

## WOOD-BORERS ON *Acacia*: A COMMUNITY PERSPECTIVE

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**Wood boring beetle in the family Cerambycidae, recently emerged from *Acacia* tree.**

*Acacia* trees form an integral part of the southern African landscape. They are iconic of the African savannah, provide abundant food and habitat, and have practical and economic value to local communities. Despite the importance of *Acacia*, little is known of the insect community associated with these trees. Insects shape patterns of abundance and distribution of their host tree species, with important consequences for local community diversity and composition. Wood-boring insects in particular can cause considerable damage to native and non-native trees by disrupting water relations and by making stems more susceptible to snap.

In an effort to better understand the wood-boring community on *Acacia*, Drs Brett Hurley and Jeff Garnas (from the CTHB) and Dr Diedrich Visser (from the ARC) have examined stressed and dying native *Acacia* from a single bushveld site in northern Pretoria. Preliminary collections from several *Acacia* species indicate the existence of a complex community of insects living within the wood of these trees, including members of the metallic wood-boring beetles (Buprestidae), longhorn beetles (Cerambycidae), weevils (Curculionidae), and wood-boring moths (Cossidae), among others.

The objectives of future research will be to: a) Examine the community of wood-boring insects associated with *Acacia* and the impact that they have on tree longevity and on community composition; b) Determine the geographic extent of damage and the effect of host species on the occurrence of insect borers; c) Evaluate evidence for recent changes in damage levels linked to tree stress associated with changes in climate; and d) Examine the microbial community associated with these wood-borers and the nature of this association.



**Extensive larval tunnelling on *Acacia* by various wood boring species.**