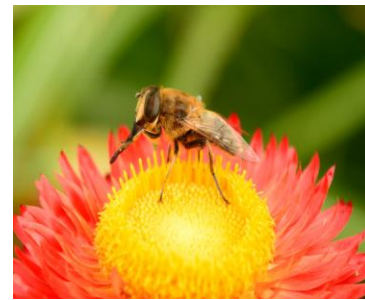




The DAFM Pollinator Newsletter

2nd Edition, May 2019



Pollinating insect such as bees, wasps, hoverflies, and butterflies, are **vital** for high **quality, diversified** foods and crops, farming and agriculture **sustainability**, and for protecting our **biodiversity**, landscape and regulating our natural **environment**. The DAFM, in conjunction with stakeholders of the farming, agricultural and horticultural sectors of Ireland, are making considerable efforts to make Ireland more pollinator friendly.

The 2nd Edition of our newsletter provides an update of the different activities and achievements of the divisions of the DAFM with pollinator protection responsibilities.



Horticulture & Plant Health Division (HPHD)

The honeybee is the most important managed pollinator species. Due to their key role in maintaining plants in the wild as well as field crop production DAFM's Horticulture and Plant Health Division is involved in a number of initiatives relating to beekeeping and honey. There are ~3,000 Irish beekeepers maintaining approximately 23,000 colonies of honeybees nationally.

The HPHD has a number of measures in place to support the protection of pollinators, these mainly relate to honeybees. The National Apiculture Programme (NAP) is co-funded by the European Commission and DAFM, the overall aim of this is to improve honeybee health by providing laboratory diagnosis of honeybee diseases and also conducting scientific research on how to protect against pests and diseases that are harmful to honeybees.

An important part of the NAP is monitoring of Irish over-winter colony losses as part of the COLOSS international research network. In addition the programme is providing technical assistance to beekeepers through workshops and lectures conducted at local beekeeper association level. This applied research programme has a strong emphasis on dissemination of results to beekeepers and is designed to benefit all Irish beekeepers.

The Sentinel Apiary Programme (SAP) is another initiative that has been implemented by HPHD to protect Irish honeybees. This programme aims to provide an early warning system for new honeybee pests such as the small hive beetle and Asian hornet. Selected beehives are monitored on a regular basis using specific trapping equipment to detect these pests.

Financial Support for Beekeepers

DAFM pays annual grants to Irish National Beekeepers Federations to help their associated members pursue the craft of beekeeping to the highest standards and to also inform the general public about the environmental role that bees play in maintaining Irish bio-diversity and crop production.

Individual beekeepers may apply for the Scheme of Investment Aid for the Development of the Commercial Horticulture Sector. This scheme grant aids capital investments in specialised buildings and equipment in the horticulture sector including beekeeping. The scheme's objectives are to: facilitate environmentally friendly practices, promote the diversification of on-farm activities; improve the quality of products; and improve working conditions. Further information on both types of financial support can be found in the link below.

<https://www.agriculture.gov.ie/farmingsectors/beekeepinghoney/beekeepingschemesgrants/>

Honey Production and Food Safety

Beekeepers wishing to sell their honey commercially are encouraged to register with DAFM for food hygiene purposes so they can sell their produce legally. To ensure the safety of Irish honey samples are taken each year as part of Ireland's National Residue Control Plan and tested for the presence of a range of residues and potential environmental contaminants. Separately DAFM's Veterinary Inspectorate at the Border Inspection Posts are responsible for sampling imported honey from outside the EU.

In addition, the Horticulture and Plant Health Division is also responsible for conducting inspections at apiary level regarding honey hygiene and the use of animal remedies.

