Commercial bumblebees policy



Bumblebees have been reared commercially for pollination services since the 1980's. In this practice, bumblebee colonies are reared in captivity and then individual colonies are shipped around the globe to aid the pollination of crops, especially soft fruits like tomatoes, raspberries and strawberries. This practice of importing bumblebee colonies has resulted in the accidental escape of non-native species throughout various regions of the world, and the spill-over of parasites and diseases into these regions to the detriment of native wild bees. There are an estimated 65,000 commercial colonies imported into the UK each year to support the soft fruit industry, although some of the trade is marketed at gardeners. In 2015 Natural England tightened regulations to prevent the use of nonnative sub-species, which were previously allowed to be purchased by license holders in the UK representing a hybridisation risk to the native species. In response commercial producers now supply the UK sub-species Bombus terrestris audax, however the pathogen spill-over risks associated with commercial bumblebee operations still represent a significant threat to native bees. Important scientific findings show that despite the current screening and eradication protocols (both within rearing facilities and following preexportation checks), colonies entering the UK contain a number of pathogens when they arrive and that these pathogens can transfer to native bees via shared flowers.

Bumblebee Conservation Trust position on commercial bumblebees

Last Updated June 2016

The Bumblebee Conservation Trust wants to protect our native bumblebee populations, which play a significant economic role in UK agriculture, whilst recognising the necessity of commercial bumblebee operations to support pollination of crops, increasing the capacity for growers to grow better quality and higher quantities of produce within the UK.

The extent of what we know about the consequences of importing bumblebees is increasing. However, further research is needed into the detection of parasites and diseases, the means of sterilising pollen fed to commercial bumblebees, the risks of imported species and subspecies becoming invasive, and the extent to which commercial bees have already become established in the wild. Research is also required to

understand which diseases and parasites are endemic to different geographical areas of the UK, and if any of these diseases and parasites were potentially introduced with imported bees.

Given the current protocols' failure to detect parasites and diseases before importation, there is also an urgent need to agree which pathogens should be tested for, how to test for them, and to establish standard EU-wide protocols. Legislation to ensure that health-check practices are followed would need to be implemented.

Until producers and legislators can guarantee that commercial bumblebee colonies do not carry infectious pathogens we must take precautions to ensure that commercial imported bumblebees (including endemic UK sub-species) are not released into the wild. We are calling for improved legislation to prevent the release of imported bumblebees. This may require Bombus terrestris audax to be added to Schedule 9 of the Wildlife and Countryside Act, meaning growers would still be able to use commercial bumblebees within glass houses and poly-tunnels, however methods to prevent their escape would have to be taken and they would not be able to be deployed outdoors where they would be likely to come into contact with native wild bees. We strongly recommend the current practice of marketing colonies at gardeners for cosmetic reasons should cease immediately. This practice causes competition for our native pollinators and is an unnecessary pathogen risk to wild bees and also managed honeybees.

We applaud producers who are working closely with scientists, to research and develop new methods to eliminate pathogens from their colonies and hope that their efforts can be refined to ensure all commercially produced colonies can be certified disease free.

Links to further information

The Trojan hives: pollinator pathogens, imported and distributed in bumblebee colonies Graystock *et al.* (2013)

Mitigating the anthropogenic spread of bee parasites to protect wild pollinators Goulson and Hughes (2015)

<u>Do managed bees drive parasite spread and</u> emergence in wild bees? Graystock *et al.* (2016)

Bumblebee Conservation Trust policy position (2014)



