

Briefing

From Brussels to Westminster: the road to a bee-friendly Brexit

Summary

- *Environment Secretary Michael Gove's welcome pledge of a 'gold standard' pesticides policy based on 'rigorous science' will shortly be put to the test. How the UK votes on two imminent EU-level decisions on pesticides restrictions will set the course for post-Brexit custodianship of the British countryside.*
- *Apocalyptic predictions about the impact of the temporary ban on three neonicotinoids, introduced in December 2013, have proved groundless. 2015 and 2017 saw bumper harvests of oilseed rape, with many farmers successfully using lower impact alternatives.*
- *A comprehensive ban covering all uses of these three neonicotinoid pesticides is essential to reversing the decline of bees and other pollinators, and would help aquatic life and cherished UK wildlife including birds and butterflies.*
- *Both the science and public sentiment are overwhelmingly supportive of such a ban, and the evidence indicates these toxic and environmentally persistent neonicotinoid pesticides are unnecessary and ineffective anyway.*

Walking the talk of a bee-friendly Britain

In 2013 EU member states voted to restrict the use of three neonicotinoid insecticides (imidacloprid, thiamethoxam and clothianidin) on flowering crops attractive to honeybees.

This followed a review of evidence¹ by the European Food Safety Authority (EFSA) which found a 'high acute risk' to honey bees when neonicotinoids are used on crops attractive to them. The current restrictions only apply to use on insect pollinated crops, for example oilseed rape (OSR), but not wheat.

"...there is scope for Britain ... to be a global leader in environmental policy across the board. Informed by rigorous scientific analysis, we can develop global gold standard policies on pesticides and chemicals"

Michael Gove, July 2017

<https://www.gov.uk/government/speeches/the-unfrozen-moment-delivering-a-green-brexite>

The European Commission is now proposing to extend the restrictions to most other crops. Because of the way they persist in the soil, travel through soil and water, and are spread by dust at the time of sowing, neonicotinoids can end up in wildflowers next to treated crops or flowering crops grown next to or subsequent to the treated crop. This means they pose a risk even to pollinators that are not visiting directly treated crops.

The UK was one of a minority of Members States to vote against the EU restrictions on neonicotinoid pesticides in 2013, and neonicotinoids are still widely used in the UK. For example, clothianidin was used on over 700,000 hectares of wheat in 2014.

¹ <http://www.efsa.europa.eu/en/press/news/130116.htm>



East Anglian Daily Times, January 21 2017

Since then the scientific evidence of harm to bees, and other wildlife, has stacked up. It's now overwhelmingly clear the ban must both be made permanent and extended to cover other crops such as wheat.

Two upcoming EU votes, on whether to extend the neonics bans to other crops, and whether to make them permanent, present Environment Secretary Michael Gove with the opportunity to deliver on his recent green promises².

The votes, likely in the coming weeks, also present the government with the chance to allay fears Brexit could lead to a bonfire of environmental protections.

Farmers need bees, not neonicotinoids

Apocalyptic claims by biotech companies and the National Farmers Union (NFU) about the impacts of banning neonicotinoids have proved spectacularly unfounded. A report³ funded and promoted by Bayer and Syngenta claimed an EU neonicotinoid ban would slash oilseed rape yield, costing tens of thousands of jobs and €billions in lost food production over five years.

"We are still very happy not to be using them. ... As a business we've been growing by about 20% for the last three or four years – we have no regrets"

Sam Fairs, conventional OSR farmer and owner-director of Hillfarm Oils, commenting on farming without the banned neonicotinoids. January 2017.

Instead, the average UK OSR actually increased by 6.9 per cent in 2015⁴ (the first year without access to neonicotinoid seed treatments), with **one Lincolnshire farmer reaping a world record harvest⁵**.

This year's yield⁶ of 3.9 tonnes per hectare is one of the highest in the last 10 years, and significantly higher than in 2013 when neonics were still widely used on the crop.

A lower OSR yield in 2016 was due to a range of reasons including weather, but those yields (3.0-3.2 tonnes per hectare) were similar to yields in 2013 (3 t/ha) before the restrictions on neonicotinoids came into effect.

Europe-wide, the Centre for Food Safety reports⁷ that in the two years since the partial ban **maize and OSR yields rose relative to the preceding four years** by 5.7 and 14.4 per cent respectively.

