Honeybee news

Honeybee news is produced by our own Jill Hill and contains interesting snippets and links to articles from around the world that mention the honeybee.
This page is updated approximately 4 times per year with pages from previous years available in our Library.

2021

63 endangered penguins were found dead on a beach near Cape Town. Post-mortem showed no injuries except for evidence of multiple bee stings around their eyes. Normally, the bees and penguins live together peacefully, but Dr Alison Kock, marine biologist with the South African National Parks, said the presence of many dead honeybees nearby suggests the penguins must have disturbed a colony of bees.
Click here to read the full article.

How do you stop a herd of elephants from eating your crops and trampling your house down? Farmers in Kenya had even resorted to shooting the intruders, undermining the conservation work being done in the country to increase the elephant population. Other deterrents such as building thorn bush barriers, banging drums and sheets of metal, and burning rubber tyres to produce irritating smoke proved ineffective. Building on the belief of indigenous communities that elephants are terrified of bees, strings of beehives have been suspended round the periphery of fields. When the elephants push against the strings, swarms of angry bees emerge, stinging the elephants around their eyes and in their mouths and trunks, making them flee from the crops.
The Times recently reported that the same deterrent was being tried in Odisha, India. Local farmers had tried putting chilli powder in trenches, electric fences, beating drums all night and setting off firecrackers to deter the marauders with limited success. The power of the small bee against the huge elephant is a real David and Goliath scenario!
Click here to read the full article.

After a freezing April, a soggy May and a hectic swarming season in June, many Welsh beekeepers were pleasantly surprised to reap a much better honey harvest than expected. Not so for French beekeepers who are predicting the worst honey harvest for 50 years. Beekeepers are blaming climate change, which this year has caused months of frost, excessive rain, and cold northerly winds, shortening the flowering season significantly. In total, the French honey harvest is expected to amount to about 8 tonnes, two thirds less than last year. As France is estimated to consume about 40,000 tonnes annually, that looks like a lot of honey to import.
Click here to read the full article.

A study of how honeybee behaviour responds to varroa infection has recently been published in Science Advances by a group of Italian scientists based in Sardinia. One part of the research involved comparing colonies infected with varroa with control colonies which were not. The study investigated where foragers, the bees most likely to introduce the mite into a colony, perform the waggle dance to inform other foragers the direction and distance of nectar sources. Compared to the control colonies, foragers in infected hives were less likely to do this in the centre of the colony, instead favouring the periphery of the colony, therefore helping to protect the young nurse bees and brood. An increase in grooming behaviour by young bees of other young bees was also observed in the infected hives.
The second part of the research involved infecting small groups of about a dozen young bees in laboratory conditions. There was no difference seen in social distancing behaviour between the infected groups and non-infected control groups, the assumption being that as this is a strategy to separate young and forager bees, social distancing was not relevant in this situation. However, there was still an increase in the grooming behaviour in the infected bees and food sharing was also more pronounced.
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According to Māori legend, the Mānuka tree was produced through the union of Tane Mahuta, the god of the forests, through his union with Tawake-Toro. It is a plant characterised by its spiky foliage, delicate flowers, and the beautiful (and expensive) honey produced from these flowers. The Mānuka tree and its produce are seen as treasure by the Māori people who traditionally have seen themselves as its guardians. This background helps to explain the strength of feelings aroused by New Zealand in its fight to protect the brand of Mānuka honey. The fact that it is a lucrative, multi-million-dollar business probably has some relevance too!
Leptospermum scoparium grows in both Australia (where it is commonly known as Tea Tree) and New Zealand (where it

is called Mānuka). Honey made from the plant in Australia is called Manuka (not Mānuka), an Australian word used for over a century and not associated with Māori legend. This is one of the arguments being used by Australia in its objections to the acceptance by the Intellectual Property Office of New Zealand to the trademark of Mānuka honey by the New Zealand Mānuka Honey Appellation Society. A charitable Trust comprising of representatives from government, beekeeping businesses and Māori tribes has been formed to fight the Australian objections. Mānuka honey has a formal scientific definition and must meet strict criteria to be sold as such, whereas Manuka honey does not. The two products may be confused by the less discerning shopper. The issue has elicited such strong feelings in New Zealand that individual beekeepers in Australia are being prosecuted for trying to trademark their Manuka honey. The latest formal challenge has been postponed due to restrictions imposed by the pandemic but watch this space!
Click here to read the full article.

After reports in earlier editions of the Welsh Beekeeper about the problem of Asian Hornets in Jersey this year, a glimmer of hope has been reported. Apparently, the much larger European Hornet has been attacking and dismembering the Asian Hornets when they have been visiting the feeding stations set up to monitor and track the invasive species. However, it may just be a temporary behaviour due to recent weather patterns affecting the European Hornets usual food source. Also, there is concern that if an Asian Hornet escapes from an attack at a feeding station, it may avoid it in the future and therefore reduce the effectiveness of this valuable tool used for tracking hornets and locating and destroying nests.
Click here to read the full article.

Some potentially good news for honeybees was published in iScience in September. A paper titled “Real-time monitoring of deformed wing virus-infected bee foraging behaviour following histone deacetylase inhibitor treatment” described a common and inexpensive compound called sodium butyrate could prevent and even reverse the effects of deformed wing virus (DWV). Highlights of the study showed the compound reverses the learning ability of bees infected by DWV, restores the expression of genes involved in memory, and improved the homing ability of infected bees.
A team of scientists at the National Taiwan University fed bees with syrup containing sodium butyrate and then infected them with DWV. After 5 days, they found that 90% of these bees were still alive compared to 10% of bees which were not fed with the substance. The team also monitored the entrances to beehives on a bee farm for about a month. They found that only about 50% of foraging bees infected with DWV returned to their hives whereas 80% of bees fed with the sodium butyrate syrup made it home.
Click here to read the full article.

Amateur beekeeping is enjoying a surge of interest in Australia recently, with about 28,000 hobby beekeepers registered in the country. Concern about the decline in bee populations, the popularity of the Flow Hive, and Covid lockdowns restricting usual activities are the main factors causing this. Its big business for manufacturers of beekeeping equipment, as amateur beekeeping is worth about $173.5 million per annum.
Click here to read the full article.

A paper published recently in Science Advances has answered the question about where the Western honeybee evolved: was it Asia or was it from an ancestor which had previously spread to Africa? Analysis of 251 Western honeybees across a number of subspecies confirmed they evolved first in Western Asia 7 million years ago and then spread to Africa and Europe about 6 million years ago. Interestingly, despite the vast range of different environments which honeybees have colonised and adapted to, only about 145 genes out of the 12,000 which make up the Western honeybee genome are different between the species.
Click here to read the full article.