

WHAT IS THE HONEY BEE?

The native honey bee is naturally dark brownish/black in colour but interbreeding with other races has resulted in a number of colour strains including the yellow and brown-banded form typically associated with commercial hives. Honeybees are social insects living in colonies of 50,000 individuals or more. Each colony consists of one egg-laying female, the queen, several thousand female workers, and a few hundred male drones. The workers collect pollen and nectar, to feed directly to the larvae, the latter develops into honey.

The honey bee has been managed to produce honey for human consumption for over two thousand years in a variety of constructions. In their wild state they select hollow trees and caves or cave-like areas such as roof spaces. The nest itself is constructed from wax which is produced by the workers and formed into hexagonal egg cells for the development of the larvae and honey storage.

WHY IS THE HONEY BEE OF CONSERVATION IMPORTANCE?

Honey bees are the major pollinator of a number of plant species and are of commercial importance for their role in crop pollination. The continuing decline in numbers of bee colonies may have a serious effect on a number of plant species both wild and cultivated.

CURRENT STATUS:

The honey bee is present across most of the Plan area in both wild and managed forms. Although there is a western boundary beyond which the climate makes it unlikely that the species would be able to over winter. This boundary is roughly from Middleton-in-Teesdale to Stanhope but there is a wild colony that is known to exist at Ireshopeburn.

Honey bee colonies are declining because of the introduction of a parasitic mite *Varroa jacobsonii*. The mite originated in Asia from where it was accidentally introduced to Europe and has spread rapidly. First found in captive colonies in the UK in the early 1990s the parasite has now spread throughout the UK. Its effect on the wild population is difficult to monitor. Little is known about the effect of this mite on wild populations of honey bees.

THE HONEY BEE IS AT RISK FROM:

Parasitic mite, *Varroa jacobsonii* – infestation with *Varroa* can destroy a honey bee colony within two seasons.

Use of insecticides and herbicides – honey bees are directly affected by the use of aerial insecticides and indirectly affected by the use of herbicides, which may destroy food supplies.

SUGGESTED ACTIONS:

Treatment of captive colonies for *Varroa jacobsonii* mite – there are treatments available for the management of the parasite although these are time consuming. While these treatments can control the mite they cannot eradicate it.

Survey the plan area for existing wild colonies.

Continue to monitor and treat *Varroa jacobsonii* and other diseases both in captive and wild colonies.

Promote the use of weed wipe techniques and best practice in use of pesticides.