

# Conservation of critically endangered wildlife species – scope for private landholder and citizens' action

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## Abstract

The conservation status of wildlife on private grazing land is contentious. For macropods this ranges from ubiquitous pest species (e.g. kangaroos) to critically endangered for many of the smaller macropods, including the Bridled Nailtail Wallaby, which was thought to be extinct until ‘rediscovery’ in 1973 in Central Queensland. Recovery activities for the Bridled Nailtail Wallaby in Queensland are being undertaken at Taunton N.P. (Scientific) and Idalia N.P. A third reintroduction effort commenced on “Avocet”, a grazing property in the Central Highlands in 2001; and presently involves a consortium of interests including a pastoral enterprise, a sporting shooters association, community volunteers, a conservation trust and the Department of Environment and Resource Management (DERM). The paper details elements of the history of wallaby recovery efforts on “Avocet” and how this model might offer scope for private individuals and community interests to contribute to endangered species conservation outside the formal conservation estate.

## Introduction

The conservation status of wildlife, particularly macropod species, on private grazing land is contentious. Mention of macropod conservation needs in pastoral industry forums is inevitably met with disinterest or a rapid narrowing of the discussion to ‘total grazing pressure’ and its’ impact on sustainable grazing management. While this may be true of the larger kangaroos and some wallabies, for many smaller macropods whose once wide-scale

habitats have been destroyed by vegetation modification, habitat usurpment and predation, continued existence on the planet is extremely tenuous. Suggestions within conservation circles that pastoralists and sports shooting and hunting interests might wish to play a serious role in rehabilitating endangered species, commonly invokes scepticism if not rejection. Yet for one critically endangered small macropod, this is the case and the subject of this paper.

The Bridled Nailtail Wallaby (*Onychogalea fraenata*) is a small wallaby historically living in semi-arid areas where acacia shrublands and grassy woodlands meet, with males weighing ~5-6kg and females ~4-5kg. The pre-European settlement range is thought to span from west of the Great Dividing Range, north to Charters Towers in Queensland, south to northwestern Victoria and west to eastern South Australia (Gordon and Lawrie 1980). Habitat destruction through land clearing and pasture development, and predation promoted a rapid decline in the population and the species was thought to be extinct by the 1940s until a population<sup>1</sup> was 'rediscovered' in 1973.

Formal efforts commenced to consolidate the wallaby population with the acquisition of "Taunton" in 1979 and "Redhill" in 1984 and their gazettal as Taunton N.P. (Scientific Reserve). Estimates of population size declined markedly from ~1400 animals in 1991 to ~450 animals in 1994 and largely attributed to drought (Clancy and Porter 1994; Lundie-Jenkins et al., 1998), raising concern for the remaining population and the need to establish new self-sustaining populations in former parts of its range, such as Idalia N.P. The estimated number of wallabies has further declined due to severe drought at Taunton N.P. since 1994 and at Idalia N.P. since 2001 with estimated populations of between 100-150 animals each (Graeme Lightbody pers comm.).

Conservation efforts in Queensland are not confined to the parks, and several other sites are involved with captive breeding or wild release, including at "Avocet" near Springsure. This provides an alternative model involving non-traditional partners including a cattle-producing enterprise, a conservation group backed by a national sporting shooters' association, a wallaby conservation trust, and community volunteers working together with some support

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<sup>1</sup> The number of animals present in the region at the time of 'rediscovery' is not known

from the Department of Environment and Resource Management (DERM - formerly the EPA).

### *Conservation efforts on “Avocet”*

“Avocet” is 5,500 ha and runs ~1100 cattle. In 1996, despite significant opposition and isolation from other landholders, Hugo Spooner established perpetual protection of ~1,100 ha of remnant Brigalow scrubland through the creation of a nature reserve. The Spooner family annually commits a substantial investment for habitat, weed and fire protection management, and communication activities (e.g. addressing schools, service groups). The reserve was identified by the EPA as a suitable site to trial off-reserve conservation with an initial release of 16 animals in December 2001 and 14 subsequent releases to 2005 for a total of 164 animals. The preparation of wallabies for release, has been assisted by Australian Animals Care and Education (Inc) (AACE) since 2003. Unfortunately, formal public support for the “Avocet” trial declined from early 2006 and, despite episodic efforts to capture and tag wallabies by Queensland Parks and Wildlife Service (QPWS) rangers, few reliable estimates exist of the present population. One mark-recapture study (Kingsley 2008) provided a population estimate for July 2008 of between 32-40 individuals, although ‘guesstimates’ by Hugo Spooner based on the capture records and personal observations are much higher at 140-180 animals. Actual numbers will have been affected by the high male to female ratio in the original animals (97:67), dispersal off-reserve, predation and severe drought for much of the post-release period. Without more intensive mark-recapture surveys, it is impossible to confidently determine the population trends, although the limited capture and release of previously untagged females with pouch young suggests that they are breeding.

