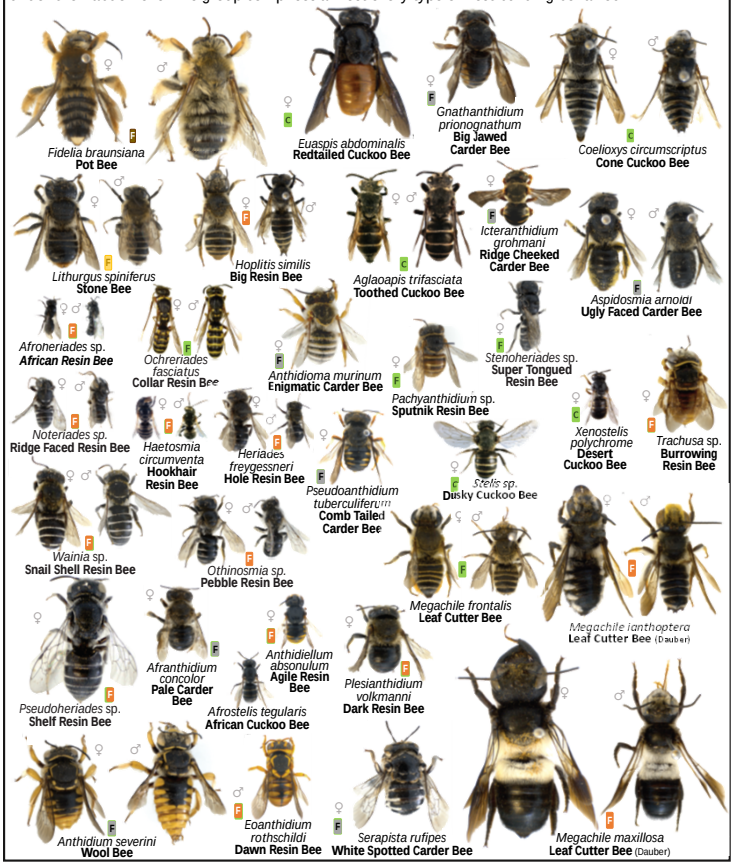
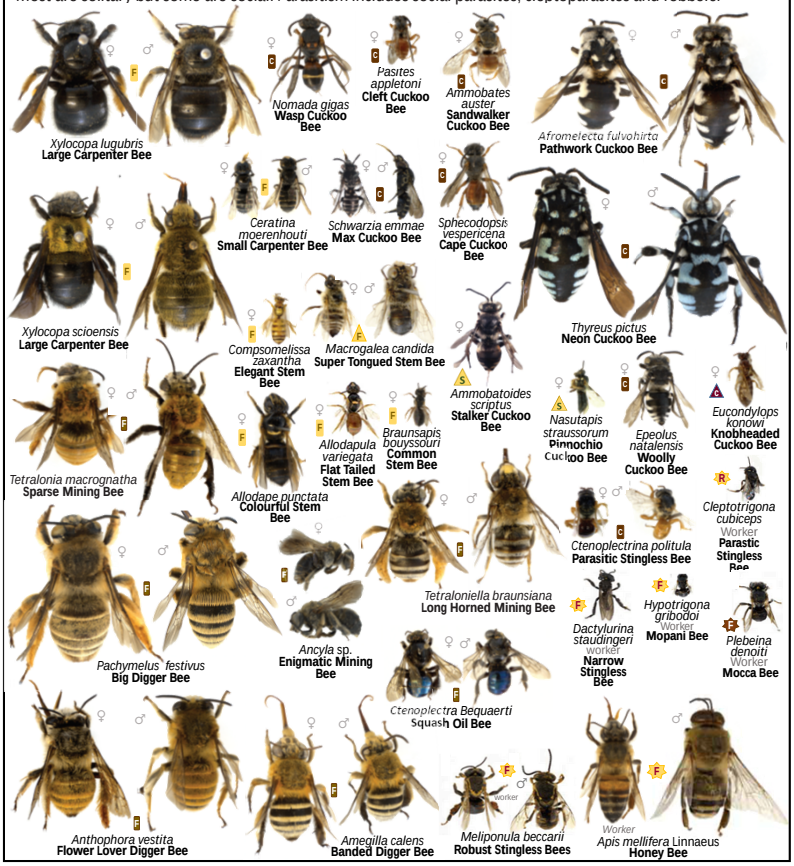
Bees of Sub-Saharan Africa

It is estimated that there are around 30 000 bee species worldwide of which about 20 500 have been described, 2755 occur in sub-Saharan Africa and about 1200 occur in South Africa. Bees, in many shapes and sizes, pollinate about 80% of all flowering plants and 75% of the vegetables, fruits and nuts we eat. The symbols next to each bee indicate their sociality, where they nest and where they get their food.

