

SOUTH AFRICAN HONEY BEE MANAGEMENT

Introduction

AVCASA hosted a workshop on 7 February 2012 to discuss the environmentally sound management of bee colonies that are perceived to be problematic in urban, agricultural and industrial situations. The workshop was attended by members of AVCASA, the SA Pest Control Association, the South African Beekeepers Association, Mike Allsopp of the Agriculture Research Council and Dr Ruan Veldtman of SANBI. The purpose of the workshop was to discuss mitigation measures that could be deployed nationally to protect honey bee colonies from wanton extermination with pesticides.

The workshop identified a number of issues to be addressed:

1. Categories for “problem” colonies.
2. Management mechanisms for “problem” colonies.
3. Potential pesticides for the extermination of “problem” colonies.
4. Potential repellents for inaccessible “problem’ colonies.
5. Service providers who should be managing “problem colonies”.
6. Insurance options for management of “problem colonies”.
7. Infrastructure modification to avoid honey bee invasion.
8. Awareness and education re the role and function of honey bees.
9. Bee colony management in agriculture (in relation to the application of pesticides).

“Problem” honey bee colonies should be categorized as follows:

1. Category 0.
 - a. Presence: on residential, industrial, public or agricultural premises.
 - b. Threat to people or domestic animals: no immediate or future threat.
 - c. Accessibility: easily accessible.
 - d. Intervention required: no intervention is required.
 - e. Extermination required: not required.
2. Category 1.
 - a. Presence: on residential, industrial, public or agricultural premises.
 - b. Threat to people or domestic animals: poses a potential threat in the near future.
 - c. Accessibility: easily accessible for removal.
 - d. Intervention required: required to be removed and relocated.
 - e. Extermination required: not required as removal is possible.
3. Category 2.
 - a. Presence: on residential, industrial, public or agricultural premises.
 - b. Threat to people or domestic animals: poses a potential threat in the immediate future..
 - c. Accessibility: not accessible due to specific location.

- d. Intervention required: required to be repelled from the site by using repellents.
- e. Extermination required: not required as it is possible to repel them.

4. Category 3.

- a. Presence: on residential, industrial, public or agricultural premises.
- b. Threat to people or domestic animals: poses an immediate life threatening situation.
- c. Accessibility: not easily accessible for removal or of critical high threat level
- d. Intervention required: required but impossible due to inaccessibility.
- e. Extermination required: immediate extermination is required.

ACTION: Compile a check list for bee managers that must be used to categorise colonies, and to decide on which intervention must be followed.

Management options for “problem” colonies:

1. As stated under categories, the management options are matched with the threat category.
 - a. Bees that are merely present but pose no immediate or future threat to people or domestic animals should not be tampered with and left to continue with the environmental functions.
 - b. Bees that pose a potential threat to people or domestic animals in the near future and are easily accessible such in a hive in a tree, under the eave of a roof or in a ceiling should be removed by a qualified person and relocated to a site where they can perform their ecological function without posing a threat.
 - c. Bees that pose a potential threat to people or domestic animals in the near future but is inaccessible due to their colony’s location such in a cavity wall, very high in towers of churches and schools, high up in trees, in flat roofs and other inaccessible places should be repelled by a qualified person using specific repellents. These repellents will only be available to such qualified persons.
 - d. Bees that pose an immediate life threatening situation to people and domestic animals, and are either inaccessible for removal or pose such a critical threat that removal is not an option, must be exterminated by a qualified person using a remedy that will be available only to such persons. This remedy will not be promoted or advertised in the public arena.

ACTION: Compile a simple instruction manual for the various management options for “problem colonies”.

Potential pesticides for the extermination of life threatening “problem colonies”:

1. AVCASA expressed their total objection to the development and registration of any agricultural remedy for the extermination of honey bees.
2. Mike Allsopp offered an idea of a possible remedy that could be used effectively to exterminate a life threatening colony but it will not be promoted in the public arena.

**ACTION: Draft an extermination guideline that must be used by certified service providers ONLY for extermination of colonies that are immediately life threatening.
Mike Allsopp to draft a simple guideline for the remedy to be used.**

Potential repellents for “problem colonies”:

1. Repellents that are effective in rapidly repelling honey bees from inaccessible sites are urgently required. Mike Allsopp and members of AVCASA will look in to this and offer suggestions.
2. Once a small number of potential repellents have been identified, the industry will be invited to do tests and trails and register such repellents.
3. Repellent will only be available to qualified and certified persons and not to the general public.

**ACTION: Potential repellents to be identified by CropLife SA members and tested for efficacy (probably by Mike Allsopp) – once efficacy has been proven, registration applications have to be submitted.
Guidelines for the application of repellents ONLY by certified individuals to be drafted.**

Service providers that could manage “problem colonies”:

1. The participants recommended that individuals who wish to offer services for the management of “problem colonies” must be qualified and certified to do so:
 - a. Such individuals may be registered pest control operators, beekeepers or others who have undergone specific training in responsible bee management.
 - b. Such individuals must be certified by the Department of Agriculture (Directorate of Agriculture Input Control) for being eligible to offer bee management services. It can be managed as part of the pest control operators licensing.
 - c. Companies and individuals that are not certified may not offer such bee management services.
 - d. Public servants in service of state departments such as municipalities must also undergo the specific training and certification.

ACTION: Engage the Registrar of Act Nr. 36 of 1947 with a proposal for special dispensation for bee managers.

Insurance options for management of “problem colonies”:

1. It was suggested that the short insurance industry is engaged in constructive negotiations to include bee management in their household and business insurance policies as a contribution to the well-being of honey bees.

ACTION: Engage the insurance industry with a proposal.

Infrastructure modification to avoid honey bee invasion:

1. Architects should be engaged in discussions around designs of building that would not attract honey bees.
2. Municipalities should be requested to change meter boxes and other cavities that are regularly invaded by honey bees to prevent invasions.

**ACTION: Draft a simply guideline for architects.
Draft a simple guideline for municipalities for changing meter boxes and other cavities.**

Awareness and education about honey bees:

1. All participants agreed to generate awareness around the critical importance of honey bees, and educate the public to prevent wanton poisoning of colonies.

ACTION: All participants to do awareness and education on honey bees and their issues.

Bee colony management in the agricultural sector:

1. The recurring problem of agrochemical impacts on honey bees need to be addressed through various mechanisms:
 - a. Lobbying for Mike Allsopp to be used as specialist consultant by the Registrar of Act Nr. 36 of 1947 to review applications for insecticides that may adversely affect honey bees.
 - b. Ensuring that labels reflect precautionary measures to prevent adverse impacts on bees.
 - c. Farmers to be informed to use products strictly according to label instructions especially in crops that are pollinated by honey bees.
 - d. Special precautions to be implemented when using neonicotinoids to prevent adverse impacts on honey bees.

ACTION: Draft letter to the Registrar re Mike Allsopp's appointment as specialist consultant.

**CropLife SA members to individually engage Mike Allsopp to check labels of insecticides that may adversely affect honey bees.
Create awareness**