A number of different pieces of legislation apply to honey offered for sale. Such honey must comply with the EU marketing standard for honey which sets down quality parameters as well as labelling provisions. In addition the legislation relating to the labelling of lot/batch and the provision of food information to the consumer also applies to honey. Horticulture and Plant Health Division takes samples at apiary and honey packer level as well as conducting labelling inspections to verify compliance with these three pieces of legislation. Laboratory analysis includes pollen analysis to verify the correct labelling of the country of origin. To assist beekeepers achieve compliance with their legal obligations a number of documents are available on DAFM's website including a honey labelling guidance note.



DAFM Research Division

Given the dramatic loss of pollinating insect species across the globe and what this means for biodiversity, ecosystem health and food security, there is an ever pressing need to understand how pollinator populations and communities respond to rapidly changing environments.

DAFM funded research has, and continues to play a significant role in identifying the importance of these species; identifying threats and devising ways in which we can protect our pollinators while maximising our agricultural potential. However, the implications of rapidly developing technologies and farm management practices remain relatively unknown in terms of their effects on pollinating species, and are even less predictable when considered in the context of an increasingly volatile climate.

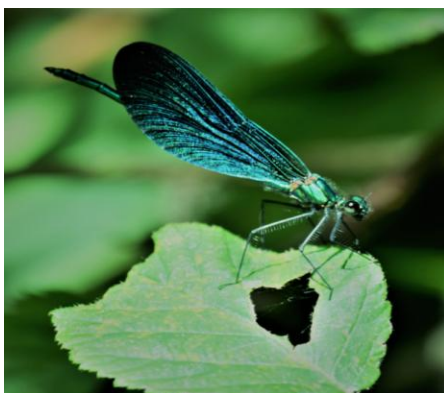
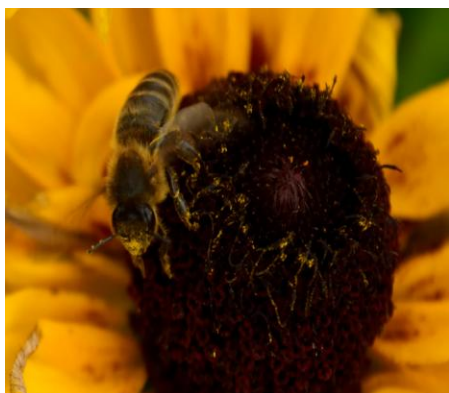
As a priority funding area, DAFM will continue to support the development of strategies and technologies that reduce the impact of food production systems on our biological diversity and pollinating species. There is now a real need for new research and innovation to ensure balanced food production under future, increasingly uncertain economic and environmental conditions and move towards increasingly resource-smart, climate-smart and "eco-healthy" production and consumption systems. Through our national and trans-national funding calls DAFM will continue to support Irish researchers as they position themselves amongst the world leaders in these areas.

Research on the native Irish Black Bee

Funding has been provided for a number of projects since 2008 to carry out research on the native Irish honeybee; this funding has been provided under the GRGAS (Genetic Resources Grant Aid Scheme). This scheme includes conservation, promotion and research into, indigenous varieties of plants and native livestock breeds. Further information on these projects and on the native Irish honeybee can be found in the link below.

<https://www.agriculture.gov.ie/farmingsectors/beekeepinghoney/thenativeirishhoneybee/>

For more information on DAFM's competitive research funding calls go to:
<https://www.agriculture.gov.ie/research/>



Agri-Environment and Structures Division

The Green, Low-carbon, Agri-Environment Scheme (GLAS) scheme, which forms part of the Rural Development Programme (RDP) has just under 50,000 active participants. This scheme aims to protect and enhance biodiversity, improve water quality, and help mitigate the impacts of climate change. The scheme is delivering in terms of the environment and public goods on a range of actions including the **bee actions**. It is also important to recognise the buy in to the scheme by the farming community in achieving and, in some instances, surpassing the targets set out in the RDP.

There are two **specific measures** within GLAS aimed at supporting the conservation of pollinators, particularly solitary bees on farms: **Bee Boxes and Bee Sand**. These measures aim to enhance biodiversity within the agricultural landscape and offer alternative nesting habitats where suitable natural habitats have been lost through changes in farming practice.