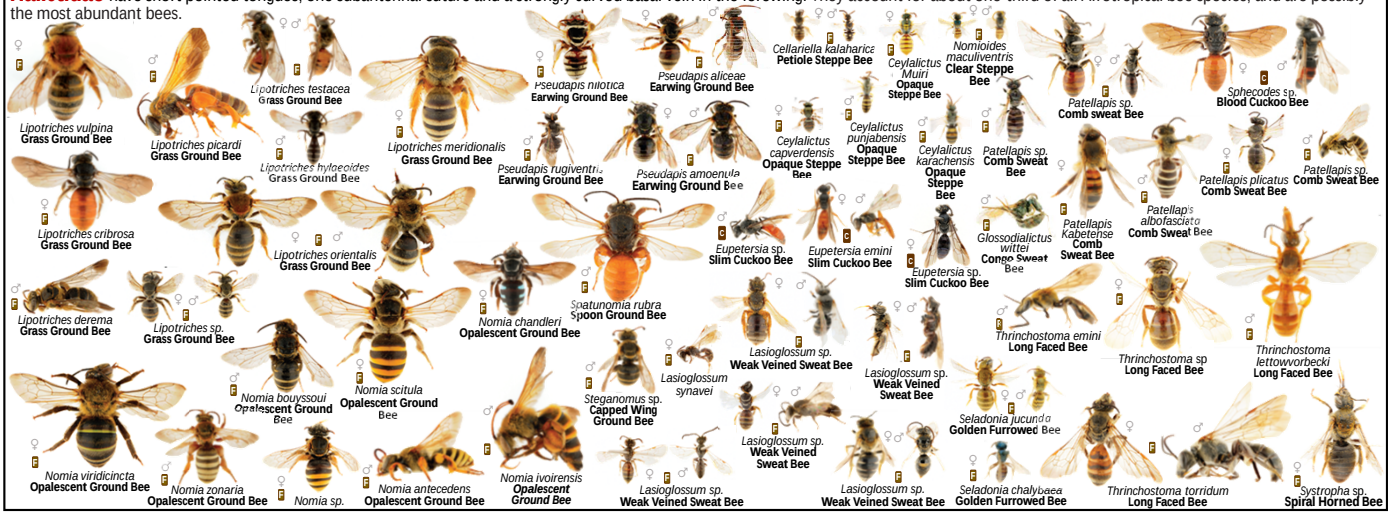
Megachilidae are long tongued bees with two submarginal cells on their wings that collect pollen under their abdomens. The group comprises almost every type of nest building behaviour.



Apidae are long tongued bees with two or three submarginal wing cells that collect pollen on their hind legs. Most are solitary but some are social. Parasitism includes social parasites, cleptoparasites and robbers.



Halictidae have short pointed tongues, one subantennal suture and a strongly curved basal vein in the forewing. They account for about one-third of all Afrotropical bee species, and are possibly the most abundant bees.



Poster Compiled by:
Lynn Katsoulis and Connal Eardley

Reference:
Eardley C, Kuhlmann M, and Pauly A. (2010) The Bee Genera and Subgenera of Sub-Saharan Africa. Abc Taxa, Belgium.

Happy Acres
Environmental Education Centre
More information on identifying bees and ways to collaborate is available at
www.happyacres.co.za
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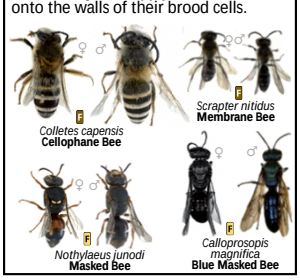
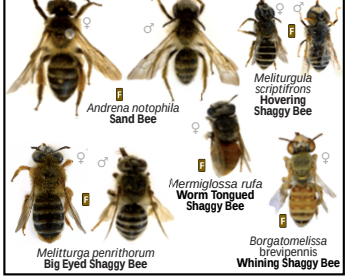
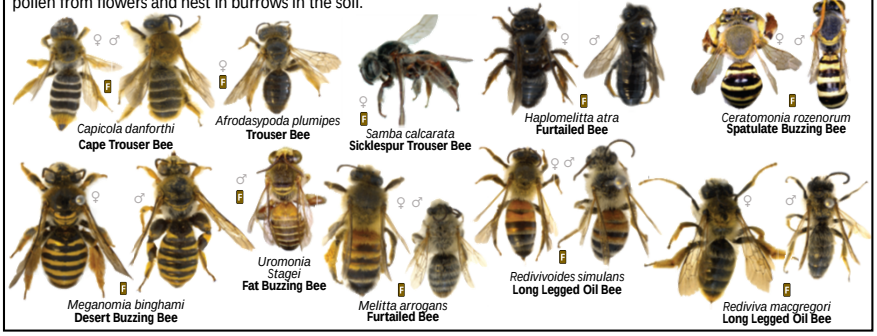
Colletidae have forked short-tongues, one subantennal suture and a straight basal vein in the forewing. They nest in tunnels in the ground or in hollow twigs and apply clear secretions onto the walls of their brood cells.



Andrenidae have short pointed tongues, two subanttennal sutures and a straight basal vein in the forewing. They are pollen collectors that nest in burrows in the soil.



Melittidae have short pointed tongues, one subantennal suture and a straight basal vein in the forewing. They collect pollen from flowers and nest in burrows in the soil.



Scale:
5 mm
10 mm

Nesting (Colour):
- Make external cases from plant material in existing burrows
- Secrete a cellophane-like substance in existing wood burrows
- Carpenter, stem and stone bees bore tunnels in wood
- Ground nesting
- Dauber and resin bees make cases of soil or resin
- Carders make woolly balls around little cocoon-like structures

Feeding (Letter)
- **F - Collect pollen from flowers** and pollinate flowers in the process
- **S - Social parasites** replace or coexists with the queen and use the host workers to raise their progeny
- **C - Cleptoparasites** lay their eggs in the nests of other bees and the larvae feed on the food collected for the host's larvae
- **R - Robbers** steal pollen and honey from nests of other bees

Sociality (Shape)
- Solitary
- Social
- Social honey producers

Males (♂) and Females (♀)
Only female bees that provision brood cells carry pollen, and only females sting.

Bee Keeping
One species, *Apis mellifera*, is used for almost all honey production and commercial pollination.