



EFB/AFB Recognition Lothian Outbreak 2023

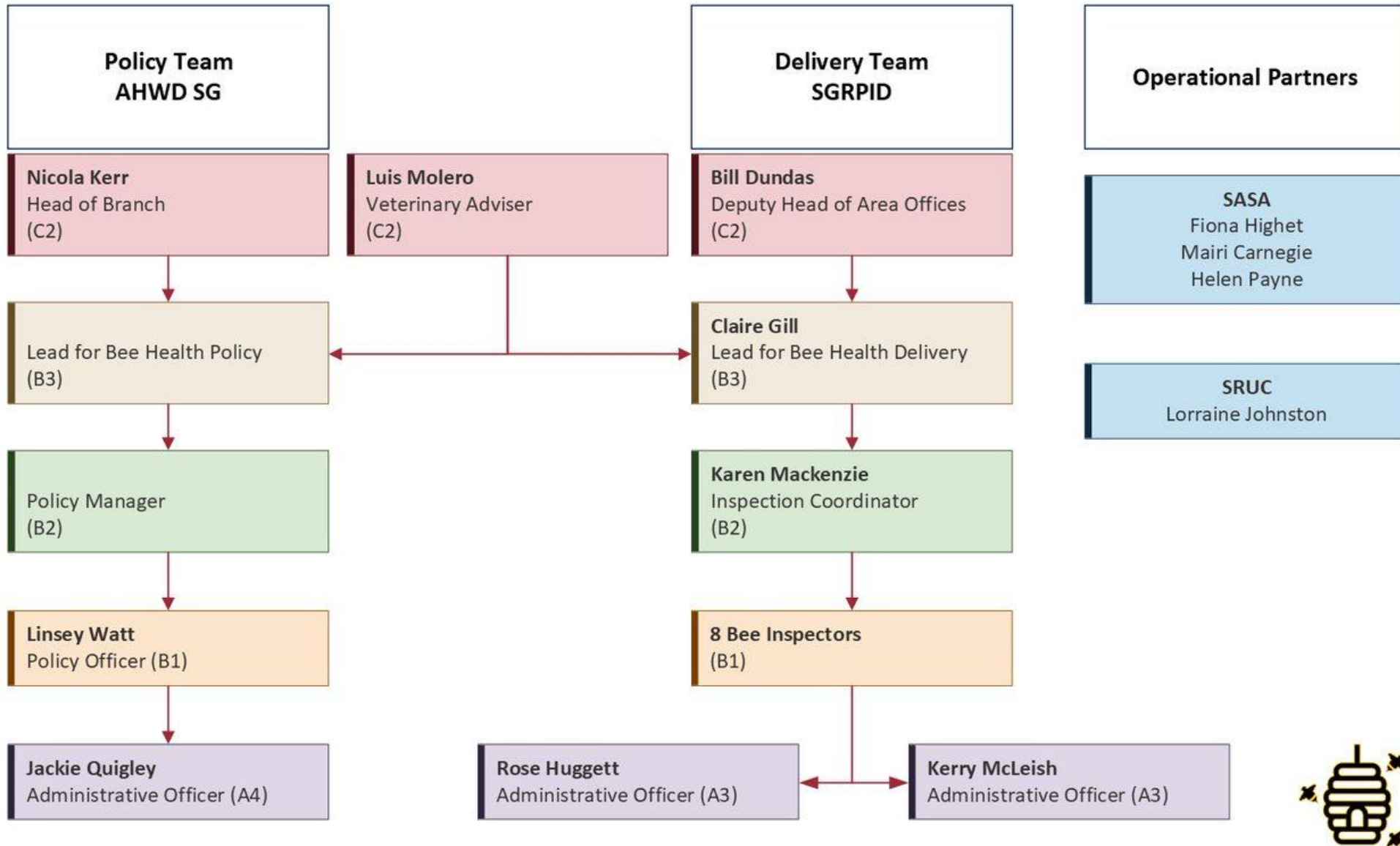
Claire Gill

Bee Health Delivery Lead



