

**SBA Technical Data Sheet Number 17 - Health and Safety
Information and risk Assessment for Apiary Visits and Events.**

This information sheet is based on a document developed and used by Moray Beekeepers Association. It is provided for download in .doc and .pdf formats. Please use the .rtf format if you need to alter the document for use by your own association, but if you do so, please continue to acknowledge Moray Beekeepers as the original source.

The Scottish Beekeepers Association is grateful to Moray Beekeepers, and the document's author Allison Laws, for permission to reproduce this document for download on the SBA web site.

Moray Beekeepers' Association
Apiary Visitor Events Procedures,
Risk Assessments and
Visitor Information Sheet

Table of Contents

| | |
|--|--|
| Health and Safety around Honeybees..... | |
| Risks from Bees..... | |
| Hazards of being stung..... | |
| <i>Normal Reaction.....</i> | |
| <i>Mild Allergic Reaction.....</i> | |
| <i>Severe Allergic Reaction.....</i> | |
| The Risks..... | |
| <i>To You The Beekeeper.....</i> | |
| <i>To Other People.....</i> | |
| <i>To Property.....</i> | |
| Risk Management..... | |
| Planning Preparation..... | |
| Before the Meeting..... | |
| At the Meeting..... | |
| Onsite Spectator Briefing..... | |
| Emergency Procedures..... | |
| Medical Emergency..... | |
| <i>Bee stings.....</i> | |
| <i>Unconscious/immobile.....</i> | |
| <i>First aid cases.....</i> | |
| Security Emergency..... | |
| Moray Beekeepers' Association Apiary Visitor Information Sheet..... | |
| Introduction..... | |
| What happens if I am stung?..... | |
| What do I need to wear when visiting the apiary?..... | |
| Other..... | |
| Moray Beekeepers' Association Check List..... | |
| Pre-Meeting Check..... | |
| Provided by..... | |
| Checks on the day..... | |
| Moray Beekeepers Association Apiary Risk Assessments..... | |

Risk Assessment Review Record.....

Health and Safety around Honeybees

Health and Safety in Beekeeping should be approached, like any other activity, by using your common sense to think about what's involved in the job before starting. In Health & Safety terms this is known as carrying out a Risk Assessment, the purpose of which is to identify any hazards and the likelihood of something or someone being injured by those hazards. Once these have been identified a plan of action can be devised for minimising the risk of accident or injury, and what action should be taken in the event of such an occurrence.

The most common hazards connected with beekeeping are from procedures and products used in normal hive manipulations such as slips trips and falls, stings, back strains, fire, burning, poisoning and asphyxiation. It all sounds very dangerous when put like this but in reality accidents don't happen very often, all you have to do is apply just a little common sense!

Where Risks Occur

- Apiary Location – proximity to other people, animals and property
- Access in and out of the apiary
- Opening & Examination of Stocks
- Transporting Hives
- Use of Potentially Harmful Substances
- Visitors to the Apiary
- Health Concerns
- Sting Reactions
- Honey Extraction and Preparation
- Collection of Swarms & Observation Hives

Risks from Bees

Honeybees like bumblebees, wasps and hornets have a stinger at the posterior end of their abdomen. The sting is connected to a venom sac and is a modified egg-laying tube, so if you are stung, it was a female insect that did it.

Most stinging insects can sting more than once, the exception is the honeybee (the female worker bee) which has a barbed sting. When the worker bee escapes after stinging a person, the sting and attached venom sac are ripped out of the bee and stay in the victim's skin; the bee will die shortly afterwards.

Hazards of being stung

Generally, most stings only result in a temporary injury - pain, swelling, redness and itching around the sting site. However, sometimes the effects can be much more severe – and can even be life-threatening, depending on where you are stung and whether the injured person has allergies. Summon medical help if the sting is near the eyes, nose or throat.

Normal Reaction - Most people experience local effects like pain, swelling, itching, and redness around the sting site. Painful stings in the mouth and throat can result if you accidentally swallowed a wasp or bee (e.g., drinking a soft drink from a can that a wasp had entered).

Mild Allergic Reaction - Some people will experience swelling in a larger area, not just immediately around the sting site. They may develop hives but no systemic effects (effects in the body away from sting site like effects on breathing and blood flow). This mild allergic reaction can last a few days. The area will be sore and uncomfortable but one should not give in to

the temptation to scratch the stung area. Scratching may cause a break in the skin which could lead to an infection.

