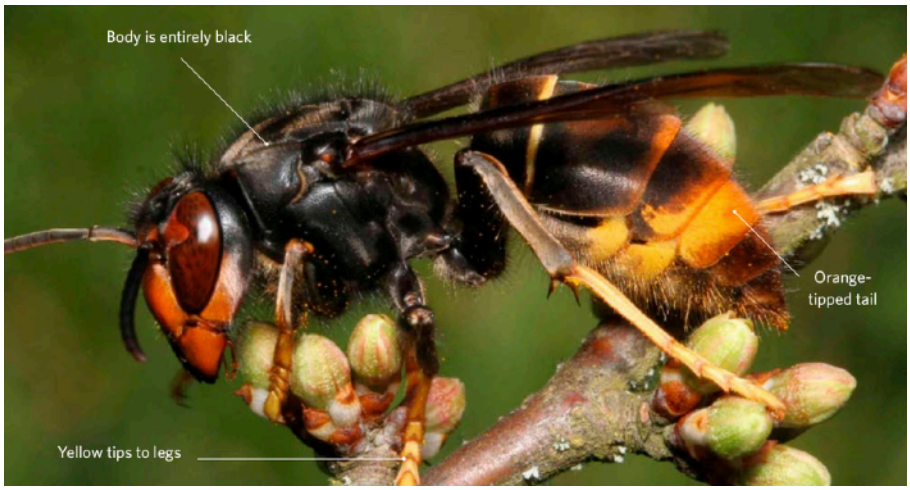
NATIONAL APICULTURE PROGRAMME NEWSLETTER



National Biodiversity Data Centre (invasives.ie)/photo credit Somerset Beekeeping Association

New Reporting system for the Asian hornet

The Asian hornet (*Vespa velutina*), a species native to Southeast Asia, has dispersed widely across continental Europe following its inadvertent introduction to France in 2004. It has potential to cause major ecological harm, particularly to native pollinators, as a single nest can cause substantial declines in honeybee populations.

Efforts to tackle invasive species are set to receive a boost through a new collaboration. The Invasive Species Bureau has been set up between the National Parks and Wildlife (NPWS) and the National Biodiversity Data Centre NBDC.

Aimed at improving monitoring and protecting native biodiversity, the initiative supports the implementation of EU regulations on invasive species while enhancing Ireland's capacity to manage them effectively.

With this a Rapid Response model for the Asian hornet, outlining a coordinated plan to prevent the species from establishing itself in the country. Minister O'Sullivan said: "Each step within this roadmap – from early detection, through to investigation, eradication strategy and deployment of all control measures – is based on the best available scientific evidence".

If a suspected sighting is made, then log onto invasives.ie. Information sourced from www.gov.ie (From: Department of Housing, Local Government and Heritage published 19th May 2026).

Have your say!

Want to get in touch or share some information?
What would you like to see in the next edition?

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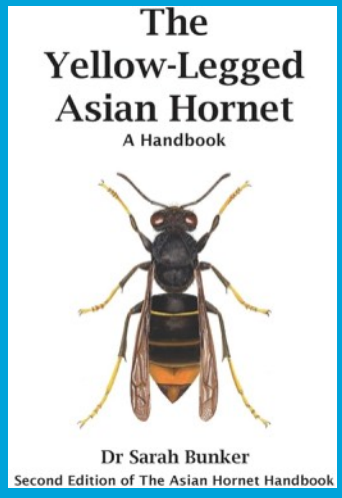
Recommended Reading



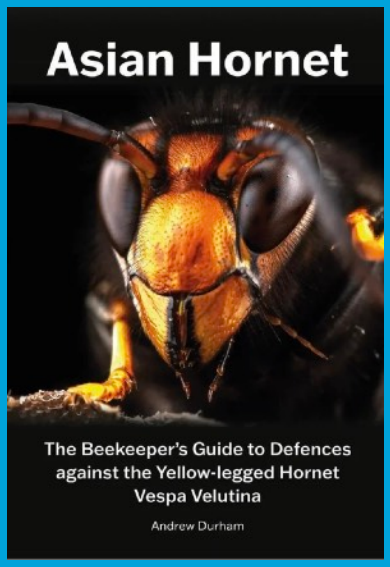
In other News

It's that time of year again, the annual COLOSS survey on winter colony losses is due. The data collected is a representation of Irish beekeeping so it's important as many of you complete the survey. You can click the link here to take you to the survey monkey.

COLOSS: Honey Bee Winter Colony Loss Survey 2025/2026

https://www.surveymonkey.com/r/coloss2026

Recommended reading



A whats app group has been established where you can keep up to date with other beekeepers across Ireland, join the link below, to the announcement group.
Please keep posts respectful, on-topic, and follow the group rules at all times.

https://chat.whatsapp.com/KYRhKd7XbcO8EHPME7QB26?s=cl&p=i&ilr=2

From there you can also join your regional group.

Connacht https://chat.whatsapp.com/LsFMcrybr6QDBslba8vKW6?s=sw&p=i&ilr=2

Leinster https://chat.whatsapp.com/DKOZdTs8tAz7jPSxplY1Pl?s=sw&p=i&ilr=2

Munster https://chat.whatsapp.com/JGeVdC9hqUMLmluHactBRs?s=sw&p=i&ilr=2

Ulster https://chat.whatsapp.com/LqiBT8O9g66JtCMLd4ELEY?s=sw&p=i&ilr=2

University of Galway

This poster presents the progress achieved to date on Task 4 at the University of Galway. The assessment methodology was informed by Steve Riley's book 2024 (*The Honey Bee Solution to Varroa*), which details an approach beekeepers can follow. Within this task, both treated and untreated colonies were monitored over an annual cycle to assess *Varroa destructor* infestation levels. Monitoring was conducted through the analysis of bottom board debris, in combination with alcohol washes, brood sampling, and adult honey bee sampling. Collected samples were subsequently submitted to Dr Mary Coffey at the Department of Agriculture, Food and the Marine (DAFM) for diagnostic analysis.

