEEKEEPERS ASSOCIATION

## *A queen improvement group for Burton?*

*Sam Hampton reports:*

2020 has been quite a rough year. For me very little beekeeping has been done and, except for the progress we've made with the training apiary, Burton Beekeepers as an association has been pretty much hamstrung by the pandemic.

Things are, however, looking up. The forthcoming vaccine roll-out raises the prospect of being able to socialise again when the beekeeping season starts and, in the meantime, it's looking very much like we will be able to get together online with a few Zoom webinars of our own once Christmas is out of the way.

December, though, is a month for developing plans for the coming season and I thought I would put pen to paper and share with you some thoughts about a possible future development.

### **Development of "Improvers"**

Quite naturally, the association puts a lot of effort into attracting and training new beekeepers. However, apart from the monthly meetings, we don't do a great deal to help more experienced beekeepers develop more advanced practical skills. Some random examples are colony

assessment, queen rearing, clipping and marking, shook swarm etc. Last year I did begin a queen rearing course, but my efforts were severely hampered by Covid 19 as the year developed. Hopefully this coming year we will have another go.

### **Problems with queens**

I have been keeping bees for some 12 years. Beekeepers who have started earlier than this can recollect times when beekeeping was much easier because queens were healthier, lived longer and swarmed less. I have to confess that in the past, I have listened to them waxing lyrical about this with mild scepticism.

However, in April and May this year I started to think that I should be a little more concerned when every one of my 14 colonies decided to swarm. Later on, more than half exhibited serious disease problems, supersedure of mated queens and/or queen failure. I'm sure that beekeeping today is much more challenging than it used to be. The underlying reasons are numerous, complex and varied, and perhaps not for this newsletter. They range across climate change, modern farming methods and so on. But undoubtedly, just as with the current pandemic, part of the blame lies with globalisation as movement of

bees transmits disease and interferes with the natural adaptation to the local environment.

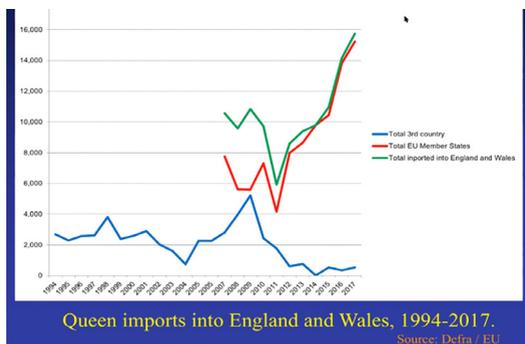
## Queen Imports

A couple of years ago I began to be concerned about the level of queen importation into the UK after a respected bee farmer talked to an association meeting about his queen rearing operation. He told us that he raised over 2000 queens a year but didn't explain much about the stock which he rears from. It turned out that he does this by importing every year a small number of queens from a Dutch supplier. They are used as queen mothers and to produce nearby drone saturation colonies. It was a surprise to me and a little alarming that he does not use any English stock. Of course this may have changed.

The concern is that these queens will eventually produce genetically very similar drones, carrying a blueprint of European, not English environmental adaptation. They (or their progeny) will leave the hive and mate with your bees and mine, making all our bees less adapted to our local climate and forage. If you like, it's a little bit like an invisible pollution and the result may take many years to clean up.

## So how big a problem is queen importing?

The graph shows how queen importing has risen dramatically over the last 10 to 15 years. The blue line is non EU imports, the red is EU imports and the green is the total. Imports have risen very dramatically over the last 10 to



15 years, in line perhaps with internet sales. It seems obvious that if this trend continues it won't be long before the situation becomes irretrievable.

## Is this really a bad thing?

Scientists agree that local honey bee strains perform much better than bees from a different area. In 2017 a team of scientists from COLOSS, led by Ralph Buechler, organised an experiment involving over 600 colonies to look at just this issue. The performance of local bees in apiaries right across Europe was compared with bees which had been imported to the tested apiary from some way off. Various performance factors were tested, including survival (the bees were not treated for varroa) and honey production. In the graph on the next page the green line represents the survival of the local bees and the blue line shows the imported ones. There is a very clear conclusion that locally

adapted bees perform better. The same applied for honey production.

If you want to know more about this you can look at the National Honey show lectures in 2019 by Ralph Büchler. Norman Carreck also covers the research thoroughly in his talk to the Bee Improvement and Bee Breeders Association (BIBBA) in October. You can find this on the BIBBA website. These talks are well worth watching.

