# Disease Assurance Scheme for Honeybees (DASH)

**Nigel Semmence** and **Dan Etheridge**, National Bee Unit (NBU), explore the working protocols of the scheme

n this article, we explore in detail the working protocols of the Disease Assurance Scheme for Honeybees (DASH).

DASH is a joint initiative between the National Bee Unit (NBU) and the Bee Farmers' Association (BFA). The NBU is part of the Animal and Plant Health Agency (APHA) and is responsible for the implementation of the Statutory Bee Health Programme in England and Wales. The aim of the scheme is to reduce the costs associated with disease within commercial beekeeping operations and improve the health of honey bees within the operation. DASH is recognised within the Department for Environment, Food and Rural Affairs (DEFRA) Farming Regulation Task Force Implementation – Earned Recognition Plan August 2013. The scheme is entirely voluntary and there are no other benefits other than that of less regulatory burden in the form of inspection visits.

## How Does DASH Work ?

The scheme is only open to active full members of the BFA who are registered on BeeBase. Bee farmers wishing to join the scheme will make an application via the BFA. Admission to the scheme is at the discretion of the NBU. The scheme is entirely voluntary and participants may leave at any time. There is no charge for participating in the scheme; equipment such as lateral flow devices (LFDs) for foulbrood and reply-paid labels will be provided.

There are three phases of the scheme:

• Phase One – establishes the overall health status of the operation. A condition of DASH is that, following attendance at a DASH training event and subsequent passing of the assessment, all bee colonies owned



by the keeper are inspected by the NBU's inspectorate to give an accurate and reliable assessment of the disease situation with the operation.

- Phase Two aims to improve the health status of the operation. Depending on the outcome of the baseline inspection, a management plan is agreed to reduce and maintain disease levels to a minimum.
- Phase Three monitoring of the operation. By means of audit/advisory visits to ensure that the previously agreed management actions are working and that protocols are being followed correctly, with additional help and advice given if necessary.

# The DASH Year

Over the years, the schedule for DASH has changed and going forward will follow a similar pattern to that below:

- Autumn BFA invites expression of interest and reviews DASH applicants.
- Winter NBU reviews applications.
- Spring NBU contacts candidates and invites them to training sessions.
- Spring NBU hosts online training for applicants with an online assessment.
- Spring/Summer NBU offers a mix of comb workshop events and/or apiary visits focusing on disease recognition and biosecurity.
- One year baseline inspection of all colonies offered.
- One year successful DASH members receive a certificate of competency. Applicants may receive improvement orders where necessary and are asked to rectify any non-compliances within an agreed period.
- Three years NBU performs risk-based audits every three years.
- Annually in-field disease recognition sessions to be offered for bee farmer continued professional development.

# DASH Principles

The principles of DASH, for its members, are outlined below:

- 1. Assurance is in two stages initial training and assessment of your capability to recognise and manage disease, and a baseline inspection of all your colonies.
- 2. Once you are assured, the principle is that you inspect your own colonies for foulbrood and should you find it, you are empowered under the scheme to report it and deal with it yourself.
- 3. DASH membership shows a level of disease awareness and regulatory



compliance which often means less inspection visits are necessary.

- 4. There is a low level of bee disease throughout the UK. Therefore, DASH members cannot assure bees and or produce are 'free of disease'. Promotion of products by DASH members claiming 'free of disease' or 'DASH assured' is misleading and is considered a non-conformance on the scheme. Accredited DASH bee farmers may say the following on websites and other communications material: A member of the National Bee Unit's Disease Assurance Scheme for Honeybees (DASH) – Assured to recognise, manage and responsibly report honey bee disease.
- 5. DASH members may not advertise products with 'DASH' but may say: Visibly free of disease on DD/MM/YY, checked by [name DASH member].
- 6. If you do find foulbrood, it is mandatory that you report it to the NBU. We will then input the finding into BeeBase so that we can inspect surrounding apiaries not belonging to you.
- 7. You must maintain appropriate records. We recommend that these are at least sufficient to enable you to trace colony movements should you discover disease, together with veterinary medicine records.
- 8. Once you are assured, inspectors will no longer routinely be calling on you to inspect your bees. They will still be available should you need advice or assistance. Apiaries identified to be at risk may still require an NBU inspection.
- If you are part of the Voluntary or Enhanced Sentinel Apiary Programmes (VSA and ESA), we encourage you to continue your participation. Apiaries in

exotic risk areas are subject to checks for exotic pests. You can find our more information about the VSA and ESA programmes on BeeBase: https:// www.nationalbeeunit.com/index. cfm?pageId=379

## Training

The purpose of the initial training and assessment is to ensure that the beekeeper can look for and recognise foulbrood; and that they know and can use appropriate husbandry measures to avoid and, where necessary, manage foulbrood disease.

