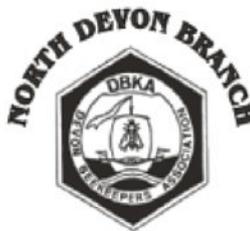


NORTHERN LIGHTS

THE NEWSLETTER OF THE NORTH DEVON BRANCH
OF THE DEVON BEEKEEPERS ASSOCIATION

FEBRUARY 2016

www.northdevonbees.org



USEFUL LINKS

DEVON BEEKEEPERS'
ASSOCIATION
www.devonbeekeepers.org.uk

BRITISH BEEKEEPERS'
ASSOCIATION
www.bbka.org.uk



JUDGING HONEY—Winter Talk by Jack Mummery

Did you know that our local North Devon Honey Show 2015 had more exhibits than the Show that covered all of Cornwall? This is one of the fascinating facts that came in the talk on how to get the best out of your honey and wax exhibits. Only a few hardy members braved the wind and rain on the Friday night to listen to Jack; you missed a great opportunity to pick his brains. Jack is one of our most interesting members; the work and effort he has put towards getting his Judges Certificate is staggering. Jack has spent the last few years helping to judge other shows and he passed on to us, those golden nuggets of information that help us to stay clear of disaster and make the most of the hard work we have put into getting our honey and wax ready for our show. He says it's all in the detail; we were given so many handy hints and things that will make so much difference on the show day. Thank you Jack, for such a good talk and for passing on all your knowledge.

Our Honey Show this year is on 10th & 11th September at St Johns Garden Centre, Barnstaple. Jack and the team will be there, hope you are to.

Barbara Carlyle

Chair Chat

We are told that warm, wet winters are bad for honeybees so our colonies may be struggling to survive. There are live bees in all the hives at Horestone. It will be interesting to see how strong they are once the weather allows us to inspect them. Most have Ambrosia fondant in situ. There is some confusion about our membership renewal form. Please see the notice from Brian Sharp our new membership secretary. Do check that you are using the 2016 amended form. Our second 2016 talk will be held, as usual at the Castle Centre, on February 26th. Ruth Neal will be speaking about the County Honey Show. The Beginners Course starts on the 22nd February so perhaps the new beekeeping year is awakening. Horestone apiary will be re-opening in March with a workday on Tuesday 8th March. Further details will be emailed to you nearer the time. Thank you to Barbara and Ian for renewing the much needed steps into Albert's shed

Mave Dowling

FORTHCOMING EVENTS

Devon Wildlife Trust meeting

Friday 12 February 2016 7.00 to 7.30pm
'Hornets Gentle Giants' -Castle Centre, Barnstaple
Stephen Powles is a vet and a passionate photographer. He has spend many hours with hornets, much of it in very close proximity to large nests

Somerset Beekeepers Association Lecture Day

Saturday 20 February 2016 9.00 to 5.00pm
4 speakers – trade stands - booking essential
details www.somersetbeekeepers.org.uk

Branch Meeting

Friday 26 February 2016 7.00 for 7.30pm
'The Devon Honey Show' – Castle Centre, Barnstaple
Ruth Neal has been the Chair of the DBKA Show Committee or several years winning many awards for the quality of the Show which is one of the biggest and best in the country.
£2.00 donation please to apiary funds and including light refreshments

Holsworthy Branch Spring Convention

Saturday 27 February 2016 9.30am to 4.30pm
3 speakers – 3 workshops – trade stands
Booking essential – by e-ticket
details www.holsworthybeekeepers.org.uk

Bee Tradex Exhibition

Saturday 5 March 2016 9.00 to 4.30pm
Stoneleigh Park, Warwickshire
See www.beetradex.co.uk for more information

Branch Meeting

Friday 29 March 2016 7.00 for 7.30pm
'Drone Laying Queens' – Castle Centre, Barnstaple
Glyn Davies is a Master Beekeeper and has been the BBKA President. He is in demand nationally as a speaker and is currently involved in a research project looking at DLQs.
£2.00 donation please to apiary funds

Branch Committee met in January 2016

The Branch needs a portable display stand as we are often asked to contribute to minor events. We are reducing the number of shows which we usually attend this year, but will be present at the N Devon Show and at the events at St John's Nursery. Our N Devon website needs amending at times. Please let a committee member know if you want to amend/add to the information. We have three relevant websites:

1 North Devon Branch

2 Devon Beekeepers Association
(www.devonbeekeepers.org.uk Password: honeypot2)
See the first page of Beekeeping for these details.

3 BBKA website

The committee plans to involve the members in the running of the Apiary. The teams will continue with leader and 'seconders'. The notes must be clearly kept, the programme of inspections discussed at midday together with set topics for general consideration. We plan to buy in 2-4 queens to strengthen any failing colonies.

Brian is formulating, with other members, a welcome pack.

