

March 2015

BUZZWORD

Ayr & District Beekeepers Monthly Newsletter



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Presidents Message

After a mild winter, spring is now upon us and many hives are showing a lot of activity with pollen going in - a good sign of a laying queen and colony build up. The bees may be making significant inroads into their stores so keep on hefting!

Some members have already been through their hives, choosing a good day. One has reported the loss of a colony and another has found no signs of eggs or larvae in four of his hives. So it is not all good news.

This is a good time to check through your stored frames and decide which should be discarded. A number of mine have a significant amount of stored pollen many cells capped with a white dust and I thought I would pass on a tip I received from Tony Riome. The dust is evidence of the pollen mite which is universal in hives. The mite can be encouraged to eat the pollen by dusting the frames with flour and stacking them till the summer, when a good shake will get rid of any residue.

The club continues to keep a high profile nationally and was well represented at the recent A.G.M. In Perth of the Scottish Bee Association when three of our members , Ian Jamieson , Phil McAnespie and Joyce Duncan were honoured with awards for outstanding service to local beekeeping.

The latter part of the meeting was devoted to a presentation on the latest threat to our bees - the small hive beetle. This included a lively presentation from Fiona Highet, an entomologist based at S.A.S.A, on the life cycle of the beetle – see the article later in Buzzword.

UPCOMING EVENTS:-

Saturday 11th April
4th Beginner' Talk –
Basic Apiary information
Lindsay Baillie
Carrick Centre, Maybole
11am
Club Apiary 1:30 pm

Saturday 18th April
5th Beginners' Talk
Pests & Diseases
Jane Šik
Carrick Centre, Maybole
11am
Club Apiary 1:30pm

Saturday 25th April
6th Beginners' Talk
Swarming
Phil McAnespie
Carrick Centre, Maybole
11am
Club Apiary 1:30pm

Finally I had the pleasure at our last meeting of presenting certificates to Julian Stanley and Joyce Duncan for successfully passing SBA Modules. Joyce is to be particularly congratulated for now having completed all 7. For those interested in sitting exams, we have a social group who meet regularly ostensibly to discuss the syllabus and go over old papers. It is a worthwhile exercise and I recommend it to you.

If you have reached this far in my report - well done.

Until next time.

Alan.

SBA AGM Report

The Scottish Beekeepers Association Annual general meeting was held on Saturday the 14th of March at the Dewars Centre in Perth. As the general secretary's report notes, it has been a busy year for the SBA year and they have now been accepted as a Scottish Incorporated Charitable Organisation (SICO), and most of the resolutions proposed were related to this. All of the officer's reports and previous minutes can be found on the member's page of the SBA website (login details for this are on your blue SBA Members card). The first resolution was to re-elect all those trustees who automatically became trustees of the new SICO to serve at most until the next annual general meeting, the vote was overwhelmingly positive. Julian Stanley was also elected a trustee of the SBA – he will serve as west area representative.

Another result of the SBA becoming an SCIO means local associations will now have to apply to become an Affiliated Beekeeping Association (ABA) and pay an annual subscription, it was voted at the AGM that all association that were affiliated before the change will be granted complimentary ABA membership until 31 Dec 2015 and will be exempt from paying an ABA subscription until expiration of that complimentary membership.



Also on the agenda was presentation of SBA awards and we are pleased to say that three members of Ayr and District beekeepers: Joyce Duncan, Ian Jamieson and Phil McAnespie, were awarded the Local Association award for their service to the club and beekeeping at a local level. They were presented with the award by Bron Wright (SBA President) - congratulations to all three on their award!

After the AGM had concluded, there were 2 talks on the Small Hive Beetle, given by Fiona Hight of SASA and Steve Sunderland, lead bee inspector for the Scottish Government. Fiona, as an entomologist, was able to give some great background on the small hive beetle. The small hive beetle (*Aethina tumida*) originated in Africa and is considered a minor pest. African bees have strong house-cleaning and defensive traits, which include: preventing the beetles access to the colony by aggressively harassing them, filling cavities where the beetle could hide with propolis, removing beetle larvae from the hive, and by confining beetles to 'propolis prisons'. These behaviours limit small hive beetle reproduction in African colonies, and so keep the beetle population down to manageable levels and below damaging thresholds.

The European honeybees have fewer natural defences and struggle to cope with the small hive beetle. The small hive beetle starts as an egg and hatches within 2-6 days, and they do most damage while in the larval stage, as they consume brood and stores - often

QUESTION OF THE MONTH:

- How many American states have the Honeybee as their official insect?

LAST MONTH WE ASKED

- Who discovered that bees need honey, not pollen, to make beeswax?

