

## Bladder Cicada

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Generally, by March, the majority of cicadas are no longer active, but 2013 has been different. I'm normally aware of 2 or possibly even 3 species at home in March, but this year there have been 6 to 8. Cicadas spend from 1 to 17 years underground in their nymphal phases according to species, but affected by availability and quality of food resources. Four to seven years is common for our local species.

My assumption of the reason for this year's variation in timing is that nymphs which should have been ready to emerge in November, December and January had not found sufficient resources during the extreme dry to develop to maturity. They feed on sap from their preferred plant's roots, and dry conditions would have created poor sap flow. With the improved rainfall in late January, February and into March, tree health and sap flow would have increased dramatically, producing rich feeding for the cicada nymphs, thus allowing late completion of the nymphal cycle and emergence into adulthood.

One of these late species was the Bladder Cicada (*Cystosoma saundersii*). Although they mostly perch and call from a height of 1.0 to 1.7 metres in shrubby plants, they are so well camouflaged, they are difficult to spot. Singing occurs in the short interval between dusk and dark, and this is normally the only time for their short flights. They are not built for speed or agility and probably move just inches from the daytime feeding position to a more prominent perch to chorus. They do not congregate in the huge numbers of some species, and prefer to have no more than 2 or 3 males in a shrub.

The male (see photograph) is an attractive and fascinating insect. It is approximately 40 mm in length, with the abdomen largely hollow providing resonance for its loud call. The female abdomen is smaller, not hollow, and houses mainly its digestive and reproductive organs, with room for egg storage. The male's ribbed sound-producing membrane (tymbal) can be seen just behind where the wings join the body. The call is so loud that the insect relaxes its hearing organs (tympana) as it calls so they become ineffective and it does not deafen itself! The Bottle Cicada is also green and is sometimes mistaken for the Bladder Cicada, but its abdomen is bottle-shaped, whereas the Bladder Cicada has a definitive apex to the abdomen.

Cicadas are "bugs" in the strict sense of the word, and therefore have sucking mouth parts, not chewing mandibles. They syphon liquid from the plant, extract the nutrient, then excrete the watery remainder. Large numbers in trees can give the effect of gentle rainfall!

Although Bladder Cicadas are endemic creatures, most of the known plant species in which they lay eggs are exotics. The female uses the ovipositor at the rear of the abdomen to cut a slit and insert eggs in living plant tissue of Lantana, Camphor Laurel, Mango, Privet, Jacaranda, etc.