

APPENDIX 8: BEES

MANAGEMENT AND CONTROL OF BEES

1. GENERAL INFORMATION

Honey bees get their common name from the honey they make using the nectar of flowers. They are social insects found all over the world and are extremely beneficial because of their role in pollination and play a vital role in the functioning of ecosystems. Adult workers range in length from about 1/2 to 5/8 inches. Honey bees are usually orange-brown in color to sometimes black, and have an enlarged rear portion of the abdomen that is broadly banded with orange and brown, or brown and black. Their bodies are mostly covered with pale hairs, which are most dense on their thorax. Honey bees have 6 legs, as well as a visible barbed stinger. Queen honey bees are slightly larger, about 5/8 to 3/4 inches long, and have a pointed abdomen that extends well beyond the tips of their wings, with a smooth stinger present. Male honey bees, or drones, are about 5/8 inches long, and do not have a stinger. Africanized honey bees look just like domestic bees except for being slightly smaller. A specialist is required to identify specimens by genetics or measurements. Honey bees are active pollinators and produce honey which feeds their young in colder months. They are the only social insect whose colony can survive for many years.

Honey bees swarm primarily when the colony size gets too large for the available hive space or the queen begins to wane or fail. New queens are produced and the old queen leaves with a large number of workers. Swarms first move to a temporary site such as a tree branch. The swarm will usually remain here for about 24-48 hours until permanent quarters are located, and then moves on. Permanent quarters may consist of a bee hive, hollow tree, hollow wall, attic, etc., typically some place which is sheltered from the weather.

2. MANAGEMENT AND CONTROL OF BEES

2.1. MECHANICAL CONTROL

2.1.1. Nest Removal

The relevant Section Ranger should be notified and consulted before physical removal of a nest. Only trained and experienced personnel should be involved in the nest removal.

Great care must be exercised because any disturbance around a nest can cause multiple stings. It is best to have a professional pest control operator (PCO) or other experienced person remove the nest. Nest removal should take place at night when the 'yellowjackets' are inside the nest. When illumination is needed, use a flashlight covered with red acetate film. Adequate protective clothing and proper procedures can minimize problems and stings. Use clothing made for beekeepers.

This includes:

- A bee veil or hood that either contains its own hat or can be fitted over a light-weight pith helmet or other brimmed hat that holds the veil away from the head. A metal-screen face plate that extends around the head is a desirable feature. Check the veil carefully for tears before each use;
- A bee suit or loose-fitting, heavy-fabric coverall with long sleeves. This is worn over regular pants and a long-sleeved shirt to provide extra protection from stings; and
- Gloves with extra-long arm coverings so sleeves can be taped over them to protect the wrists.

Bees can be also be smoked out in most cases.

2.2. CHEMICAL CONTROL

No pesticides can be used to remove or eradicate bees from any man-made structure except in extreme circumstances. Once bees have been removed mechanically, **Coltar (carbolic acid)** can be sprayed onto the area to get rid of the smell of the pheromones. If not removed, the pheromones could attract the bees back to the same place. Brown vinegar is also a bee repellent and once bees have been removed, it can be applied directly to the area. Pieces of cloth swabbed in brown vinegar can be left in the area as a repellent.

IMPORTANT NOTE: The use of **Jeyes Fluid** has been prohibited in the park due to its toxicity and risk to the natural environment.