



CALM officer Michael Hughes weighs a captured northern quoll.
Story and photo by Tanyia Maxted

Quolls safe from 1080

A RECENT survey on Dolphin Island in the Dampier Archipelago has shown that the population of northern quolls alive and well despite years of fox-baiting.

As the quoll is a carnivore, it was feared initially that baiting for foxes - using dried meat baits containing 1080 poison - may have affected it. However, work carried out by the Agricultural Protection Board and CALM in the 1980s which indicated that there would be no detrimental effect on the northern quoll has proven correct.

The northern quoll, (*Dasyurus hallucatus*), is common and widespread on rocky habitats throughout the Pilbara, Kimberley and Northern Territory. However, Dolphin is the only Pilbara island to support a population of the species.

Pilbara reserves officer Greg Oliver said it was important that a secure quoll population be maintained free of disturbing influences found on the mainland,

such as development, foxes and feral cats.

In the February survey, Greg and fellow CALM officer Michael Hughes trapped 19 individuals on two grids over four days. Their weights ranged from 70 grams for a juvenile to 345 grams for an adult.

On the first two-hectare grid in low open *Acacia coriacea* scrubland, seven individuals were caught - a density of 3.5 animals per hectare.

On the second grid from fringing mangroves to spinifex grassland, 12 individuals were caught - a density of six animals per hectare.

Greg and Michael also searched several beaches, a favourite foraging area, on the island for fox tracks, but found none.

The island was first baited for foxes in 1980, and baiting has since been carried out in 1981, 1984, 1987, 1989, 1990, and 1991. Foxes are now believed to be extinct on nearby Angel, Gidley, and Keast islands, and on Collier Rocks.

Greg said that Dolphin needed to be regularly baited to prevent incursions across Sea Ripple passage from the Burrup Peninsula. Fox track counts were conducted at three month intervals, he said, with trap monitoring annually.

Dolphin Island is a "B" class nature reserve declared in 1977. As well as the northern quoll it also supports the euro *Macropus robustus*, the common rock rat *Zygomys argurus*, Tunney's rat *Rattus tunneyi*, and Rothschild's rock-wallaby *Petrogalerorothschildi*.

Spotlight traverses conducted in 1990 have indicated a 30-fold increase in the sighting frequency of rock-wallabies on Dolphin Island since the inception of baiting in 1980.

The island is also rich in heritage values. Its name derives from the exploration ship used by F.T. Gregory during his exploration of the Roebourne district (then known as the Nickol Bay District) in 1861.