Farmers across the UK are successfully growing crops without using neonicotinoids and can be further supported through promotion of existing best practice of agronomic and non-chemical methods of pest control and increased R&D into improving methods and developing new ones. This includes spreading existing advice from sources such as the HGCA¹⁹ and the Rothamsted Institute²⁰ about better monitoring of pest threats so sprays are only used when absolutely essential, and promoting non-chemical means of control such as natural predators (including wasps and spiders).

² <https://www.gov.uk/government/speeches/the-unfrozen-moment-delivering-a-green-brexite>

³ http://www.hffa.info/files/wp_1_13_1.pdf

⁴ <https://www.gov.uk/government/statistics/farming-statistics-final-crop-areas-yields-livestock-populations-and-agricultural-workforce-at-1-june-2015-uk>

⁵ <http://www.fwi.co.uk/arable/world-record-oilseed-rape-yield-smashed-in-lincolnshire.htm>

⁶ <https://www.gov.uk/government/statistics/farming-statistics-provisional-crop-areas-yields-and-livestock-populations-at-1-june-2017-united-kingdom>

⁷ <http://www.centerforfoodsafety.org/reports/4591/net-losseconomic-efficacy-and-costs-of-neonicotinoid-insecticides-used-as-seed-coatings-updates-from-the-united-states-and-europe>

Recent research⁸ found a **potentially catastrophic 75% decline in insect biomass** over 27 years, suggesting intensive farming including pesticide use is as a key factor. Banning the most harmful pesticides, like these neonicotinoids, must go hand in hand with significant cuts in all pesticide use.

The weight of public and scientific opinion is clear: we need a comprehensive ban covering the three neonicotinoids to save bees and other cherished fauna.

Public support for banning neonicotinoid pesticides is huge, as many MPs will have felt directly from their constituents. UK voters, including and especially Conservative ones, back strong controls on pesticides use as part of preserving or toughening EU regulations post-Brexit.

The people have spoken...

[A survey of 1,687 people](#) for Friends of the Earth found:

- 81 per cent of respondents backed keeping the EU's ban on neonicotinoid pesticides because of the threat to bees.
- More than four out of five people want laws protecting wildlife to remain as strong or be made tougher after the UK leaves the European Union.

<https://www.foe.co.uk/sites/default/files/downloads/yougov-survey-brexit-environment-august-2016-101683.pdf>

A [2017 survey for Bright Blue](#) revealed:

- 85 per cent of Conservative voters reported they want to strengthen or maintain restrictions on the use of pesticides and fertilisers in agriculture.

<http://www.brightblue.org.uk/index.php/medias/press-releases/item/713-conservative-voters-want-a-green-brexit-polling-reveals>

Concern amongst scientists is just as strong:

- August 2017 research published in Nature⁹ shows **bumblebees could be driven to extinction by theomethoxam**, one of the partially banned neonicotinoids. Queen bees exposed to the pesticide were 26% less likely to be able to start a new colony.
- A June 2017 pan-European field study¹⁰ provided **emphatic evidence neonicotinoids harm honeybees and wild bees**. This study is hugely powerful because, covering a crop area equivalent to 3,000 football pitches, it's the **biggest yet real-world study** of these pesticides. Undertaken in the UK, Germany and Hungary, the experiment found:

- Increasing levels of neonicotinoid residues in the nests of wild bee species were linked with **lower reproductive success** across all three countries;
- Exposure to treated crops **reduced overwintering success** of honeybee colonies – a key measure of year-to-year viability – in the UK and Hungary.

• The largest global review of studies¹¹, involving 29 scientists and over 1,000 papers, concluded that neonicotinoids “are causing **significant damage to a wide range of beneficial invertebrate species** and are a **key factor in the decline of bees**”.

• **Neonicotinoids could be damaging food production**¹². Apples pollinated by bumblebees exposed to neonicotinoids were of lower quality than neonicotinoid-free bumblebees.

• The highly respected European Academies Science Advisory Council concluded¹³ there is **clear evidence for sub-lethal effects** on bees and other pollinators exposed to **very low levels of neonicotinoids over extended periods**.