There are several other actions within GLAS which support measures that have potential for positive effects on pollinators, e.g. maintaining cover of Low Input Permanent Pasture (LIPP) & Traditional Hay Meadows (THM) preserves native flowers which are important food sources for pollinators while restrictions on pesticide use associated with these actions reduces use of potentially toxic chemicals in the wider landscape used by pollinators.

These achievements will deliver public goods across the key areas of Water Quality, Biodiversity and Climate Change to be addressed under the scheme, with the targeted bee actions delivering in terms of biodiversity. These achievements will also place Ireland in a favourable position in discussions on future agri-environment schemes.

Nitrates, Biodiversity & Engineering Division

The Nitrates, Biodiversity & Engineering Division plays a supportive role in pollinator protection through:

- Continuous support of the *All-Ireland Pollinator Plan (2015-2020)* through its active membership of the Steering Committee and annual funding of €15,000;
- The Biodiversity Section of the Division is actively involved in policy development, working towards the next CAP and agri-environmental schemes and exploring potential measures and actions for pollinators;
- **European Innovation Partnership (EIP) Protecting Farmland Pollinators:** As part of the EIP funding stream under the Rural Development Programme, DAFM awarded €1,194,697 to the Protecting Farmland Pollinators EIP. This project began in 2019 and is led by the National Biodiversity Data Centre. The project aims to develop a flexible mechanism that encourages all farmers to make their whole-farm more pollinator friendly in a way that is measurable and will not impact productivity. Many EIP projects support the wider biodiversity of farmland habitats and will have benefits for our vulnerable habitats and species including pollinators.

Pesticide Registration & Control Division (PRCD)

The PRCD of the DAFM is responsible for regulating and monitoring the safety of pesticides on the market to facilitate the sustainable production of safe and authentic food. The EU regulatory system, which Ireland fully implements, is the most stringent in the world. Pesticides can **only be approved** if their use: (1) results in a negligible exposure of bees; or (2) has no unacceptable acute or chronic effects on colony survival and development.

Regulatory decision makers rely on accurate scientific information. Therefore, investment in research, monitoring and communication is essential for establishing the effects and risks of pesticides on managed and wild bee populations. At a European-level, the PoshBee project aims to support healthy bee populations, sustainable beekeeping and pollination across Europe by integrating the knowledge and experience of scientists, academics, beekeepers and farmers. DAFM recently awarded €1,084,756 to the PROTECTS (Protecting terrestrial ecosystems through sustainable pesticide use) Project. This collaboration project (NUIG, TCD, DCU, and NUIM) aims to generate results that will help ensure pesticides can be used safely while protecting wildlife, health and the environment, both in Ireland and internationally

Forest Services Division

The Forest Services Division is responsible for ensuring the development of forestry within Ireland in a manner and to a scale that maximises its contribution to national socio-economic well-being on a sustainable basis that is compatible with the protection of the environment. As part of the DAFM's policy in ensuring compatibility between forestry development and the protection of the environment, the Forest Services Division is responsible for implementing the policy on Sustainable Forest Management (SFM) with a view to ensuring that all timber produced in Ireland is derived from sustainably managed forests. This work is in accordance with Ireland's commitment to the six pan-European criteria for SFM adopted at the Third Ministerial Conference on the Protection of Forests in Europe, Lisbon, 1998. The implementation of SFM within Ireland is supported by the Irish National Forest Standard, the Code of Best Forest Practice and a suite of environmental guidelines (relating to water quality, landscape, archaeology, biodiversity and harvesting) as well as the work of the Forestry Inspectorate and the ongoing review of Irish forest legislation.

Host a Hive Initiative

Intertwining this work and the protection of pollinating species, **Minister of State at the Department of Agriculture, Food and the Marine, Andrew Doyle TD, is announcing the Department's 'Host a Hive' initiative, in partnership with Woodlands of Ireland and beekeeping associations, as a meaningful contribution to the All-Ireland Pollinator Plan.** Landowners who have created new native woodlands are being invited to Host a Hive in their woodland, and in doing so, help the honey bee.

