

## UP CLOSE: FROM THE COLLECTION

### BUSTED! THE CASE OF THE SMUGGLED STAG BEETLES

■ Why does the Museum hold 600 specimens of an endangered species of stag beetle in its collection? Read on, as research scientist Chris Reid relates a tale of human greed and science on trial.

Early in 2003, Taronga Zoo phoned to ask if I would come over to identify some *Lamprima* stag beetles at the quarantine facility there. They had nearly a thousand specimens of this magnificent beetle, bright metallic green and each the size of the last joint of your thumb, intercepted in baggage at Sydney Airport. About half of them were still alive in boxes of woodpulp.

Identifying *Lamprima* species can be tricky – there are seven described species in Australia – so I set off to compare the contraband species with voucher specimens and found they perfectly matched *Lamprima insularis*, known only from Lord Howe Island, a World Heritage Area.

The two defendants – a professional insect breeder and a wealthy collector, claiming to be tourists – were citizens of Japan, where stag beetles, dead or alive, are highly prized. They pleaded guilty to the collection and attempted export of Australian fauna, but not guilty to causing significant damage to a World Heritage Area.

Anyone can name a species, but whether that 'species' has any legitimacy in the natural world is another matter. The defence claimed among other things that the Lord Howe Stag Beetle was just a blow-in from the mainland. The prosecution had to show that this beetle was indeed *Lamprima insularis* and furthermore that it was a valid species unique to the island, not just some mistake by an ignorant dilettante masquerading as a taxonomist in the nineteenth century.

When it comes to telling species apart, taxonomists focus on genitalia because, like a lock and key, differences can prevent interbreeding and thus maintain the separation of species. Fortunately the genitalic differences between the Lord Howe species and those on the mainland backed up the differences in mandibles (jaws) noted when the species was described in 1885, and I was able to convince the judge that this was indeed a separate species.

But the further charge of 'significant damage' hinged on the meaning of 'significant' – a keyword that not even the federal government representatives seemed able to define adequately, with the result that this charge was thrown out.

After almost a year, the original guilty plea went through, and the collectors, now considerably out of pocket in legal and living expenses, were each fined \$200 plus two years in prison, suspended. The National Parks & Wildlife Service had returned the surviving beetles safely to the island early in the case, and the Museum got to keep the dead ones.

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above: Female *Lamprima* species, with the Lord Howe Stag Beetle (centre). Adults can reach 2 cm in length. Photo Kindi Smith.

below, left: Detail of male Lord Howe Stag Beetle, *Lamprima insularis*. The brushes on the beetle's 'antlers' may be used for collecting plant nectar. Photo Carl Bento.

below, right: An army of smuggled beetles surrounds the Museum's original specimens collected over the last 100 years. Photo Carl Bento.

