

JNFORMATJON SHEET:

Eucalyptus trees as honey bee forage

South Africa's honey bees, managed by beekeepers to provide crop pollination, play a vital role in human lives. But when they are not pollinating crops, where do these hundreds of thousands of honey bees go? In order to support their bee hives, South African beekeepers use a variety of flowering plants to provide forage (food) at different times of the year to keep them strong and healthy for pollination.

Research has shown that beekeepers in all South African provinces have a strong dependence on Australian **eucalyptus trees (gums)** as a forage resource for their honey bees. Eucalyptus trees provide a reliable pollen source and nectar flow, and because different species flower at various

times of the year they provide a steady forage resource for colonies. Although eucalyptus trees can be invasive, the goal should be to manage them to limit the likelihood of invasion.

Six eucalyptus species are listed as "Category 1b" invasive species (i.e. they must be 'controlled') in the Alien and Invasive Species Regulations promulgated in 2014 under NEMBA (the National Environmental Management: Biodiversity Act, 2004).

The Department of Environmental Affairs, however, recognizes the value of eucalyptus species as bee forage and the regulations strive to



E. sideroxylon (left, not NEMBA listed) and *E. cladocalyx* (right, NEMBA listed), two of the most important eucalyptus species in terms of honey bee forage in South Africa [photographer: Carol Poole]

accommodate appropriate use of the listed invasive species. Stands of listed eucalyptus can be demarcated by permit as Category 2 Invasive Species under NEMBA as bee-forage areas, windrows or woodlots. Eucalyptus species within riparian areas, protected areas or ecosystems identified for conservation purposes must be removed. Find more information on the NEMBA regulations and specific eucalyptus species on <u>www.invasives.org.za</u>.

Several eucalyptus species that are important bee forage (e.g. *Eucalyptus sideroxylon* and *E. gomphocephala*) are not listed in Alien and Invasive Species Regulations and are therefore not regulated and could be maintained or planted in non-riparian areas.

What we need to do about eucalyptus trees important as honey bee forage

- Encourage state and private landowners who have eucalyptus bee-forage resources on their land to consider allowing access to beekeepers in a controlled manner. Local beekeeping associations are listed on <u>www.sabio.org.za</u>.
- Maintain or plant certain eucalyptus species in certain areas where they are not a threat to water resources or posing an invasive risk (this might require a permit under the NEMBA regulations).
- Encourage eucalyptus forestry in South Africa to research the 'bee-value' of certain eucalyptus cultivars and ensure they are allowing access to beekeepers to those cultivars of high value.

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This infosheet was produced as part of the material emanating from SANBI's projects on pollination and honey bee forage. Visit <u>http://www.sanbi.org/pollination-honeybees</u> for more information.