

Annual Conference

1st & 2nd March 2024

Athlone Springs Hotel | N37 F9T3

Native Irish Honey Bee Society
Apis mellifera mellifera



Keep it Local



Friday 1st March

Grace McCormack, Alexandra Valentine, Arrigo Moro, Irene De Carlos

Research Update - Galway Honey Bee Research Centre

The team at the University of Galway commenced research on Irish honey bees in 2014, collaborating with NIHBS and other partners to show that Ireland still held a significant population of *Apis mellifera mellifera*, the subspecies native to here, and under threat elsewhere across its range. We also showed that wild honey bee colonies are common here. From this work many other questions have arisen and we have sought funding and collaborations to follow important lines of questions relating to the adaptation of honey bees in Ireland, with a focus on their conservation. Here we will outline some of the new directions this research has taken including how our major study on wild honey bees and our citizen science approach are faring. Recently, we have commenced the project that provides more scientific evidence to our government to help determine if a ban on imports of non-native bees is a proportionate response to the perceived threat. We will outline the programme of work involved in that project. Finally, we will outline the main objectives of the new National Apiculture Programme lead by Julia Jones in UCD, and what we will be offering in support to Irish beekeepers.

Poster Presentations:

This session will introduce the creators of each poster to the audience and briefly outline the topics covered. There will then be an opportunity for delegates to ask questions and view the posters with tea and coffee available.

The Importance of Rearing Our Own Local Queens - Question & Answer Panel Session

with Mike Palmer, Grace McCormack, Andrew Abrahams & Roger Patterson.

Chaired by Paula Somers Kennedy.

Declare your land a
**Native Irish Honey Bee
Conservation Area.**

Scan here for more information:



Saturday 2nd March

Grace McCormack and Alexandra Valentine

Characterisation of *Apis mellifera mellifera* in Ireland.

Earlier work showed the presence of pure *Apis mellifera mellifera* (Amm) in Ireland via multiple genetic approaches, but questions remain on what our native bee looks like and if we have something unique here. These questions underpin our conservation efforts to protect our native biodiversity and our efforts to prevent the loss of adaptations that have resulted from the isolation our bees enjoyed for many centuries in this climate. There is very little published data on what beekeepers have observed about Irish bees or detail of their physical attributes and genetics leaving a gap in our understanding of what physical and genetic traits are required for a colony to be clearly identified as Amm and/or Irish Amm and if they even really exist.

Recent years have seen a large increase in the numbers of imported colonies and observations of bees that are not as dark as we might expect. It is crucial that we document the characteristics of the native honey bees in Ireland while our population is still healthy. It is also of importance perhaps to document the nature of the hybrid honey bees that can now be found.

Here we present data from the >500 managed colonies from beekeepers that posted samples to the Galway team in 2021/2022. Maps will be shown of the distribution of pure versus hybrid bees via genetic data and how well wing geometric morphometrics agree with genetic data of these colonies will be discussed. The audience will be taken through the use of easy to use online software to determine the subspecies of their own colonies. We also have assessed 17 honey bee physical traits used by Ruttner and others to distinguish the *mellifera* subspecies from other subspecies and determined which of these physical traits clearly define our *mellifera* subspecies. Comparing Irish *mellifera* from European *mellifera* also shows interesting differences. Finally, we will also look again at the link between colour and genotype using >5000 bees from >300 colonies. There is something here for all beekeepers that hope to maintain native honey bees in their apiaries and in Ireland.

Eoghan Mac Giolla Coda

Commercial honey production working with Amm

Eoghan is a commercial beekeeper based in Co. Louth. As a fourth-generation beekeeper, he learned his craft through helping his father with the famous Galtee black bees of Co. Tipperary. After settling in Co. Louth, he embarked on his own beekeeping enterprise using local strains of our native Irish honey bee (*Apis mellifera mellifera*). Eoghan manages around 180 colonies of black bees, distributed across Co. Louth, in environments ranging from rolling grassland pastures to areas of flat tillage to the small upland fields and hillsides of the Cooley Mountains. Eoghan's primary interest is in honey production, and over the 12 years he has worked as a full-time beekeeper, his colonies have averaged close to 80 lbs per year. Given Ireland's cool and damp climate, he believes that to achieve good yields, it is important to work

with locally adapted bees that can best take advantage of the generally short periods of good weather. In addition, a good management system is needed that minimizes the labour and time involved in inspections. As a former scientist, Eoghan emphasizes the need to continuously collect data on colonies' behaviour and characteristics. Using these data for selection, he breeds native queens, mostly for his own use. He is also involved in the conservation of the native Irish honey bee, both on the island of Ireland and locally, helping to establish Co. Louth as a conservation area for the black bee.

Eoghan's lecture will also include updated observations on varroa tolerance and swarm management.

Mike Palmer

Stock improvement: Breeder Selection, Cell Building & Mating.

Starting in 1974, Mike Palmer built a successful beekeeping enterprise but suffered from Varroa etc., in the early 90s. In 1998 Mike started raising a few local queens himself, wintering them in nucleus colonies and found that the bees wintered more successfully and stored larger surplus honey crops. He believes that quality should always trump quantity, so he cut back on the number of production colonies and focused on raising the best queens possible.

Now, with 1000 nucleus colonies to help support the three hundred honey producing colonies, French Hill Apiaries produces, on average, some 1200 queens and 15 tons of honey annually.

