

Under the radar? The occurrence, impact and management of feral cats and black rats in Kakadu

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Most exotic mammals in northern Australia, such as buffalo, are highly conspicuous and their environmental impacts may be obvious. They have a high profile, are writ large in management planning, and may be relatively straightforward to control. When most park managers think of pest management, it is of buffalo, pigs, donkeys, cattle or horses. These are indeed pests, and it is appropriate that managers attempt to control them. But there are other pests in this region that are far less conspicuous, are rarely considered in management plans, and for which control actions are at best occasional and incidental – and consequently typically ineffective. In this paper we highlight issues in Kakadu with two smaller species, feral cats and black rats, which are rarely considered in detailed feral management plans but are potentially causing significant impacts.

There is damning evidence of the detrimental impacts of feral cats and black rats upon biodiversity in many parts of their Australian range. Feral predators (foxes and cats) are widely accepted to have been important contributing factors in the extinction of about 15 species of mammals in Australia over the last 100 years, and a wide range of recent studies (mostly using predator enclosure fencing or intensive baiting) has provided compelling evidence of the continuing impact of feral predators on native wildlife, particularly mammals, but also birds and reptiles. The highly significant decline in native mammals in northern Australia (including Kakadu) is evident in recent monitoring programs, largely involving groups of mammals that are easy prey for cats and foxes (bandicoots, possums, larger rodents, larger dasyurids).

Black rats are known to have very significant destructive impacts on a broad range of wildlife species, particularly on nesting birds and on islands. Black rats are also vectors for a range of diseases, notably including salmonellosis, leptospirosis and bubonic plague, and it is feasible that their main impact on native fauna may be through spreading exotic diseases.

The management of cats and black rats in Kakadu is caught in a snag – there has been little research and hence little compelling evidence of impact. A consequence has been little management and little incentive to do research. Furthermore, these species and the damage they do are far less obvious in the landscape than larger feral animals or cane toads. Finally, effective control of cats and rats is very difficult and costly. Despite these issues, cats and rats need to register on our radar and an integrated research and management program should be established targeting these two species.