Scottish Government
Riaghaltas na h-Alba

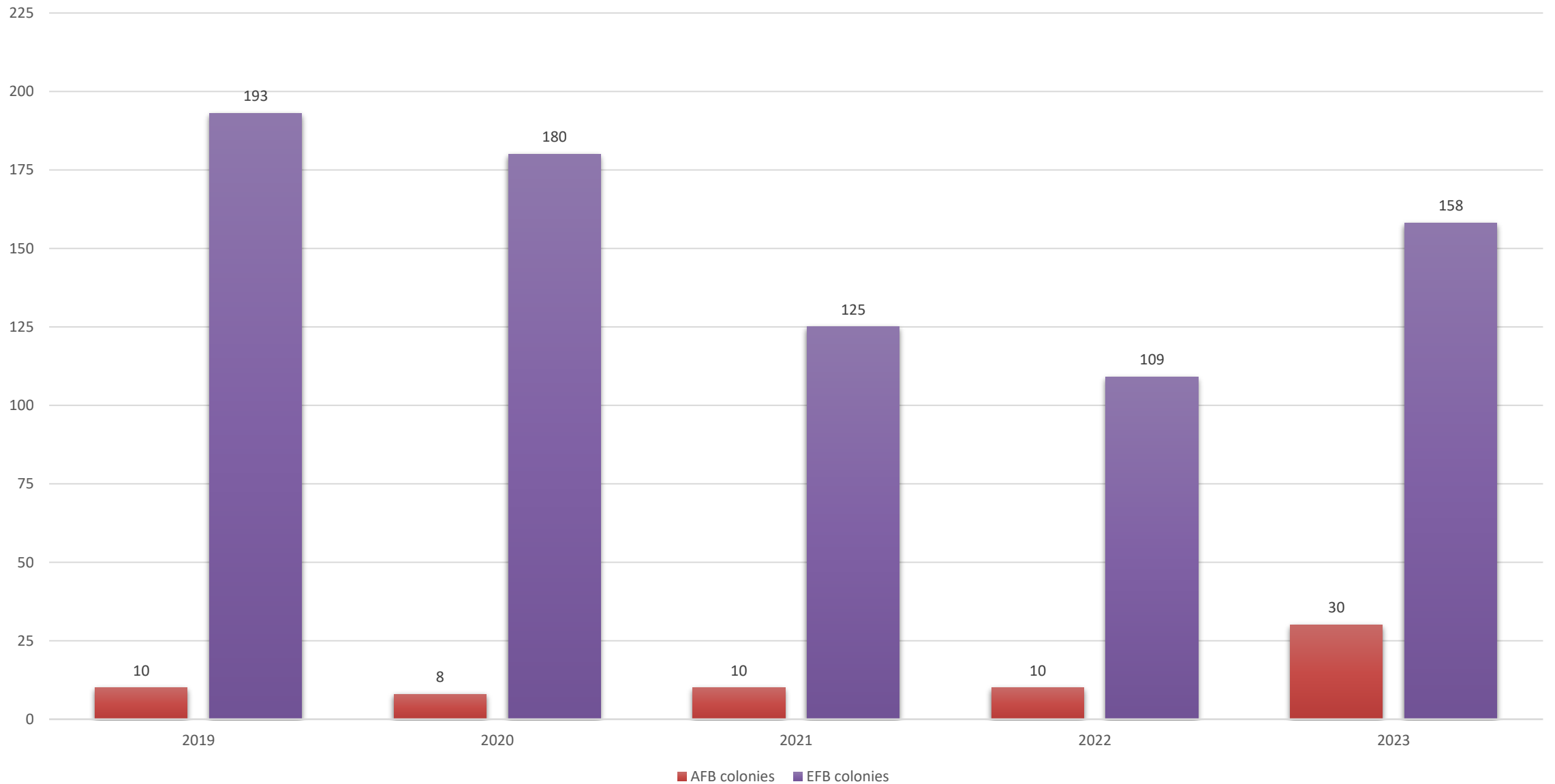
Scottish Government Honey Bee Health Team Structure



