

8

Bee Diseases

8.1 Contact

The SBA's Bee Diseases Convener, whose name is published every month in "*The Scottish Beekeeper*" inside the front cover, and whose name is also given in section 11.3 of this Manual.

8.2 SBA Policy on managing bee diseases

The Convener's duties are to advise the SBA Executive on all aspects of the biology, detection and control of bee diseases; to inform and advise Members, by means of articles, courses and personal contacts; and to represent the Executive at official meetings on this subject.

8.3 General Information on diseases

Bee Diseases fall into two categories: Notifiable and Non-Notifiable.

8.3.1 Notifiable Diseases

Notifiable Diseases are defined in law, and currently they are

- American Foul Brood (AFB)
- European Foul Brood (EFB)
- Small Hive Beetle infestation
- Tropilaelaps Mite infestation

The beekeeper is under a legal obligation to notify the competent authority of the suspected occurrence of these four diseases. On discovery, or suspicion of the occurrence of any of the above diseases, the beekeeper is required to report the fact to the nearest office of the Scottish Executive Environment and Rural Affairs Department (SEERAD).

The address of your nearest one can be found in your local telephone directory under SCOT-TISH GOVERNMENT or from the list at the back of this section. The beekeeper, or Local Secretary should also inform the SBA Bee Diseases Convener immediately a notifiable bee disease is confirmed and all possible help and advice will be given. The Bee Diseases Convener will then inform the Area Representative of that area so that all beekeepers in the area are made aware of the infection as soon as possible.

American Foul Brood (AFB)

Colonies diagnosed as being infected with AFB will be destroyed by fire under the supervision of a SEERAD Bees Officer. If the Bees Officer is confident of the diagnosis and the owner agrees, the bees may be destroyed immediately. Alternatively the Bees Officer may seek confirmation by means of a laboratory test on sample combs or the owner may insist that such a confirmatory test is carried out.

European Foul Brood (EFB)

Diagnosis of EFB is not so readily carried out at the apiary and will normally require confirmation by laboratory test. If heavily infected, the colonies will be destroyed, but if lightly infected, they may, at the discretion of the Bees Officer, be treated, by him or her, with an appropriate antibiotic. Under no circumstances should a beekeeper attempt treatment.

Tropilaelaps Mite

This mite has as yet not been found in the UK, but beekeepers are advised to be vigilant. The mite has a similar life cycle to *Varroa*, but it is smaller and moves on combs more quickly. It has been suggested that it may not survive in areas where there are longer broodless periods during the winter.

Small Hive Beetle

The Small Hive Beetle has not yet been found in the UK but beekeepers are advised to be vigilant. It is a serious threat.

There is no treatment authorised for this disease in the UK as yet. It is likely that treatment with pesticides in the hive and to the surrounding soil may be required, but good husbandry and good hygiene will help to combat the beetle.

Leaflets on notifiable diseases

Attention is drawn to the excellent DEFRA publications describing these diseases which could be invaluable in aiding the beekeeper to identify them.

Consequences of finding a notifiable disease

Colonies affected by any of the four notifiable diseases and nearby colonies which are considered to be contacts may be subject to Standstill Orders.

Compensation for Loss of Bees

Beekeepers who lose colonies, located in Scotland, due to compulsory destruction following diagnosis of AFB or EFB, will be issued with a Certificate of Destruction and, if they are members of the SBA, may be eligible for compensation under the terms of the SBA's Compensation Scheme — see under Compensation Scheme. No compensation is payable for losses due to infestation by *Varroa*.

8.4 Non-Notifiable Diseases

Non-Notifiable Diseases, i.e., those not on the “notifiable” list, do not require to be reported to SEERAD. Examples are varroasis, chalk brood, acarine, nosema, etc. Varroasis is now a perennial problem for beekeepers whose stocks are kept in infested areas. The other diseases crop up from time to time.

All these diseases can usually be treated if necessary at local level by the beekeeper or with the help of someone in the Local Association. Again if help is required please contact the Bee Diseases Convener.

The whole of Scotland has now been designated a “Statutory Infested Area” (SIA) with regard to *Varroa*, and varroasis has now been removed from the list of notifiable diseases. Beekeepers should nevertheless be responsible about not moving *Varroa*-infested hives to parts of the country where *Varroa* has not previously been found, for example, some of the islands. Please contact local beekeepers to try to obtain local bees rather than risk taking in *Varroa*-infested colonies.

It will be regarded as highly irresponsible to move bees from an area where *Varroa* is known to be present into one where it has not been found.

8.5 Scottish Agricultural Science Agency

Whether a suspected disease is notifiable or not, material for examination for disease can be submitted, by a beekeeper, direct to

Mrs Fiona Hight,
The Scottish Agricultural Science Agency (SASA),
1 Roddinglaw Road,
Edinburgh
EH12 9JF.

Their email address is info@sasa.gsi.gov.uk and their telephone number 0131-244-8890.

These samples should be clearly marked, “Bee Diseases — material for examination” and addressed for the attention of Mrs Fiona Hight. If these samples are of bees, they should comprise about a cupful. Samples should be packed in paper or cardboard and not plastic, since plastic causes samples to deteriorate rapidly.

Remember that this is the place to send all floor scrapings for identification of possible *Varroa* infestation.

In all cases the hive or at least the apiary must be clearly identified on the label of the sample.

If a disease is confirmed by SASA as a notifiable one, then SASA itself will proceed to inform SEERAD, thus removing the need for the beekeeper to report it. Of course the beekeeper must allow the Bees Officer thereafter to take the legally required action of destruction or treatment, and should also inform the SBA’s Bee Diseases Convener.