Mave on behalf of the Committee

DBKA Executive Committee met in January 2016

Most of the discussion this time was concerned with transferring all the information sent out to members in future by digital transmission. This is partly to save money as postage, printing etc. are costly. It is under consideration to initially put the Year Book on line and possible *Beekeeping* in the future.

Barry Neal, General Secretary, was awarded a Certificate of Merit for his painstaking and time-consuming review of the Constitution.

All BBKA members are invited to attend the Presidents Day and County AGM on Saturday, 19th March which is held at 10.30 in the Bridge Suite, ISCA Centre, Summer Lane, Whipton, Exeter, EX4 8NT. Tea or coffee will be served free on arrival and a lunch can be ordered (on arrival).

Mave

FOR SALE

National brood boxes and supers, painted but all in good serviceable order and will give many more years of use £10 per box, £5 per super, some straight sided brood frames.

Please 'phone 01598 710 986 or email julie.elkin@outlook.com

Granola and honey by Gaham Kingham

For my 60th birthday present our son and his partner took my wife and I to New York, we ate out for breakfast several times to experience the American way, forget the eggs over easy and fried potatoes with onions, go for the healthier option of yogurt topped with a ring of granola with added fresh fruit such as blue berries and strawberries or pears in the centre, plus the extra ingredient, some runny honey drizzled either around the yogurt or over the fruit.

Inspired by this meal I returned home and looked up several recipes for granola, so after several very pleasant trials, I came up with a proven recipe that we all liked.

300gm Plain muesli base or porridge oats	2 tablespoons Sunflower oil
2 tablespoons Runny honey	125 ml Maple syrup
50 gm Sunflower seeds	50 gm Linseed or sesame seeds
1 teaspoon Vanilla essence	1 teaspoon Finely crushed cardamom seeds
1 teaspoon Ginger powder	1 teaspoon Nutmeg
½ teaspoon Cinnamon	100 gm Dried coconut
Generous pinch of salt	

100gm Dried fruit . Sultanas, raisins and cranberries or your chose.

Mix together the oil, honey and maple syrup, stir then add the seeds, salt and spices, mix well then add the muesli, stir to make sure that the cereal grains are covered then transfer into a shallow baking tray spreading evenly.

Bake in an oven at 150°C electric, 130°C fan oven or gas mark 3 for 15 minutes, remove from the oven and stir in the fruit and coconut returning to the oven for about 5 minutes then stir, return to the oven for about another 5-10 minutes, stirring if needed, checking it has become dry and slightly coloured, this depends on the depth of mix.

Allow to cool then store in an air tight container, it will keep for up to 3 months.



Do you know who this is ?

One of the most famous of all UK beekeepers. Without his discovery we would be way behind in our knowledge of the craft.

His obituary taken from The Daily Telegraph last month appears overleaf with no apology for its length.

He deserves it !

Colin Butler, born October 26 1913, died January 4 2016

COLIN BUTLER, who has died aged 102, was one of the world's most distinguished entomologists and was credited with the discovery of a pheromone known as "queen substance", a scientific breakthrough which transformed our understanding of the social behaviour of bees. Butler carried out his research at Rothamsted Experimental Station, Harpenden, to which he had been recruited in 1939 to work on bee research. Early in the war, as the government was seeking to optimise food production, bee research was made into a separate department with Butler as its head, growing from two members of staff to 20. He continued to work at Rothamsted until his retirement in 1976 as head of the entomology department, publishing several books about bees, including *The World of the Honeybee* (1954), a classic monograph, and *Bumblebees* (1959, with John B Free), both published in Collins's *New Naturalist* series. The research for which he was best known was carried out in the 1950s at a time when the mechanisms of social cohesion in honeybee colonies were not well understood. A healthy colony might contain some 40-50,000 workers, several hundred drones and normally a single mated queen, to whom the colony is fanatically loyal. What causes the workers to produce a new queen to replace one which is failing, or has been lost, was, however, a mystery.

As any beekeeper will know, when a queen is removed from a colony the behaviour of workers changes from a state of organised activity to one of restlessness. After a few hours, they will have modified one or more cells containing female larvae into emerging queen cells. Traditionally, beekeepers assumed that the queen must emit some sort of odour which keeps workers aware of her continued presence, the absence of which causes them to begin rearing new queens.

To test this theory, Butler placed a queen in the middle of her hive in a wire gauze cage, so that surrounding bees could not touch her, and found that the workers began to behave as if they had lost her, rearing new queens. He concluded that some sort of physical or chemical signals from the queen to keep the colony loyal were being transmitted, not through smell, but through physical contact with the few workers attending her. No one had reported seeing any physical signals, so the latter theory, that the queen emits some sort of chemical substance, seemed the more plausible. Butler then compared the behaviour of workers that had left the queen after licking the special wax which covers the queen bee's body, with those of other workers which had examined her body with antennae, but not licked her. Each of the bees that had licked her body offered regurgitated food to other colony members within the first five minutes of licking her, while the other bees did not.