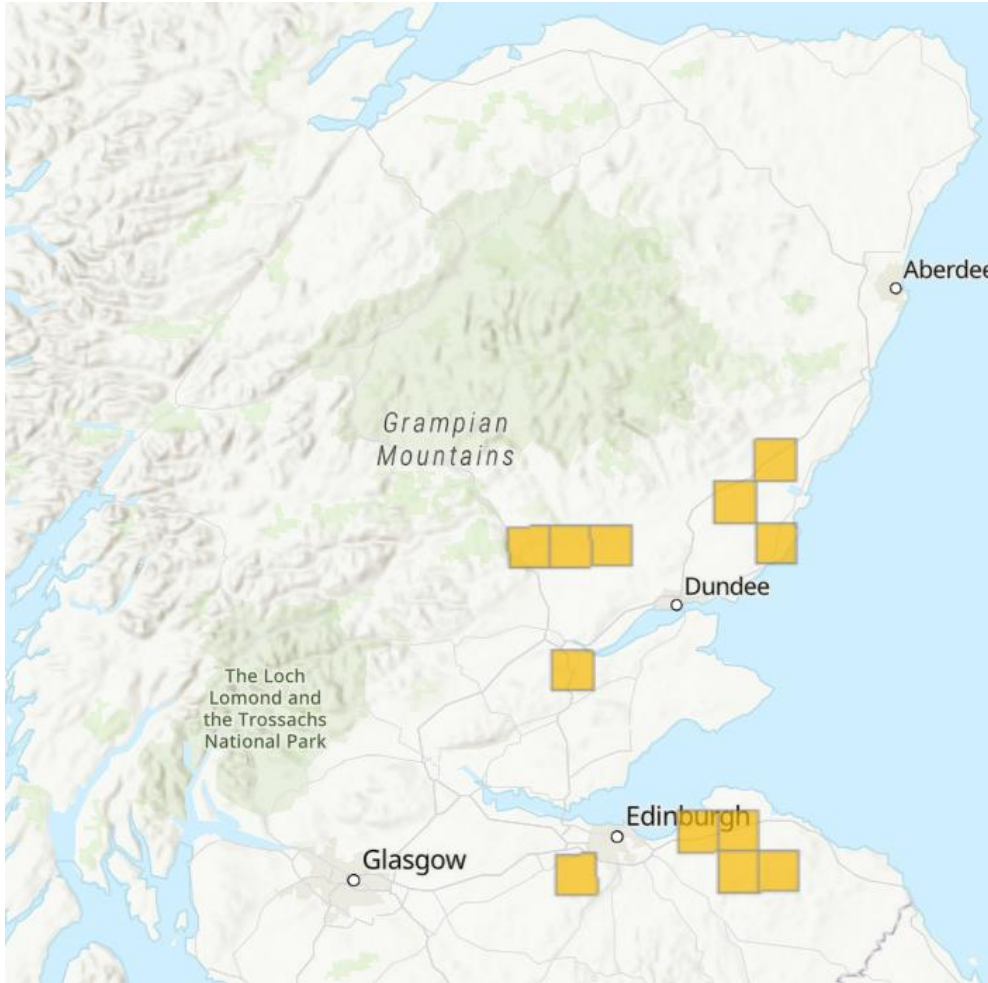
Bee Health Team 2023



Colonies Where AFB or EFB Have Been Found



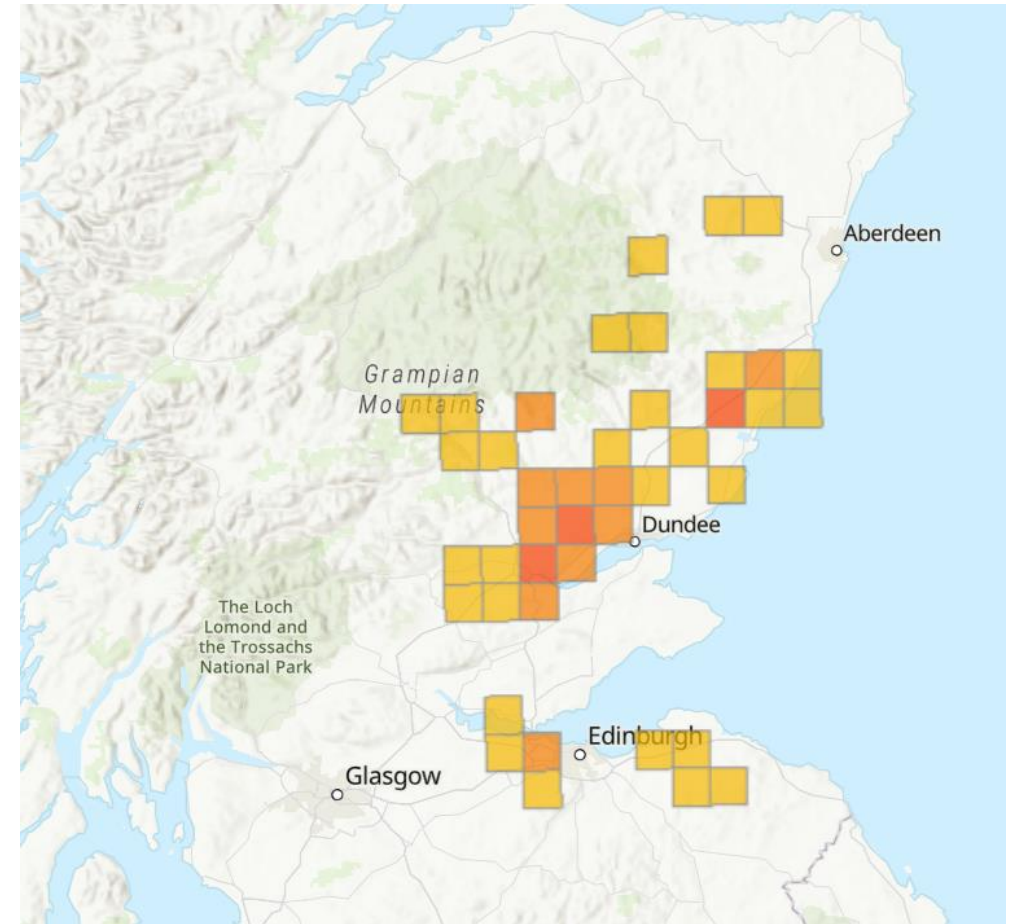
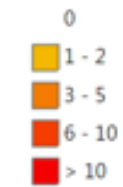
AFB 2023



