

Responding to Accidents involving Honey Bees

From: www.dadychery.org/2012/06/17/what-price-a-bee/

Responding to Accidents involving Honey Bees

Honey bees are an important part of the process of growing fruits, vegetables and cash crops in Alberta. In 2011 it is estimated that Alberta had approximately 760 beekeepers with nearly 270,000 colonies spread across the province. As part of the production cycle the hives get moved several times a season. Inevitably, this results in vehicle accidents involving trucks hauling the bees between locations.

Bee trucks carry two types of loads:

1. The truck will have hives full of bees that are being moved to fields, (this is the main concern)
2. The truck will have a number of hives with most of the bees removed and the hives are going back to have the honey removed. (note - there may still be a few bees trapped in the honey hives but there should not enough to cause a major problem)

By understanding the nature and characteristics of honey bees, first responders can effectively respond to the accident, minimizing any further damage to the hives or bees while maintaining the safety of the public and any victims.

****This protocol is not applicable to wild bee or wasp swarms****

1. Hazard

Honey bee behaviour is quite predictable even when they have been involved in an accident. Having an understanding of their general behaviour will minimize any adverse reactions by the bees to first responder activities.

a. *General Bee behaviour*

- i. The natural tendency for the bees is to return to the hive. The presence of the queen and the smell of the hive all work together to bring them back.
- ii. Even when hives are damaged or destroyed in an accident the bees will generally want to remain in the area due to the smell of the hive or to protect the queen.
- iii. Bees generally won't sting unless they become agitated or put into a defensive/protective state.
- iv. At night, bees are attracted to bright lights. (like the ones used to light up accident sites)

b. *Key Actions to minimize conflict with/avoid agitating Bee's*

- i. Move slowly in and around hives and clouds of bees.
- ii. Don't swat at or swipe away bees.
- iii. Any quick or jerky movements will generate an aggressive response.

c. *Bee Stings*

- i. The main hazard with bees is the risk of being stung and with some people there is a danger of potential allergic reactions when they have been stung. In an accident scenario, there could be thousands of bees released from the hives. In most cases they will try to remain near the accident site, thus increasing the risk of someone being stung multiple times.

2. Victim and Responder Protection

Set an initial safety distance for bystanders or unprotected responders of 100 metres from the accident site/hives. This can be moved closer if the bees are clustered closer to the actual accident/damaged hives or there is little damage to hives.

a. *Victims*

- i. Maximize coverage of exposed skin, to minimize any future/further chances of being stung.
- ii. Check for adverse reaction to stings/being stung (medic alert, signs of reaction, etc).
- iii. An Epi-pen may be required to deal with cases of anaphylactic shock (individual should self-inject or this should be done under medical supervision)
- iv. Antihistamine pills will help reduce minor allergic reactions to being stung. (individual should self-administer or this should be done under medical supervision)

b. *Responders*

- i. Make clothing/Personal Protective Equipment (PPE) bee tight by closing off all openings and covering exposed skin (face, neck, sleeves, pants, hands, etc)
- ii. Heavy clothing is not a necessity for protection, a standard pair of work coveralls provides sufficient protection.
- iii. Access to a bee veil will provide protection for the head and neck while allowing free and easy breathing. Each bee truck will have at least one veil on board.
Example below

- iv. To calm a cloud of bees, a light misting with clean water will calm them down, suppress movement and they will want to return to the hive.
- v. Intermittent misting will provide the same effect and reduce deaths among the bees minimizing economic damage to the operator.
- vi. If necessary, spraying soapy water or foam will kill the bees.

3. Contact Information

a. *Owner of truck/hives*

The driver should be able to provide contact information for the owner/company that manages the hives. They will want to come to the site and start recovery of hives and bees that can be saved.

b. Alberta Provincial Apiculturist and Assistant

- i. Dr. Medhat Nasr – tel: (780) 554-1566
- ii. Samantha Muirhead – tel: (780) 415-2309

c. Alberta Beekeepers contacts

- i. Address: 102 - 11434 - 168 Street Edmonton Alberta T5M 3T9
- ii. Phone: (780) 489.6949
- iii. Fax: (780)487-8640
- iv. E-mail: Gertie.Adair@albertabeekeepers.org