Severe Allergic Reaction - In rare cases, a **severe allergic reaction** can occur. This situation is serious and can cause "**anaphylaxis**" or anaphylactic shock. Symptoms of anaphylaxis may appear immediately or within the first 30 minutes. The symptoms include:

- Hives, itching and swelling in areas other than the sting site,
- Swollen eyes and eyelids,
- Wheezing,
- Tightness in the chest and difficulty breathing,
- Hoarse voice or swelling of the tongue,
- Dizziness or sharp drop in blood pressure,
- Shock,
- Unconsciousness or cardiac arrest.

The "**anaphylactic reaction**" can occur the first time someone is stung or with subsequent stings. Death can occur within 30 - 45 minutes of being stung. If you see any signs of this reaction, or even if you are not sure, get medical help immediately.

People, who have had severe allergic reactions to insect stings in the past, will probably have a similar or worse reaction if stung again. Bee sting kits may be available to allergic people through their Doctor.

The Risks

To You The Beekeeper - There is always a risk of being stung when working around honeybees, for beekeepers it is an occupational hazard. In general honeybees, bumblebees, wasps and hornets will not attack and sting unless provoked or physically attacked (or think they are being attacked).

Normal hive manipulations creates a great disturbance in the colony making the bees tetchy and prone to sting anyone in close proximity. Honeybee colonies differ in temperament - some are well behaved and will tolerate fair amounts of disturbance, while others are ready to meet the beekeeper at the apiary gate, will harass them all the time they are there, and then escort them out to the car!

To Other People – As well as the risks to the beekeeper in the apiary, there are risks to other people and property in the vicinity of the apiary. Flight paths are often quite direct and may take bees straight into areas where people are going about their normal business. Stinging occurs when individuals try to wave away bees in a manner that looks threatening.

There is always a risk to humans when apiaries are sited near to public areas such as pathways where adults, children and animals pass. The latter two are often inquisitive and may get closer than is safe.

To Property - Honeybees must void their bowels the same as any other living creature. They do this mostly in the relative vicinity of the apiary (up to 50 meters or more) and can cause soiling of laundry, windows and vehicles.

Risk Management

The risks involved in beekeeping can be minimised to an acceptable level by following a few simple rules.

- Bee Prepared!
- Site apiaries well away from areas where people and animals will be in close proximity.
- Keep the apiary tidy and free from debris, and maintain clear access ways.
- Lift only what you are comfortable lifting, get assistance if necessary.
- Always wear the correct PPE (Personal Protective Equipment) such as hat, veil, suit, gloves and footwear when working in the apiary. Make sure you maintain them in good condition and ensure you are completely bee-proof before entering the apiary.
- Ensure there are barriers to lift bee flight paths above areas where people and animals will be.
- Avoid working on hives when bees are not likely to be in good humour e.g. too cold, colony structure upset, wrong time of day, recent disturbance.
- Avoid working on hives when there is a risk of members of the public being in the vicinity
- Exercise care when using a lighted smoker particularly during long dry spells.
- Always follow manufacturer's instructions and approved codes of practice when using chemicals and products for disease control and hygiene, and only use approved products.
- Know what you need to do in the event of an accident, and Bee Prepared!

Planning Preparation

Before the Meeting

1. Plan and organise the Meeting carefully.
2. Determine who will be running the Meeting- One person only
3. Identify roles and responsibilities including first aiders
4. List all essential equipment and who will provide it.
5. Identify what protective clothing is needed and arrange for it to be available.
6. Make sure that the Landowner knows of your plans.
7. Make sure that any neighbours who could be affected are aware of the meeting.
8. Check environmental conditions
9. Have a mobile phone to hand and know the exact location (map grid reference) of the apiary as well as access directions and the nearest public phone.
10. Identify vulnerable persons
 - Age - accompanied by responsible adult?
 - Disability - additional measures in place?
 - Bee Venom Allergy - RA carried out?
 - Medical Conditions identified and measures in place
12. Carry out a written risk assessment of the event, identifying hazards and the steps taken to minimise them and their outcomes.

At the Meeting

1. Introduce supervisory team



2. Identify anyone attending who has any relevant medical issues. The Beekeeper in Charge should carry out a risk assessment to determine if it is possible to implement risk reduction measures if not, that person cannot participate in the meeting



3. Carry out a briefing

- Dress
- Behaviour - humans
- Behaviour - bees, flight path, perfumes, waving arms, noise etc
- Dos and don'ts

  Make sure that all those attending are appropriately dressed.