Mike lives in St. Albans, Vermont, USA and enjoys travelling the world teaching sustainable beekeeping to anyone who will listen.

Stock improvement: Breeder Selection, Cell Building, and Mating "Stock improvement at French Hill Apiaries has been an ongoing project for more than 25 years. I wasn't many years into the program before I had to admit to myself, stock improvement is a forever job in the apiary. For me, working with my queens and seeing improvement is the most exciting aspect in my apiary work, and what motivates me to continue."

Andrew Abrahams

"The Colonsay Black Bee Reserve" Honeybee Adaptations – a Myth?

Andrew has kept bees commercially on Colonsay for over 40 years and has wide experience of honey production and queen rearing. He holds the Scottish Beekeepers Association Master Beekeepers Certificate and has a BSc (Hons) Degree in Agriculture. He has teaching experience in both beekeeping and agriculture. Colonsay is home to one of Europe's few populations of pure Black Bees (*Apis mellifera mellifera*), the UK's native honey bee. The bees on Colonsay are managed for commercial honey production and queen rearing, but are also of unique interest to honey bee conservationists and scientists studying bee diseases. The 50-60 stocks of Black Bees on Colonsay have been isolated and self sustaining for decades. Years of selection have produced a productive and gentle strain. In 2013 the Scottish Government passed an Order under the Scottish Wildlife and Natural Environment Act (2011) WANE that will ensure Colonsay remains a Reserve for *Apis mellifera mellifera*.

Frankie de Dobbelaere

The Asian Hornet and its potential impact

This presentation intends to create awareness of the Asian Hornet, its lifestyle, how to identify the Asian Hornet and its nests and where to report any sighting. This presentation also emphasises the potential impact on beekeepers and biodiversity when the hornets settle in a new environment.

Michael Maunsell

The importance of Drones

Michael is a retired Physics, Mathematics, Applied Mathematics, and Chemistry teacher. He began beekeeping in the early 1970s when he was approached by a local farmer to rescue bees from a dangerous hollow tree that overhung the road between Michael's house and the farmers land. There followed a short intense study of beekeeping and carpentry to make a suitable home for his new tenants. Naively, Michael assumed that the bees would be delivered to him but he had to cut down the tree and remove the bees. He made his first lucky beekeeping mistake by moving the bees across the road. Michael got away with this error and only realised it some years later - obviously the bees were orientated to tall trees and now the only tall trees were on his side of the fence. Michael's beekeeping philosophy is quite simple – start with your own local bees, use natural selection (survival of the fittest, this has brought them to where they are) then progress with artificial selection, using comprehensive colony records.

Colm O'Neill

Queen rearing for Conservation

Colm has been beekeeping for over 50 years, he and his three brothers worked 30 colonies with their father until Colm took over the beekeeping operation in his early 20s. With his wife, Imelda, he manages 60 honey production colonies, and another 30 colonies and nuclei, for the production of Amm queens and nuclei for sale. Colin and Imelda only use *Apis Mellifera mellifera* (Amm) bees for local adaptation, ease of management, and rapid Spring build-up. Both he and his wife have full-time jobs, working the bees on the weekends and queen-rearing tasks as needed on weekday evenings. Colin is the education officer for his local association, a committee member for the Native Irish Honey Bee Society (NIHBS), and holds beekeeping, bee improvement and queen-rearing classes at his home and association apiaries during the summer. Along with Jonathan Getty, Alan Forskitt and Paula Somers Kennedy he has been giving online training to the more than 400 members of the NIHBS Queen Rearing Group Scheme since 2021.

NIHBS Annual Raffle @ 17.00 on Saturday

Thank you!

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Apis mellifera mellifera



2024 Conference

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Friday 1st March

- 5.30 p.m. **Welcome & Introduction**
- 5.35 p.m. **NUIG Research Updates**
Impact of Imports, NAP, Test Results, Genomics, Wild & Managed Honey Bees in Ireland & UK, Bacteria.
- 6.35 p.m. **Poster Presentations / Tea & Coffee**
- 7.30 p.m. **The Importance of Rearing Our Own Local Queens**
Q & A Panel With Mike Palmer, Grace McCormack, Andrew Abrahams & Roger Patterson. Chaired by Paula Somers Kennedy

Thank you to our Sponsors



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Saturday 2nd March

- 9.00 **Welcome & Introduction**
NIHBS Chairperson, Loretta Neary
- 9.05 **Characterisation of Amm in Ireland**
Professor McCormack & the NUIG team
- 10.00 **Commercial honey production working with Amm**
Dr. Eoghan Mac Giolla Coda
- 11.30 **Sustainable beekeeping with Local Honey Bees**
Mike Palmer, Vermont, USA
- 12:30 **Lunch & time to view the posters, skep-making & Suppliers Market Place**
- 13.45 **The Rev. Sam Millar Award**
For outstanding achievements in conserving & protecting our Native Irish Honey Bee.
- 14.00 **"The Colonsay Black Bee Reserve" Honeybee Adaptations - a Myth?**
Andrew Abrahams
- 15.00 **Asian Hornet & its potential impact**
Tony Baldwin
- 15:15 **Tea & Coffee Break**
- 15.30 **The Importance of Drones**
Michael Maunsell
- 16.15 **Queen rearing for Conservation**
Practical equipment demo with Q & A

Skep-making demonstration
with Jane Sellers
All Day Saturday

NIHBS Annual Raffle
17.00 Saturday



Suppliers Marketplace