Bridled Nailtail Wallabies are easy prey for feral cats, dingoes and foxes; they also experience competition from rabbits and hares, and habitat damage by feral pigs. Conservation and Wildlife Management Qld (CWMQ), established by the Sporting Shooters Association of Australia (SSAA), engages in conservation projects through assistance with habitat maintenance and predator control. The group recognised the “Avocet” rehabilitation effort as a unique opportunity to demonstrate its’ commitment to wildlife conservation, especially for an endangered species that is not a target for recreational or professional hunting. Since 2003, CWMQ volunteers have undertaken predator control and assisted with the trap,

measure and release activities undertaken by QPWS rangers. Field activities have involved ~4-15 volunteers making 2 trips per year from Brisbane and more recently regional branch members visiting ~ monthly. The in-kind value is estimated to be ~ \$50,000 per annum (Fiachra Kearney pers comm.) including ~ 135,000 km travel to the sites and ~25,000 km on-site resulting in the removal of ~ 102 cats, 15 dingoes, 10 foxes, 190 rabbits, 46 hares and 15 pigs (Mark Woods pers comm.). With the shifting emphasis to local branch participation the effective culling rate of pest species on the reserve should increase substantially.

Other participating community groups include the Greencorps, a youth development and environmental program, working with the CWMQ volunteers; and Wildmob, another non-profit group, will assist with wallaby trap, measure and release activities commencing in September-October 2010 and also to notify CWMQ volunteers on pest tracks and sightings. The reserve has also hosted visits by school children and scouts from regional communities.

Endangered species conservation is legally the mandate of the Queensland Government. Until early 2006 the conservation efforts at “Avocet” were encouraged and supported by the EPA, largely through the tireless efforts of Janelle Lowry (QPWS Rockhampton) including a considerable commitment to planning and field work. Indeed, the other volunteers regard Janelle as being totally committed and the driving force behind the reintroduction of the wallabies to “Avocet”. Since then Janelle has spent the majority of time on maternity leave, but still supported the work, and the formal commitment of agency resources has been exceptionally limited. Because of this, the uncertain wallaby numbers at “Avocet” and concern at the apparent decline on the public reserves, several concerned individuals and organisations with conservation interests, including the SSAA, sought more effective institutions for protecting the species. Because it was felt that the volunteers had largely been left to themselves to protect and actively advocate on behalf of the species, the Bridled Nailtail Wallaby Trust (BNWT) was established in 2007 for the wider community to co-operatively engage to protect the species. Seed money was provided by SSAA with additional funding sourced from voluntary contributions and corporate sponsorship. Funds are allocated to support research on the species, conservation activities on “Avocet”, and communication to raise awareness of the situation facing the wallaby. The Trust is pressing for the species to be listed as Critically Endangered and has argued against a State Government approval of a mining exploration permit over “Avocet” including the reserve.

Direct approaches to the exploration company resulted in an agreement to cease exploration on the reserve area.

## **Future**

The groups working at “Avocet” see off-reserve management as essential to the species’ survival. Within some quarters the species is seen not to be faring well under the government agencies and procedures that were in place to safeguard it over past decades; and non-government institutions continue to face difficulties in actively seeking to work on public reserves. Working with private landholders such as the Spooner family on “Avocet”, through collaborative partnerships such as between CWMQ, Greencorps, Wildmob and others offers scope to achieve tangible conservation results - e.g. use of strategic grazing to promote habitat suitability, hunting based-predator control, mobilising community pressure to reduce mineral exploration and mining in critical habitat areas etc. The BNWT is striving to direct pressure and resources to areas of high opportunity for effective protection and rehabilitation of the species.

It is not reasonable to expect that the fate of a critically endangered species that requires serious management be left entirely to a resourced-constrained state conservation agency; or, by default and commitment, in the hands of a lone pastoral family - although it was a good thing for the animal that they cared so strongly for it. Motivating other landholders to take up the challenge facing the Bridled Nailtail Wallaby and similarly deserving species will not be easy. Efforts such as that at “Avocet” involving small, community-supported institutions may ultimately prove to be catalysts for achieving such results.

## **Acknowledgments**

Details concerning the Bridled Nailtail Wallaby Trust can be found at [www.bntwallaby.org.au](http://www.bntwallaby.org.au)

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