  Ensure disabled persons have any necessary facilities in place

  Review conditions and cancel the meeting if you have any concerns .

  Split group into workable units so that the apiary is not over congested.

  Do not administer any medical treatment unless you are qualified to do so.

  Put all brace comb etc in a container and remove from the site.

Onsite Spectator Briefing

Before the spectators begin to approach the hive site it will be necessary to give a short briefing talk to explain what will be happening during the session. This should include the following elements.


1. Introduce supervisory team so that visitors know who to turn to for guidance
2. Should the weather be unsuitable for opening the hives then the Beekeeper in Charge should cancel the Apiary Meeting.
3. Advise visitors on bee behaviour
 - Bees are often upset by strong odours such as perfume, hair spray, aftershave etc. Spectators may have to withdraw.


 - Explain what will happen when opening hives and behaviour that is to be avoided such as standing in the bees' flight path, waving arms, noise etc
4. It is important that spectators must be aware that they must follow the instructions of the Beekeeper in Charge throughout the whole of the Apiary Meeting.
5. Inform supervisor if any problems, bee stings, unwell, any concerns etc
6. Identify suitable clothing is worn and the protective clothing that needs to be supplied to those attending.
7. Once the protective clothing has been put on it will be necessary for the Beekeeper in Charge to see that all spectators are checked for being "bee tight".
8. Go through scope of work, arrangements and questions
9. Explain that at the end of the Meeting that all protective clothing should continue to be worn until well clear of the apiary site, and the Beekeeper in Charge gives the instruction to remove it.


Emergency Procedures

Medical Emergency

Bee stings, if possible walk casualty away from bees and remove any stings, if signs of allergic reaction call emergency services giving the following information

 Location and access directions (map grid reference)


 Any accessibility issues

 Name of injured person

 Any allergies if known

 Any existing medical conditions if known

 Nature of injury

 Status of injured person

Unconscious/immobile, unless the person is in danger leave undisturbed and call the emergency services with the above information

First aid cases, qualified first aider to treat casualty as necessary and advise individual to seek further medical help as soon as possible. First aider to document treatment, and report to committee.

Security Emergency

Any anti-social or unsafe behavior at Moray Beekeeping Society events is not tolerated and or the safety for other spectators and other members of Moray Beekeeping Society any offending persons must be asked politely to leave the event by the person in charge. If they are unwilling to leave then they person in charge must call the police and ask for their assistance. **If you feel that asking the person to leave may jeopardise your safety then do not approach the individual call the police directly.**

Moray Beekeepers' Association Apiary Visitor Information Sheet

Introduction

Before visiting the apiary we would like to give you some information that will make your visit more enjoyable and most importantly keep you as safe as possible.

Bees are social animals and their whole lives are concerned with making the colony in which they live as successful as possible. They **do not** wish to sting you in fact when they do it kills the bee, so they have to have a really good reason to do so. The problem is that protecting the hive is one of those reasons and having a great big bear/human opening their hive can make them very upset if it is not done properly. This is why it is important to make sure that we do everything we can to not upset the bees and protect the people visiting our apiary.

What happens if I am stung?

When a bee stings you it injects an amount of venom into your body via its sting. Unlike many other stinging insects, however, honeybees leave their sting behind and this continues to pump venom into you until the venom sac is empty. Therefore if you are stung it is important to remove the stinger as soon as possible and you can do this by simply scraping the sting off your skin with a hard edge, e.g. the edge of a credit card. For the **majority** of people the effects of being stung are no more than a small amount of swelling, irritation and pain. There are some exceptions to this if you are stung in the mouth or throat, or have an allergy. People, who have had severe allergic reactions to insect stings in the past, will probably have a similar or worse reaction if stung again.

It is therefore vital that you inform us before visiting if you have an allergy to bee or other insect stings. Some susceptible individuals can go into anaphylactic shock when stung by bees and this can have serious and potentially fatal consequences.

What do I need to wear when visiting the apiary?

You do not need to buy any specific clothing when visiting the apiary as we have a supply of protective equipment (suits, hoods and gloves, **no shoes**) we can loan you during your visit. If you have your own bee suit/gloves however please bring these with you.

You are outdoors and exposed to the weather so you should ideally wear Wellington boots, other types of boot or stout walking shoes (**no heels or open tops**) and clothing appropriate to the weather expected. If you have a zip up anorak please wear it.