In other experiments he observed that if a queen was rubbed with a piece of cotton wool, the cotton wool became as attractive to worker bees as the queen herself. He also found that the number of bees which any given queen can inhibit from rearing new queens varies quantitatively with the amount of contact allowed between queen and workers; and when material from the digestive tracts of workers which had licked the queen was added to the drinking water of groups of queen-less bees, the ovaries of those bees developed much less than control bees without the additive.

His conclusion was that of all the factors that keep members of a colony of bees together, "the strong desire for 'queen substance' is probably the most important". He went on to show that queen substance is produced in the mandibular glands of the queen, and in 1959 a collaboration with Robert Kenneth Callow led to its identification as 9-oxodec-trans-2-enoic acid. They also showed that this acted as the sex-attractant for drones when deployed at about 10 metres above the ground, the height at which queens fly on their "nuptial flight", the first demonstration of a sex-attractant pheromone. In 1955 Butler suggested that "either a deficiency in the amount of queen substance available, or, perhaps, a breakdown in its collection and subsequent distribution plays an important part in the phenomenon of swarming", when a honeybee colony divides to produce two colonies and which can be a headache for beekeepers. The discovery of queen substance raised hopes that synthetic chemicals might be developed to control swarming and Butler went so far as to get a patent on synthetic "queen substance" with the idea of marketing it for swarm suppression and to facilitate the introduction of replacement queens into unwilling honey bee colonies, and also as a possible human contraceptive. Unfortunately, he was wrong. Bees still swarmed and it had no action in humans. He concluded that other factors, perhaps even psychological reasons, were involved. The mechanisms of swarming remain something of a mystery to this day. The son of a schoolmaster, Colin Gasking Butler was born at Horsham on October 26 1913 and educated at Monkton Combe School, Bath, and at Queens' College, Cambridge. After graduation, he won a Ministry of Agriculture and Fisheries research scholarship and went on to become superintendent of the university's entomological field station, teaching and carrying out research on whiteflies and locusts. In 1939 he left Cambridge for Rothamsted.

During the war, Butler had a large share in formulating the Foul Brood Diseases of Bees Order, a pioneering disease control measure introduced by the government in 1942 to combat, in particular, the widespread incidence of American foulbrood disease in British hives with a programme of targeted apiary visits. He also set up a bee disease advisory service. After the war, in 1946, he travelled to the US to learn about new techniques of "instrumental insemination" of honeybees, and on his return he developed the techniques in collaboration with J Simpson. Together they inseminated many queens, including for Brother Adam, the beekeeper at Buckfast Abbey who became famous for breeding the disease-resistant "Buckfast bee". Butler and his wife Jean became lifelong friends of the monk, and Jean would send him a birthday cake each year.

Butler was such an enthusiast for field research that he even used boats as mobile laboratories, once rowing out to sea in a fishing boat with his son, on a calm evening, and deploying "queen substance" on a mast to see how far out they could attract drones. He also used the mast of his yacht in the Fens to place queens for mating, together with a sample of "queen substance", to see how far drones would go to find them (drones were still visiting his mast several years after the experiment ended). After retiring from Rothamsted, he moved to Cornwall to enjoy his hobbies of fishing and sailing. Later he and his wife moved to a village near Cambridge to be near their family. During the 1960s Butler served as treasurer of the Royal Entomological Society, then as president in 1971-72. He was president of the International Union for Study of Social Insects from 1969 to 1973. A member of the National Trust Regional Committee for Devon and Cornwall, he also served as president of Cornwall Naturalists Trust and was an honorary member of the British Beekeepers' Association. In 1970 he was elected a Fellow of the Royal Society and appointed OBE. He married, in 1937, Jean Innes, who died in 2011. Their son and daughter survive him.

2016 Membership Renewals

We would like to remind all members to renew their membership for 2016 as soon as possible to continue receiving the full benefits of membership.

These include:

- Public liability, product and bee disease insurances
- Monthly copies of Devon Beekeeping journal
- North Devon Branch Newsletter and BBKA News
- Access to BBKA, DBKA and NDBKA websites
- Meetings and training on various aspects of beekeeping
- Use of the library and hire of honey extraction equipment
- Help, guidance and support from other local beekeepers

If you wish to be included in the Devon Yearbook it is vital that membership is confirmed by the end of February as details have to be forwarded to DBKA.

It is also worth noting that insurance cover runs from 1st January to 31st December so please be aware that you may not be effectively covered until you have renewed.

When you do renew please ensure you use a 2016 membership form as there have been several changes to categories and fees since last year. If you require a 2016 form you can obtain one from the new Membership Secretary (details below), to whom the completed form should be returned with the appropriate payment (please ignore the address at the bottom of the form):

Thank you, and may 2016 be another successful year of beekeeping in North Devon.