“This widespread pollution of the environment with these potent neurotoxins has now been linked not just to bee declines but also to declines in butterflies, aquatic insects, and insect-eating birds.”

Dave Goulson, Professor of Biology at
Sussex University

⁸ <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0185809>

⁹ <https://www.nature.com/articles/s41559-017-0260-1>

¹⁰ <https://www.ceh.ac.uk/news-and-media/news/neonicotinoid-pesticides-harm-honeybees-wild-bees-first-pan-european-field-study>

¹¹ <http://www.tfsp.info/wp-content/uploads/2014/06/WIA-PR-REL.pdf>

¹² <http://www.nature.com/nature/journal/v528/n7583/full/nature16167.html>

¹³ http://www.easac.eu/fileadmin/Reports/Easac_15_ES_web_complete.pdf

- Bees prefer to eat solutions containing neonicotinoids¹⁴, even though the consumption of these pesticides caused them to eat less food overall, so **treating flowering crops** with commonly used neonicotinoids “**presents a sizeable hazard to foraging bees**”.
- Neonicotinoids may also be **contributing to the decline of butterflies**¹⁵: the decline of 15 out of 17 butterfly species monitored correlated with neonicotinoid use.

Are farmers being sold a pesticides pup?

Increasing evidence suggests that not only can farmers manage without bee-harming neonicotinoids, but they may be a waste of money anyway.

- A [study published in Nature](http://bit.ly/2uo1Qhx) (<http://bit.ly/2uo1Qhx>) found UK oilseed rape yields were reduced by neonicotinoid seed treatments in the wettest year, and found no consistent yield benefits of using neonicotinoid-treated seeds.
- The Centre for Food Safety reports (<http://bit.ly/2gjl0a>) that most published studies across a range of crops show little or no yield benefit from neonicotinoid seed treatments.
- Natural England and Game and the Wildlife Conservation Trust [found](http://bit.ly/2hs80f0) (<http://bit.ly/2hs80f0>) ‘winter cereals treated with neonicotinoids were more likely to be treated with foliar insecticides’. Having planted a crop with a neonicotinoid seed treatment the farmer was then more, not less, likely to spray it with an insecticide.
- Neonicotinoids harm beneficial insects that help control pests like slugs: a US study found that whilst they had no impact on slugs they were toxic to the ground beetles that feed on slugs, and so reduced soybean yields. (<http://preview.tinyurl.com/yctu4569>)

Healthy pollinators, on the other hand, improve crop yield and quality. Insect pollination [enhances oilseed rape yields](http://bit.ly/2uo1BFu) (<http://bit.ly/2uo1BFu>) and has also been found (<http://bit.ly/2vx6izu>) to [increase the value](http://bit.ly/2vx6izu) of two British apple varieties by £37 million a year.

Will the UK Government back a permanent, extended ban on neonicotinoids?

“I am managing well without neonicotinoids and by reducing my total use of insecticides I am able to avoid any additional cost to my business. Taking an approach that works with nature not against it should be the norm for farmers in order to conserve our pollinator populations and natural predators.”

Conventional farmer Peter Lundgren, Lincolnshire.

There is now a strong case for the restrictions to not simply be extended but also applied to all crops. Since the restrictions came into force neonicotinoids have now been found in wildflowers²³ next to fields of treated OSR and wheat. Canadian research²⁴ found that neonicotinoids remain much longer than expected in soil dust, and that the dust is dispersed widely.

This means wildlife is being exposed to higher amounts of harmful pesticides than previously thought, and via more routes than just the insect-pollinated plants like OSR to which the current restrictions apply.

Our numerous wild bee species and other wildlife are in crisis because of inappropriate pesticides use and habitat loss. Claims that rising managed honeybee populations shows neonicotinoids are harmless are as disingenuous as counting farmed chickens to argue UK birdlife is thriving.

The Defra Secretary of State, Michael Gove MP, says UK pesticides policy must be based on the science. The overwhelming scientific evidence shows the need for a permanent ban of the three neonicotinoids, on all crops. The Government should set out a clear position to support this now.

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¹⁴ <http://www.nature.com/nature/journal/v521/n7550/full/nature14414.html>

¹⁵ <https://www.stir.ac.uk/news/2015/11/butterfly-declines-linked-topesticides/>