

## *Wildlife research grants*

### *Spotted-tailed quolls*

A research grant of \$2,000 was awarded to Al Glen a PhD student from the University of Sydney, Institute of Wildlife Research unit.

The spotted-tailed quoll (*Dasyurus maculatus*) has suffered dramatic decline since European settlement and is listed as a threatened species in all of the mainland states where it occurs. The species is thought to have been adversely affected by factors such as habitat loss and disease, but competition and/ or predation from introduced predators is also thought to have been a contributing factor.

Al gave a brief outline of his research objectives. He said that his study aims to determine whether competition or predation occurs between the spotted-tailed quoll, the red fox (*Vulpes vulpes*) and the dingo (*Canis lupus dingo*) or other wild dogs. The broad objectives of the project are to investigate the home ranges and habitat use of quolls and foxes living in close proximity, to investigate the diets of quolls, foxes and wild dogs living in close proximity, to investigate aspects of fox and quoll populations such as abundance, reproductive success and causes of mortality, and to study the population genetics of quolls.



*Al Glen*

Quolls and foxes are being monitored by live-trapping Marengo and Chaelundi State forests, in the Dorrigo area of northern NSW. The home ranges and habitat use of foxes and quolls will be analysed for evidence of avoidance between the two species. Avoidance would indicate that quolls may be excluded by foxes from areas of optimal habitat.

Diet of quolls, foxes and wild dogs will be investigated by analysis of scats. This allows assessment of dietary overlap between the species. If significant dietary overlap occurs, this may indicate that foxes or wild dogs restrict the access of quolls to preferred prey. Finally, tissue samples will be collected from quolls for genetic analysis, which will allow assessment of such factors as social structure, the genetic health of the population, occurrence of inbreeding and so on.



*Spotted-tailed quoll*