*Brian Sharp Membership Secretary (NDBK) Peagham Lodge, St Giles,
Torrington EX38 7HZ Email: bjsharp@outlook.com Mobile: 07960 091698*

What am I?

I am dynamite, straw-capped, a maze of sweetness
and embryonic flight still entombed.

Cells paved with hexagons, wafer thin
and filled with nature's liquid gold.

The combs, with clinging female tenants clad,
a royal one amidst the common horde,
this latent super organism waits

for longer warmer flowery days ahead.

Meanwhile it rests.

In winter's sweet repose there's deep content.

David Charles 2015

(The answer is on the back page)

Who would like to visit Buckfast Abbey on Sunday June 19th or Sunday 26th?

Alan Barrow has been speaking to Clare Densley at Buckfast Abbey about a Branch outing on one of the above dates. We are invited to look around the Apiary and to attend a talk. Alan would like twenty people to sign up so that a coach may be hired. If you are interested, please will you let Alan or Mave know a.s.a.p. by email or phone. Any family and friends who wish to come are welcome.

FEBRUARY FORAGE by Julie Elkin

This is the most critical time in the colony's year, the winter bees are coming to the end of their lives and must rear the brood that will take the colony forward into the new season. Their fat bodies are running low and the presence of open brood stimulates them to forage for pollen as the incoming fresh supplies stimulate the Queen to continue laying, (the thin syrup we used to be told to trickle in is now considered pointless!) Estimates vary from 70-150mg of pollen needed to rear 1 larva and with each bee's pollen load being 11-29mg that adds up to a lot of flowers to visit. To obtain all the necessary amino acids the foragers must visit a variety of flowers. The nurse bees will also use stored pollen to make brood food and some beekeepers feed pollen or a protein substitute mainly in the form of patties laid across the top bars of the brood box. Far better are natural stores and a varied fresh supply within a very short flying distance of the hives.

In addition to foraging for pollen they will also collect nectar and water to use for diluting the winter honey stores and sources of these must also be close by as at this time of year low temperatures limit the length of a foraging trip as does the energy supply available to the bee from her honey sac when she needs to maintain her thorax temperature at 37.5 deg C.

The NBU Best Practice Guidelines sheet on water, the availability of which seems to be given a lot more attention recently, suggests ways to provide this. While water feeders can now be purchased it does suggest that a communal, close to hand source is the better option and should help keep your bees out of your neighbour's swimming pool and off their washing. Fresh shallow water with plenty of safe landing area is needed, this warms up fast and minimises the risk of drowning. The NBU tell us that a pinch of salt in the water encourages bees to use a new source as they are naturally drawn to mineral rich waters.

With early pollen intake being so vital the available sources should be a prime consideration when siting an apiary and often urban sites are better than rural at this time of year. The plants supplying the pollen and nectar this month include snowdrops, crocuses, grape hyacinths, aconites, winter heathers, chionodoxa, hellebores and celandines plus all the winter flowering shrubs, the Viburnums, Mahonias, Skimmias, Winter flowering honeysuckle, early Prunus, gorse and then the major suppliers of pollen the Hazels and Willows. If you seek inspiration as to how to enhance your bee friendly garden a visit to Rosemoor this month will definitely provide it.



THE DEVON COUNTY BEES AND HONEY SHOW

Top left—Kay Thomas judging entries

Top right—Jack Mummery as Judge's Steward

Bottom left—Our next speaker, Ruth Neal showing the Gold Medal award for the 'Best in Show'

Bottom right—Jim Mogridge (Torbay Branch) showing kids live bees



WHAT AM I ? - ANSWER

A BEE SKEP (photo taken from 'Beekeeping with Pen and Camera' by Herod-Hempsall)

NEWS IN BRIEF

David Sharp has taken over from Charmain Wooley as the branch **Membership Secretary**

Reports are coming in that **Deformed Wing Virus** has been absent in several apiaries last summer.

The BBKA AGM met in January and decided by a narrow majority **not to increase the annual capitation fee** (part of the subscription) for 2017

The two **DBKA nominations for member of the Examination Board were unsuccessful**; Lea Bayly withdrew her nomination and Ken Basterfield got insufficient votes.

Tickets are now available for the **BBKA Spring Convention** on April 7 to 9; have a look at the BBKA website for more information.

Tickets are also available for the Beekeeping equipment trade fair TRADEX at Stoneleigh, Warwickshire on Saturday March 5; information on the website www.beetradex.co.uk

Edited by Chris Utting e-mail chrisutting@btinternet.com The views expressed in the articles are the author's and not necessarily those of the North Devon Branch of the Devon Beekeepers' Association.

Member's contributions are extremely welcome: by 23rd of the month prior to publication please