



Giant Burrowing Cockroach *Macropanesthia rhinoceros*

What do they look like? Large, lumbering, wingless, nocturnal insects up to 8 cm long. They have a hard, rich red-brown, shiny 'shell' or exoskeleton. Mature males have a scoop-like projection above the head. Giant Burrowing Cockroaches have strong spines on their front legs, which look like hands, to dig burrows up to a metre deep. These burrows are conspicuous after rain.

Where do they live? They favour vine thickets and also inhabit sandy areas that do not flood. They may be common but not obvious, often going unnoticed for years before suddenly appearing en masse when conditions are right. While Giant Burrowing Cockroaches are restricted to more eastern parts of the region, similar species occur throughout the area shown on the map

What do they need to live, eat and breed? Giant Burrowing Cockroaches feed on dead leaves, which they drag down into the burrow to eat. If they don't make it back to the burrow by day, they rarely survive. The presence of a good leaf litter layer seems to be necessary for the persistence of Giant Burrowing Cockroaches.

When might I see (or hear) them? Giant Burrowing Cockroaches are most obvious at night, especially after good rain on warm nights. After significant early wet season rainfall, some species undergo mass movements. At such times many thousands may get killed on roads.

What management actions affect this species? Maintaining dense ground cover, especially leaf litter, favours Giant Burrowing Cockroaches. Vine thickets are special areas for Giant Burrowing Cockroaches and keeping fire out of these areas will benefit them. Control pigs as they eat Giant Burrowing Cockroaches and destroy their burrows. Soil compaction, clearing and blade-ploughing all disturb Giant Burrowing Cockroaches, isolating populations from other breeding individuals.

How do they benefit the land I manage? The deep burrows of Giant Burrowing Cockroaches allow nutrients and oxygen deep into the soil. These spectacular cockroaches perform a critical yet largely undervalued role in nutrient cycling and water infiltration.

Similar species: Other large burrowing cockroaches look similar, but don't reach the massive size of the true Giant Burrowing Cockroach.