Bees are very sensitive to smell so it is advisable not to wear strong perfumes, aftershave, deodorants etc

Other

Please make us aware of any pre-existing medical conditions that may affect your safety while visiting the apiary.

You will be escorted at all times by an experienced beekeeper and briefed at the beginning of your visit. In order to ensure the health and safety of yourself and others it is essential to follow the advice you are given. Bees are very sensitive to changes in their environment and inappropriate behavior around them may create risks to persons.

Many bees will be flying about but remember that you are wearing a protective suit. If you find that you are disturbed by the bees' behaviour then simply walk away from the hives and wait for one of the instructors to join you. Anyone behaving inappropriately will be asked to leave the apiary.

Moray Beekeepers' Association Check List

Pre-Meeting Check

Venue:

Six Figure Map Reference Date/Time.....

Duty Beekeeper:

Assistants:

First Aider:..... 1st Aid Kit on site Y / N

Mobile Phone Reception checked: Y / N Mobile Phone No:

Nearest public phone:

Directions for Access:

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| Additional Equipment Required | Provided by |
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Checks on the day

Weather OK Y / N Apiary checked for Safety: Y / N Bees Temperament:

Meeting to proceed: Y / N Signature: _____

Post Meeting Feedback/Incidents

Association Apiary Risk Assessment: Version 2011, review January 2012

| REF | HAZARD | LIKELIHOOD | CONSEQUENCE | MITIGATION | LIKELIHOOD |
|------|-----------------|------------|------------------------------------|---|------------|
| RA/1 | Stung By Bee | Med | Anaphylactic reaction, death | Health Screening questionnaire , exclude known individuals from area, PPE, Induction Briefing, Trained personnel escort and supervision at all times, emergency procedures in place | Low |
| | | | Allergic reaction, major injury | Health Screening questionnaire, PPE, Induction Briefing, Trained personnel escort and supervision at all times, emergency procedures, in place, first aider available at all times | Low |
| | | | Discomfort, minor injury | Health Screening questionnaire, PPE, Induction Briefing, Trained personnel escort and supervision at all times, emergency procedures in place, first aider available at all times | Low |
| RA/2 | Multiple stings | Med | Major Injury/Death | Health Screening questionnaire , exclude known individuals from area, PPE, Induction Briefing, Trained personnel escort and supervision at all times, emergency procedures in place | Low |
| RA/3 | Lone Working | High | Lack of assistance in an emergency | Advise others to location and expected time return, call to confirm leaving site, if possible keep mobile phone available on site | Low |

| REF | HAZARD | LIKELIHOOD | CONSEQUENCE | MITIGATION | LIKELIHOOD |
|------|--------------------------|------------|--------------------|---|------------|
| RA/5 | Hazardous Chemicals | Med | Minor/Major injury | COSHH assessments to be followed, BKA recommended procedures to be followed, appropriate PPE worn | Low |
| RA/6 | Slips and Trips | Med | Minor/Major injury | Keep walkways and access areas clear and well maintained at all times, visitors to remain on designated areas, appropriate footwear to be worn on site | Low |
| RA/7 | Manual Handling Injuries | Med | Minor/Major injury | No single lifts of hives to be carried out, no visitors to lift hives, Separate Risk Assessment to be carried out for all lifts not hives and greater than 25kg | Low |
| RA/7 | Use of Work Equipment | Med | Minor/Major injury | Only use equipment for its intended purpose and according to manufacturers recommendations, use correct PPE | Low |
| RA/8 | Violence | Low | Minor/Major injury | Follow emergency procedure, call emergency services | Low |
| RA/9 | Honey extraction | Low | Minor/Major injury | Only use equipment for its intended purpose and according to manufacturers recommendations | Low |

Risk Assessment Review Record

| VERSION | REVIEW DATE | REVIEW COMPLETED | WHO | CHANGED | | ADDITIONS | |
|---------|-------------|------------------|-------|---------|---------|-----------|---------|
| | | | | REF | DETAILS | REF | DETAILS |
| 2010 | Jan 2011 | April 2011 | AL/TH | None | | | |
| 2011 | Jan 2012 | | | | | | |
| 2012 | Jan 2013 | | | | | | |
| 2013 | Jan 2014 | | | | | | |
| 2014 | Jan 2015 | | | | | | |
| 2015 | Jan 2016 | | | | | | |
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