This year's training was held at the NBU's headquarters at Sand Hutton, York, on 21 and 22 June. The event consisted of a series of lectures and indoor/ outdoor practical training.

The assessment takes the form of a classroom session in two parts: a disease recognition session in which participants are required to identify diseases and brood conditions in actual combs and in photographs, and a multiple-choice assessment on disease management. Those passing both parts of the assessment can progress to the second stage of assurance, the baseline inspection.

# Baseline Inspection (NBU)

The initial baseline inspection would normally be carried out in an intensive block of time, to complete them quickly and efficiently, thereby reducing disruption to the bee farmer's actvities. We will carry out the inspections in the normal way and any foulbrood found will be dealt with according to the normal protocols, but jointly to provide guidance and assistance in the early stages.

After the baseline inspection, where relevant, we will make recommendations

for changes regarding disease prevention and control. Once you have passed the assessment and the baseline inspection is completed, you would normally become fully assured on DASH. If there are major concerns arising from the inspections, for example biosecurity arrangements, you would be notified of these and given the opportunity to take remedial action. We would visit again within three months, and assuming the required remedial action was satisfactory, the bee farmer would then become fully assured.

### Routine Inspections (DASH Member)

We recommend that all bee farmers colonies are fully inspected for foulbrood three times a year. Possibly less often if you are in a low-risk area and have never had foulbrood; at least this often if you are in a foulbrood area; and more if you have recently had foulbrood, particularly in the apiary in question.

When inspecting for disease, we would recommend shaking bees off brood frames to allow you to get a clear view of the brood. If you do not find foulbrood in an apiary, you need take no action, as there is no need to inform the NBU of your clear inspections.

If you do find signs of foulbrood in a colony, the procedure is as follows: confirm that it is foulbrood using the appropriate LFD. If you use an LFD whether it comes up positive or not - always write your name, your ID number, the apiary name, the date and hive number immediately on the back of the LFD and on the extraction bottle, containing the buffer solution. If the LFD comes up positive, showing two blue lines, fill in the inspection form with details of the infected colony or colonies. Note on the form whether you are destroying or shook swarming the colony and the total number of colonies in the apiary. It is not necessary to fill in details of uninfected colonies. Post the completed bee farmer self-inspection (BFSI) form with the positive LFD and extraction bottle containing the buffer solution as soon as practicable (preferably the same day, but certainly by the next day) using the padded envelope and reply-paid label provided. If you believe from clinical signs that a colony may have foulbrood, but the LFD does not show positive, you should take samples of apparently infected cell contents in an Eppendorf tube (supplied) and send to the NBU, with the negative LFD and the BFSI form, in a padded envelope using a reply-paid

label. It is important that you do send in the negative LFD and extraction bottle containing the buffer solution so that we can, for example, detect possible strains of foulbrood that are not being picked up by the LFDs, and to monitor that LFDs are working as they should. If there is any question regarding the identification of disease, we strongly encourage you to contact an inspector to aid diagnosis.

The NBU laboratory will inform you promptly by email whether or not the tube samples test positive for foulbrood. If one or more colonies test positive for foulbrood in an apiary, or you suspect they may have foulbrood, it is essential that you place the apiary under voluntary standstill immediately, and do not move any colonies or equipment out of the apiary. This is a legal requirement. We will issue an official standstill notice to you (ideally by email, otherwise by post) when your form is processed and/or if your tube sample(s) test positive. The apiary will remain under standstill until you have carried out a follow up inspection that shows no signs of foulbrood in any colonies in the apiary and notified the clear follow up inspection to the office who will issue a withdrawal of standstill notice.

## Audits

Audits will be carried out to check that the terms of the scheme are being complied with. The intent throughout an audit is to support the beekeeper to achieve good standards of disease prevention and control. The first formal Audit visit will take place three years after the date of assurance and provided the audit is satisfactory the assurance will be automatically renewed. If not, any problems can be rectified within three months and if after a subsequent inspection the required remedial action is carried out satisfactorily, the assurance would be renewed.

If issues of non-compliance are identified, the inspectorate will issue a formal 'improvement notice.' If the concerns therein are not addressed within the timescale on the notice, the beekeeper will at that point be excluded from the scheme.  $\Box$ 

### Are You Interested?

If you would like to express an interest in joining the next cohort of DASH, please contact BFA Membership Services no later than 31 August 2022 by email: admin@beefarmers.co.uk