Map layer legends

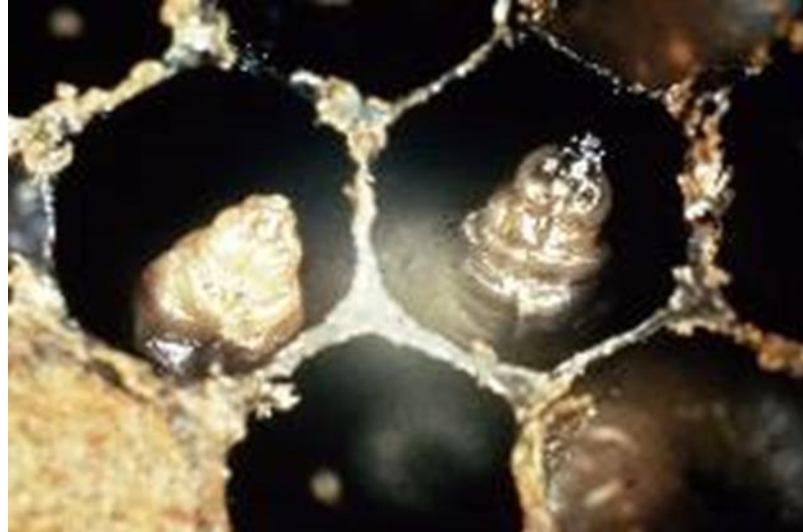
Inspections with EFB by 10km

Timeline



EFB 2023

Disease recognition



Healthy brood pattern



Not healthy brood



EFB symptoms



- Caused by *Melissococcus plutonius* bacteria
- Discoloured, yellow/creamy larvae
- Twisted in cell
- Melted, lost segmentation
- Uncapped larvae
- Foul smell in later stages

EFB characteristics



- Doesn't always kill colony
- Stress disease:
 - Lack of stores
 - Splits
 - Swarming
- Easily spread by bees:
 - Swarming
 - Robbing
 - Drifting
 - NOT by foraging in same area
- Easily spread by beekeepers:
 - Poor biosecurity
 - Moving frames
 - Extraction equipment



AFB symptoms



- Sunken, greasy cappings
- Roping
- Scale
- Perforations often at side of cell
- After cell is capped





AFB characteristics

- Always kills colonies eventually
- Not so easily spread by the bees
 - Robbing
 - Drifting
 - NOT swarming
- Most often spread by beekeeper:
 - Poor biosecurity
 - Reusing old equipment
 - Moving frames
- Only option is destruction



What to do if you suspect notifiable disease

Bees_mailbox@gov.scot
No weekend cover.

Triage questions:

Inspection arranged

Request to take samples for us

Monitor and keep in touch

Visit

Actions Following Visit



BeeBase registration

AND KEEP IT UP TO DATE PLEASE!

Compulsory registration of beekeepers?

WHY? (Free/safe)
Your bees.
Your neighbour bees
Scottish Bees

I DO NOT WANT TO REGISTER BECAUSE....
It is not safe, my hives will be stolen!
I do not want the bee inspectors to visit me:
I do not want them to know that I have disease!
They will kill my bees.
They will kill my queens.
They do not know what they are doing.
They will find disease and kill my bees.
They will report me to the tax man.
It is all part of the government wish to gather more data.
They work for Bill Gates and they want to put a microchip on me ???!?!?!?!?



Notifications following notifiable disease

- Importance of keeping apiary locations up to date.
- We have taken feedback on board:
 - What you are expected to do.
 - What you can expect us to do.
- Notifications through:
 - BeeBase.
 - Local Associations.
- Public pages of BeeBase has all latest cases of EFB and AFB found through the year.



Diseases and Pests

These pages give details of honey bee pests and diseases that all beekeepers must be aware of to maintain productive stocks of bees. They provide details of biology, impact and management options for a range of infestations and infections and, where available, information about current incidence.

Current Disease Incidence

The [Disease Incidence and Reports](#) pages gives live information about the location of confirmed cases of European foulbrood (EFB), American foulbrood (AFB) and Varroa in England, Wales and Scotland. It also provides information on imports of bees. Data from the inspections programme is updated daily during

Thank you for your time

