

## **THE PLIGHT OF THE BEE, IN SOUTH AFRICAN SEMI-DESERTS**

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South Africa's semi-deserts are renowned for their floral diversity, which is amongst the greatest per unit area in the world. Consequently they are priority conservation areas. Much of these semi-arid regions are pastoral agricultural land, and grazing pressure has impacted on the vegetation. The change caused by early stock farming was not documented, but since 1936 floral surveys have been conducted and the results published. The predominant pasture in these areas comprises indigenous insect pollinated plants, and bees are among the most important pollinators. However, they are comparably poorly known and knowledge of their host plant specificity is scant. Agriculture is known to affect bee abundance and diversity, and the changes are still not being documented. In disturbed areas bees with a wide range of host plants are common, and those that visit only a few closely related plant species are largely absent. It appears unlikely that plants and bees with narrow pollinator-host plant requirements will re-colonize areas from which they have been lost. Therefore, the South African semi-deserts should be managed to conserve the regions biodiversity. But without an appreciation for pollination as an essential ecosystem services and basic research on pollinator biodiversity, the world rich ecosystems will be lost, and this without knowledge of what was lost.