### So what can we do as a small association?

We have to ask ourselves why so many queens are imported?

It's not totally

clear to me, but my guess is that it's mainly because many UK beekeepers lack queen rearing experience, coupled with the ease with which cheap, good quality queens can be acquired over the internet, and a poor appreciation (at all levels) of the impact that this "pollution" will potentially have on our local gene pool.

Clearly one battle needs to be fought at a political level. The BBKA, partnering with BIBBA and others are now making their views clear to the politicians. There is a chance that coming out of Europe will help too.

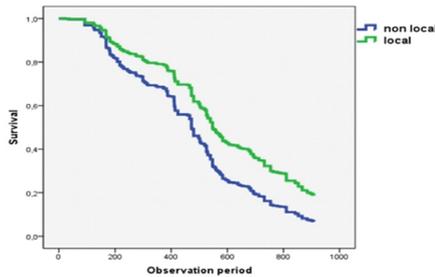
I think the main thing that we can do is to encourage beekeepers to focus much more on queen rearing and stock improvement as part of their routine beekeeping every year. If we do that, skills and knowledge will improve at all levels and the demand for imported queens will decline in line with an

increase in reliable local queens. Perhaps also it will promote a greater understanding of the potential damage to local stock and further reduce the temptation to go down the importation route.

Although you can make progress quite quickly, bee improvement doesn't happen overnight. Just as

with a rose breeder who will start with many thousands of plants, to improve our bees it will be best to begin with a fairly large population of colonies. To this end I think it would be a good thing to start a bee improvement group.

Overall effect of local adaptation on colony survival



Büchler et al., *J. Apic Res.* 53 (2), 205-214

### What would be involved?

The overall aim would be for group members to share knowledge and experience of queen rearing methods, colony assessment, mating nuclei and so on, such that anyone who is interested will feel confident to have a go at rearing a few queens to improve their own stock and have one or two left over for others at the end of the season.

There would be two or three theory sessions a year where we'd discuss such things as reproduction biology, and techniques such as the Miller method and the use of mating

nuclei. Then we'd hold a number of small meetings at each other's apiaries to share experience of colony assessment and queen rearing practice. Communication would be mainly via something like Whatsapp, or possibly Microsoft Teams or Zoom if we can get the hang of the technology.

An important feature of being part of this group would be working together to assess one another's bees, eventually identifying which colonies amongst the many we have as a group that would be the base material to work from. Using a common record keeping system will be pretty essential.

I wouldn't have thought that we'd make much use of the training apiary. Queen rearing would probably conflict with what will need to happen husbandry-wise there. At the start I'd anticipate working in one another's gardens or out-apiaries in the main.

Queen rearing is a very rewarding aspect of beekeeping, but these days it can also be very frustrating. I certainly want to encourage BadBKA members to have a go, using whatever system takes their fancy. Whilst I wouldn't actively discourage a new beekeeper from joining this group it has to be said that you are more likely to make progress if you've had a couple of years' experience beforehand.

### Contact me

I've been rearing queens and trying to improve my stock almost from the first time I had bees. I've had some successes and many failures. I'm a member of the

East Midlands BIBBA group which has an apiary in Nottingham and has been breeding near-native bees there for many years.

If you're interested in being part of this group next season send me an email. [Sam.hampton@btinternet.com](mailto:Sam.hampton@btinternet.com) or text me 07711 440496.

*Very best wishes for Christmas from me and the Committee. Don't forget to renew, preferably before 31st December 2020 to save £5!*



### *To Do List for December*

- Protect your beehives against strong winds and large mammals.
- Make sure mice cannot get into over-wintering hives by using mouseguards or entrance blocks with shallow openings eg, 8 mm high.
- Check that there are sufficient stores during mild weather. Provide fondant if needed.
- Monitor for varroa mites and carry out a winter treatment if necessary eg, Oxybee, ApiBioxal or VarroMed