A letter is being sent out to NWS participants by the Department highlighting the opportunity to contact the Federation of Irish Beekeepers' Associations (FIBKA) and the Irish Beekeepers' Association clg (IBA clg), which have a national network of beekeepers seeking a home for their hives and productive foraging areas for their bees. This initiative is supported by the Native Irish Honeybee Society (NIHBS), which promotes the conservation and re-introduction of the native Irish honey bee throughout Ireland.

The initiative is expected to bring multiple benefits to both parties. The beekeepers are able to locate their hives within wild country areas that provide fantastic foraging space for their bees. The woodland owners gain a new pollinating resource for their woodland, with bees pollinating the flowers of woodland trees and plants, ultimately producing the next generation of plant communities. It's like habitat succession, but fast-tracked! Also, there's always the possibility of a few jars of delicious home-sourced honey for the kitchen table!

In time, the initiative may develop further through the creation of local honey-producing initiatives, as illustrated by the Nectar Way agri-food tourism initiative, which is establishing Co. Wicklow as a honey tasting destination (see www.thenectarway.com). Hosting a hive would be very much in keeping with the objectives of the Native Woodland Scheme, as it will promote biodiversity within both the woodland itself and the surrounding countryside. As such, the Department of Agriculture, Food & the Marine hopes that woodland owners give serious consideration to this opportunity, as it will help the honey bee establish another foothold on its journey back to recovery.



Forest Services Division (Con'd)

Woodland's Nectar Bounty

Native woodlands are a special ecosystem, where flower resources are multi-layered and multi-seasonal. Trees like Willow, Cherry, Rowan, and Holly provide flowers in the upper story zones, Hawthorn, Whitethorn, Crab Apple, and Elder provide lower story resources. Woodland ground flowering plants include Bluebells, Wood Sorrel, Wood anemone, Wild Garlic. Ivy and Honeysuckle climbers connect the woodland floor to the tree heights. In glades and margins, Gorse, Heather and Bramble, Foxgloves and Willowherb provide excellent foraging resource for honey bees and bumblebees. Wet areas provide Purple loosestrife and Scabious. In early woodland establishment, Dandelions, Knapweed and Colts foot colonize ground from the retained hedgerow margins.



KEEP IT NATIVE!



While the temptation may arise to introduce more flowers to woodlands, it is crucial to keep it natural and wild. The introduction of non-native plants or even 'Nativars' (ornamental varieties of native plants), in wild woodland habitats can lead to ecosystem imbalance and invasive species problems.

HOW CAN I HELP?

If you too want to help protect our vital insect species please visit the National Biodiversity Data Centre website (www.biodiversityireland.ie/projects/irish-pollinator-initiative/all-ireland-pollinator-plan/). The *All-Ireland Pollinator Plan (2015-2020)* provides easy-to-follow 'How-to-Guides' for supporting bee conservation and making our homes, schools, businesses, farmlands, councils and towns more pollinator friendly. Here is a short list of seven ways you can help pollinators:

1. **Let Dandelions bloom** – dandelions are a vital source of food for hungry bees in spring.
2. **Reduce mowing frequency** – from mid-April mow every 6 weeks.
3. **Plant Pollinator-friendly blubs** (e.g. Crocus, Allium, Snowdrops - these provide better food than Daffodils).
4. **Plant Pollinator-friendly bedding** (e.g. *Calamintha nepeta*) and native flowering trees (e.g. Willow, Hawthorn, Blackthorne).
5. **Reduce pesticide use** – only use when really needed and as intended (i.e. use as per the label instructions).
6. **Bare soil** - create a small south-facing earth bank to provide shelter for nesting.
7. **Record your actions** – be part of the monitoring community by logging all actions using the www.pollinators.ie apps or website. This is an important action as it helps track efforts and pollinator populations.