8.6 Treatment of Bee Diseases

The Veterinary Medicines Regulations require that only licensed products are offered for sale and use in the treatment of diseases of animals, including bees. Treatments licensed at present for use in Britain for the treatment of bees are Bayvarol, Apistan and Apiguard for the detection and treatment of *Varroa* and Fumidil B for the control of nosema.

Records of the purchase, use and disposal of all these licensed medicines must be maintained and kept for five years from the date of purchase. A useful article by Professor Alan Teale detailing exactly what is required was published in “*The Scottish Beekeeper*” (2006), Vol. 83 (no. 6 June), pp 150–151.

Bayvarol and Apistan should only be used when necessary as determined by systematic monitoring. Their use is indicated in severe infestations, and generally their use should be reserved for cases where other control measures may not succeed. Beekeepers using Bayvarol and Apistan must adhere strictly to the instructions for use. The strips must be left in the hives for a period of 6 to 8 weeks to give effective treatment and to prevent the development of resistant mites. Treatment with these medications is best not carried out during the honey season, though it can be applied then in emergency, though not in honey supers. *Varroa* mites resistant to Apistan and Bayvarol are becoming more widespread in England and beekeepers should actively look for resistant mites. See the Central Science Laboratory/National Bee Unit website for instructions at www.csl.gov.uk where there is a link to the NBU. Beekeepers are advised to vary the treatments for *Varroa*, i.e., to practise Integrated Pest Management (IPM), to lessen the chance of resistance developing. Advice on IPM is available from the Bee Diseases Convener or from Graeme Sharpe, Apiculture Specialist, Scottish Agricultural College, Auchincruive, Ayrshire KA6 5HW, Tel 01292-525375, email g.sharpe@au.sac.ac.uk .

All beekeepers in Scotland, and especially Local Association Secretaries, should monitor what appears in "*The Scottish Beekeeper*", where new developments will be reported by the Bee Diseases Convener as they occur. Remember that your Local Association copy of the magazine is sent to you with a purpose. Please make good use of it for the benefit of your members.

8.7 SEERAD Area Office Addresses

- **Argyll and Western Isles**

Cameron House
Albany Street
Oban
PA34 4AE
Tel. 01631 563071
Fax: 01631 566756
Email: SEERAD.Oban@scotland.gsi.gov.uk

Balivanich
Isle of Benbecula
HS7 5LA
Tel. 01870 602346
Fax: 01870 602077
Email: SEERAD.Benbecula@scotland.gsi.gov.uk

10 Keith Street
Stornoway
HS1 2QG
Tel. 01851 702392
Fax: 01851 705793
Email: SEERAD.Stornoway@scotland.gsi.gov.uk

- **Grampian**

Thainstone Court
By Inverurie
Aberdeenshire

AB51 5YA
 Tel. 01467-626222
 Fax: 01467-626217
 Email: SEERAD.Thainstone@scotland.gsi.gov.uk

32 Reidhaven Street
 Elgin
 IV30 1QN
 Tel. 01343-569500
 Fax: 01343-569501
 Email: SEERAD.Elgin@scotland.gsi.gov.uk

- **Highland**

Government Building
 28 Longman Road
 Longman East
 Inverness
 IV1 1SF
 Tel. 01463-234141
 Fax: 01463-714697
 Email: SEERAD.Inverness@scotland.gsi.gov.uk

Estates Office
 Portree
 Isle of Skye
 IV51 9DH
 Tel. 01478-612516
 Fax: 01478-613128
 E-mail: SEERAD.Portree@scotland.gsi.gov.uk

- **Northern**

Strathbeg House
 Clarence Street
 Thurso
 KW14 7JS
 Tel. 01847-893104
 Fax: 01847-895983
 Email: SEERAD.Thurso@scotland.gsi.gov.uk

Ord Croft
 Lairg
 Sutherland
 IV27 4AZ
 Tel. 01549-402167
 Fax: 01549-402117
 Email: SEERAD.Lairg@scotland.gsi.gov.uk

- **Northern Isles**

Government Building
Tankerness Lane
Kirkwall
Orkney
KW15 1AQ
Tel. 01856-875444
Fax: 01856-873309
Email: SEERAD.Kirkwall@scotland.gsi.gov.uk

Charlotte House
Commercial Road
Lerwick
ZE1 0HF
Tel. 01595-695054
Fax: 01595-694254
Email: SEERAD.Lerwick@scotland.gsi.gov.uk

- **North Eastern Perth and Kinross**

Broxden Business Park
Lamberkine Drive
Perth
PH1 1RX
Tel. 01738-602000
Fax: 01738-602001
Email: SEERAD.Perth@scotland.gsi.gov.uk

- **Southern**

Government Buildings
161 Brooms Road
Dumfries
DG1 3ES
Tel. 01387-274400
Fax: 01387-274440
Email: SEERAD.Dumfries@scotland.gsi.gov.uk

- **South Eastern**

Cotgreen Road
Tweedbank
Galashiels
TD1 3SG
Tel. 01896-892400
Fax: 01896-892424
Email: SEERAD.Galashiels@scotland.gsi.gov.uk

- **South Western**

Russell House
King Street
Ayr
KA8 0BE
Tel. 01292-610188
Fax: 01292-611483
Email: SEERAD.Ayr@scotland.gsi.gov.uk

Cadzow Court
3 Wellhall Road
Hamilton
ML3 9BG
Tel. 01698-281166
Fax: 01698-285277
Email: SEERAD.Hamilton@scotland.gsi.gov.uk

(Source: <http://www.scotland.gov.uk/Topics/Agriculture/A0contacts/contacts>)