The Answer -

François Huber

burrowing through comb – “like wax-moths on steroids” as Fiona said. The next stage of life for the small hive beetle is pupation- for this, larvae will then leave the hive as a large group and can survive without food and water for up to 48 days. They then burrow into the soil to pupate. Adult beetles will start emerging after 3-4 weeks if the soil is warm enough but can last for up to 84 days depending on environmental conditions. Adult bees then search for colonies and can travel from 8-16 Km.

The national bee unit has produced an advisory leaflet that can be found at - <http://www.nationalbeeunit.com/index.cfm?pageid=125>



A Sting in the Tale – Dave Goulson

Review by Tony Riome



A Sting in the Tale Dave Goulson



Even if you have only a passing interest in bumblebees this is a worthwhile book to read.

Sufficiently anecdotal, it is easy reading and keeps the reader encouraged to want more but, meantime, it is technical enough to inform and satisfy.

Dave Goulson describes his initial interest in wildlife and insects before moving on to research and development projects both at national and international level. With the same gentle humour he outlines the decline and spread of the species.

The on-going plight of the bees, in terms of forage and habitat or, more accurately the loss of these, is well documented, as is the consequent formation of the Bumblebee Conservation Society.

All in all – a good read

Tony Riome

I can thoroughly endorse this review. I found the book very easy to read but, at the same time, very informative. I thoroughly recommend it.

Jane Šik

Beekeeping in April

- The colony should be building up well and you should see lots of pollen going into the hive. The weather was not good enough in early March for the bees to get out much to the snowdrops but they have been out on the crocuses and other early flowers. You need to keep checking on food supplies and feed if necessary.
- If you have not done it already, you should monitor varroa early so that, if necessary, hives can be treated before putting honey supers on. In April, multiply your daily mite drop by 100 - you are aiming to keep your mite population below 1000. Ian Craig recommends that you do not use thymol-based treatments prior to the honey flow, as it may taint the honey.
- On a reasonable day early in the month (if you haven't done so already) you can remove the mouse guards and put clean floors on your hive. This can be done with minimal disturbance to the hive as a whole.
- On a nice, sunny calm day, you can do your first proper inspection of the year. Puff a little smoke in the hive entrance and open up! Your first task is to find the queen and if necessary

mark her and – if it is your practice -clip her. This year the international queen-marking colour is blue (sorry colour blind members!). Concentrate on finding the queen - carefully scanning around the edge of each frame, then back and forth up the middle. When you find her, use a Baldock cage (crown of thorns) to trap her on the frame. Mark her and if you clip the queen, you only need to take a quarter of one wing off. Remember, you may expect to find a marked queen but she may have been superseded at the end of last season. Remember to release her at the end of the inspection!

- If you still have time, it is a good time of year to inspect for disease before the hive is full of bees. Shake the frames clear of bees to look at them. Check that you have good patches of healthy looking eggs, larvae and sealed brood – the eggs should be single and at the bottom of the cells. Look for a good laying pattern. Most of the sealed brood should be worker brood – lots of drone brood may indicate a drone-laying queen. Remember to note down the amount of brood, so you can check the build-up of your colony. You should always be keeping a record of your inspections.



- Are there any distorted, miscoloured larvae?
- Are there any greasy, perforated cappings?
- Is there a nasty smell?
- Any of the above see the Beebase documents on foulbrood and contact the local bee inspector.
- Do you have a lot of chalkbrood? Try to replace comb regularly and if possible, do a Bailey comb change on one third of your hives every year.
- Following this inspection, regular inspections should monitor build up, space and check for queen cells – more next month.



Nearly one in 10 wild bee species face extinction in Europe while the status of more than half remains unknown

The first-ever assessment of all European wild bee species shows that 9.2% are threatened with extinction, while 5.2% are considered likely to be threatened in the near future. A total of 56.7% of the species are classified as Data Deficient, as lack of experts, data and funding has made it impossible to evaluate their extinction risk.



The assessment was published today as part of The IUCN European Red List of Bees and the Status and Trends of European Pollinators (STEP) project, both funded by the European Commission. It provides – for the first time – information on all 1,965 wild bee species in Europe, including their status, distribution, population trends and threats.

The report shows that 7.7% of the species have declining populations, 12.6% are stable and 0.7% are increasing. Population trends for the remaining 79% of bee species are unknown.

Changing agricultural practices and increased farming intensification have led to large-scale losses and degradation of bee habitats – one of the main threats to their survival.

For instance, intensive silage production – at the expense of hay-cropping – causes losses of herb-rich grasslands and season-long flowering, which constitute important sources of forage for pollinators. The widespread use of insecticides also harms wild bees and herbicides reduce the availability of flowers on which they depend. The use of fertilisers promotes rank grassland, which is low in flowering plants and legume species – the preferred food resources for many bee species.