Sampling remains ongoing to capture seasonal variation in Varroa infestation levels. Further data collection will enhance the robustness of the overall analysis.

Dr Sheila Faherty ATU & Vickie Henshaw NAP beekeeping advisor, presenting the NAP poster at the Native Irish Honey Bee Conference.

Professor Grace McCormack receiving the Rev. Sam Miller award. This award is given to those who have shown outstanding service to the preservation & promotion of the Native Irish Honey bee. Congratulations Grace.

Vickie collecting bottom board samples for analysis.

Mean while at University of Dublin

Comparing different Varroa control treatments

Honey bees are essential pollinators, supporting biodiversity and food production. However, beekeepers continue to face major challenges from colony losses, which are often linked to several interacting stressors, including parasites, pathogens, pesticides, nutrition and environmental conditions.

One of the most serious threats to honey bee health is the parasitic mite Varroa destructor. Varroa weakens both developing and adult bees and is also an important vector of honey bee viruses. Managing Varroa effectively is therefore a key priority for colony health and sustainable beekeeping.

Current Varroa control often relies on synthetic chemicals such as amitraz. While these can be effective, repeated use raises concerns around resistance, residues in hive products, and possible effects on bee health. For this reason, there is a strong need to evaluate alternative and sustainable Varroa control approaches under real field conditions.

Pictured are some of the hives used in Egehan Özfen's study.

As a part of the National Apiculture Programme of Ireland, PhD student Egehan Özfen is leading a two-year field experiment involving 75 honey bee colonies in Ireland, comparing different Varroa management strategies. These include conventional amitraz treatment, organic acid-based treatment, drone brood trapping, treatment-free colonies with reported Varroa-resistant traits, and untreated/control colonies for comparison.

We are now in the second and final year of the field experiment. Throughout the project, colonies are being monitored for a wide range of health and performance indicators, including colony strength, brood development, adult bee population, honey production, queen status, Varroa infestation levels, pathogen presence and environmental conditions.

A key aim of the experiment is not only to assess how different strategies affect Varroa levels, but also to understand their broader effects on colony health, productivity and overwintering success.

Overall, the National Apiculture Programme of Ireland aims to provide practical, field-based evidence to support beekeepers in making informed decisions about sustainable Varroa management in Ireland.

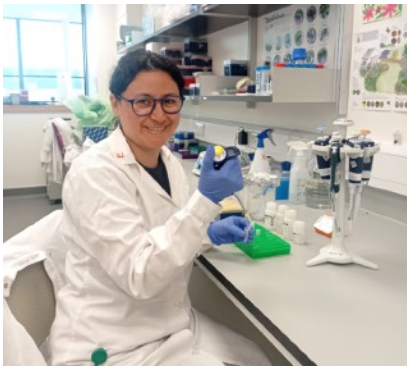
Egehan Onat Özfen

Egehan Onat Özfen is Doctor of Veterinary Medicine and PhD student at University College Dublin, focuses on honey bee health with different aspects. His work explores effects of pesticides, pathogens, and environmental stressors on honey bee colonies with field trial and genomic approaches.

As a part of the Irish National Apiculture Programme, Egehan investigates stressors, including the pesticide persistence in hive materials, the impact of major pathogens such as Varroa destructor and foulbrood diseases (American and European) as well as sustainable treatments, and the broader environmental factors driving disease prevalence. His research seeks to bridge between honey bee research and practical solutions, aiming to enhance the resilience and sustainability of honey bee populations.

Understanding the impact of pesticides and pathogens on bee health

Foraging bees are often exposed to environmental stressors like pesticides and pathogens. They bring these back to the hive putting their health and the whole colony at risk. As part of the NAP, PhD student Marcela Diaz is investigating how these stressors affect the gut microbial community - an essential component of bee health. The gut bacterial community in bees is known to be important for immunity, carbohydrate metabolism, and nutrient digestion, potentially affecting how bees respond to environmental stressors. In a controlled laboratory based experiment with bumblebees, Marcela found that exposure to pesticides and pathogens reduces the relative abundance of some of the gut bacterial taxa. Currently, Marcela is investigating how the gut microbiome of managed honey bees across the island of Ireland is affected by environmental stressors. These honey bee colonies have already been screened for all of the major honey bee pathogens and pesticides. Therefore Marcela's study will provide detailed information on the interaction between exposure to pesticides and pathogens, the gut microbiome, and honey bee health.



A collection of photos's from Marcela Diaz work.

Marcela Diaz

Marcela is a third-year PhD student at the School of Biology and Environmental Science in University College Dublin (UCD) working with Drs Julia Jones and Nicholas Brereton. Currently, she is investigating host-microbial interactions, particularly between bees and the bee gut microbiome. Marcela completed her MSc in Applied Microbiology at the Catholic University of Portugal and moved to Ireland to performed her research project supported by ERASMUS.

As part of the NAP-2021 and in collaboration with UCD and DAFM, she detected pesticides in honey and pollen across Ireland using liquid and gas chromatography. Marcela completed her BSc in Sciences at the Army Polytechnique School in Ecuador, her home country, with an innovative thesis project on biomolecular breeding techniques for guinea pigs. Alongside her academic training, Marcela has been an active beekeeper since 2017. Her research interests include microbial ecology and the role of the microorganisms in health and disease.