## Items available to buy from the association shop:

<b>HIVE PARTS:</b>	
NATIONAL SUPER FLAT PACK	£19.50
NATIONAL BROOD FLAT PACK	£24
14 X 12 BROOD FLAT PACK	£35
4" ROOF FLAT PACK	£36
CROWN BOARD	£13.50
FRAMED WIRE QUEEN EXCLUDER	£18
MESH FLOOR	£32
BUDGET OPEN MESH FLOOR	£16
SLOPING HIVE STAND	£27
PLASTIC NARROW ENDS	£6.50
NUCLEUS HIVE	£82.85
FLAT PACK HIVE, STAND & ONE SUPER	£235
10 SPACE CASTELLATIONS (PAIR)	£3.44
11 SPACE CASTELLATIONS (PAIR)	£3.44
STEEL FRAME RUNNERS – PAIR	£1.60

### **FRAMES & WAX:**

SN4 SUPER FRAMES 10 PACK	£10
SN4 SUPER FRAMES 50 PACK	£33.00
DN4 BROOD FRAMES 10 PACK	£10.00
DN4 BROOD FRAMES 50 PACK	£33.00
14 X 12 BROOD FRAMES 10 PACK	£16.24
SUPER WAX FOUNDATION 10 PACK	£8.00
BROOD WAX FOUNDATION 10 PACK	£11.50
14 X 12 BROOD WAX 10 PACK	£18.00
NATIONAL DUMMY BOARD (PLASTIC)	£7.50
NATIONAL DUMMY BOARD (WOOD)	£7.00

### **QUEEN MARKING:**

CROWN OF THORNS	£6.00
QUEEN CLIP	£4.50
MARKER PENS - ASSORTED COLOURS	£5.00
BEE BRUSH	£4.00

### **FEEDERS & FEEDING:**

ENGLISH FEEDER	£9.50
RAPID FEEDER	£4.50
NUC FEEDER	£6

SMALL MILLER TYPE FEEDER	£1.00
FEEDER EKE	£7.00

### **HONEY & WAX EXTRACTING:**

STAINLESS STEEL DOUBLE STRAINER	£21.00
STRAINING CLOTH	£3.50
30 LB PLASTIC BUCKET	£3.50
BAIN MARIE	£14
NYLON HONEY BUCKET VALVE	£8.50
30LB PLASTIC TAP BUCKET	£15.00

### **GENERAL BEEKEEPING:**

SMOKER	£35.80
HIVE STRAPS	£6.50
HIVE TOOL	£7.00
PIN HAMMER	£3.50
BEE DISEASE ID CHARTS	£6.00
FRAME NAILS 500G	£2.88
POLLEN ID CHARTS	£6.00

## Shop Update

### **Shop News**

Many thanks to all those members who have visited the shop at the training apiary to purchase equipment.

We have been open regularly on Saturday mornings but as winter draws ever nearer and the rush for equipment has diminished, we have moved to a more flexible approach. The shop will now be open on Saturdays 10am-12 noon by request until early next year.

If you would like to purchase equipment, please contact Dave who will arrange for the shop to be open. It would be much appreciated if advance notice could be given.

Dave's email : [dave.coates32@gmail.com](mailto:dave.coates32@gmail.com)

Phone number : 01283 713603

### **Sugar**

Every few weeks, Dave continues to collect sugar from the supplier. The sugar is available for members to purchase.

# Who's Who

<i>vacancy</i>	<i>Club Secretary</i>		
Sam Hampton (temporary)	Membership Secretary	<i>sam.hampton@btinternet.com</i>	
Bob Hurd	President	<i>pat90bob@gmail.com</i>	
David Coates	Chair Education Secretary	<i>dave.coates32@gmail.com</i>	01283 713603
Suzanne King	Education and Training Honey Show Secretary	<i>suzanne.king21@btinternet.com</i>	
Sam Hampton	Treasurer	<i>sam.hampton@btinternet.com</i>	
Sue Coates	Librarian	<i>susan_coates@talktalk.net</i>	
Hamish Low	Asian Hornet Team (AHT) leader	<i>hamish51151@gmail.com</i>	
Sheila Pirie	Committee member	<i>smpirie@hotmail.co.uk</i>	
Jane Ratcliffe	Committee member		
M Baker	Committee member		
Richard Matkin	Committee member	<i>richjomatkin@btinternet.com</i>	01283 812958
Sarah Winfield	Minutes Secretary		
Chris Ring	Website/Facebook		
Margaret Cowley	Newsletter Editor	<i>newsletter@honeybee.org.uk</i>	
Trustees	Bob Hurd David Coates S Hampton F Oldfield S King H Low R Matkin C Ambler	Volunteers	C Ring P Yates R Wykes R Harrison I McMillen