Climate change is another important driver of extinction risk for most species of bees, and particularly bumblebees. Heavy rainfalls, droughts, heat waves and increased temperatures can alter the habitats that individual species are adapted to and are expected to dramatically reduce the area of its habitat, leading to population decline. A total of 25.8% of Europe's bumblebee species are threatened with extinction, according to the assessment.

Urban development and the increased frequency of fires also threaten the survival of wild bee species in Europe, according to the experts.

The report also includes an assessment of the Western Honeybee (*Apis mellifera*) – the most well-known pollinator. The Western Honeybee has a native distribution through much of Europe but it is uncertain whether it currently occurs as a truly wild, rather than domesticated species. As the Red List only covers wild – not domesticated – species, it has been assessed as Data Deficient. Further research is needed to distinguish between wild and non-wild colonies, and to better understand the impacts of malnutrition, pesticides and pathogens on honeybee colonies, according to IUCN.

The authors of the report call for greater attention to bees in the management of protected areas and in agricultural policies in Europe. They also emphasize the need for stronger support for bee taxonomists and survey programmes at national and European levels, in order to ensure long-term monitoring of the status of bees and effective conservation actions.

Bees are essential for both wild ecosystems and agriculture. They provide crop pollination estimated to be worth €153 billion globally and €22 billion in Europe every year. Pollinators support crops accounting for 35% of global agricultural production volumes.

Of the main crops grown for human consumption in Europe, 84% require insect pollination to enhance product quality and yields (e.g. many types of fruit, vegetables and nuts). Pollination is delivered by a range of insects, including wild and domesticated honeybees, bumblebees, many other wild bee species and other insects.

A tiny new tracker designed to monitor bee behaviour is being tested by ecologists at Kew Gardens in London.

It is made from off-the-shelf technology and is based on equipment used to track pallets in warehouses, said its creator Dr Mark O'Neill.

Readers, used to pick up a signal from the kit, are connected to Raspberry Pi computers, which log the readings.

The device has a reach of up to 2.5m (8.2ft). Previously used models were restricted to 1cm (0.4in).

The tracker consists of a standard RFID (radio frequency identification) chip and a specially designed aerial, which Dr O'Neill has created to be thinner and lighter than other models used to track small insects, allowing him to boost the range.

The engineer, who is technical director at the Newcastle-based tech firm Tumbling Dice, is currently trying to patent the invention.

"The first stage was to make very raw pre-production tags using components I could easily buy", he said.

"I want to make optimised aerial components which would be a lot smaller."

"I've made about 50 so far. I've soldered them all on my desk - it feels like surgery."

The average "forage time" for a worker bee is around 20 minutes, suggesting they have a forage range of around 1km (0.6 miles), Dr O'Neill explained.

The idea is to have readers dotted around a hive and flower patch in order to track the signals as the bees move around freely in the wild.

The tiny trackers, which are just 8mm (0.3in) high and 4.8mm (1.9in) wide, are stuck to the bees with superglue in a process taking five to 10 minutes. The bees are chilled first to make them more docile.



Where is the UK's pollinator biodiversity? The importance of urban areas for flower-visiting insects

Insect pollinators provide a crucial ecosystem service, but are under threat. Urban areas could be important for pollinators, though their value relative to other habitats is poorly known. We compared pollinator communities using quantified flower-visitation networks in 36 sites (each 1 km²) in three landscapes: urban, farmland and nature reserves. Overall, flower-visitor abundance and species richness did not differ significantly between the three landscape types. Bee abundance did not differ between landscapes, but bee species richness was higher in urban areas than farmland. Hoverfly abundance was higher in farmland and nature reserves than urban sites, but species richness did not differ significantly. While urban pollinator assemblages were more homogeneous across space than those in farmland or nature reserves, there was no significant difference in the numbers of rarer species between the three landscapes. Network-level specialization was higher in farmland than urban sites. Relative to other habitats, urban visitors foraged from a greater number of plant species (higher generality) but also visited a lower proportion of available plant species (higher specialization), both possibly driven by higher urban plant richness. Urban areas are growing, and improving their value for pollinators should be part of any national strategy to conserve and restore pollinators.

Full Article @ <http://rspb.royalsocietypublishing.org/content/282/1803/20142849>

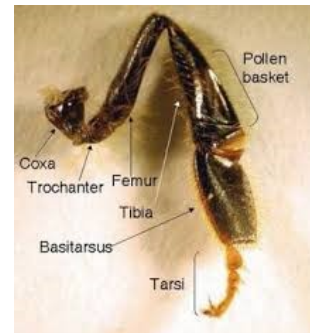
Feedback from February

"Congratulations to all concerned on the new Buzzword. I thoroughly enjoyed the new layout and contents and look forward to future editions". Suzanne Clark

Bee Humour

What is the bees' favorite body part?

The bees' knees.



Picture of the Month

Honeybee on aubretia



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