

Spectacled flying-foxes: genetics, geography and management.

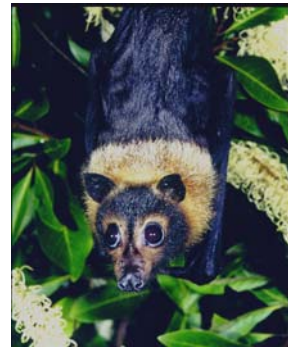
Samantha Fox: School of Tropical Biology and School of Tropical Environment Studies, James Cook University, Townsville, QLD 4811.

Samantha.Fox@jcu.edu.au

Spectacled flying-foxes act as pollinators and seed dispersers in Australia's wet tropical rainforests and adjacent areas. However, spectacled flying-foxes also cause damage to crops and economic loss to fruit farmers every year and their management is a divisive issue. In May 2002 this species was listed as 'Vulnerable' under the Commonwealth EPBC Act . The listing was controversial due to management of the species being severely limited by a lack of demographic and population structure data on which to base such decisions.

This project has two main aims:

1) To investigate the genetic structure of the spectacled flying-fox to determine relatedness of individuals within and between colonies, and between colonies which are geographically isolated (ie Iron Range and Papua New Guinea). This will enhance our knowledge of their movements and mating system which affect gene flow, and possibly allow us to determine whether orchard raiding individuals are locals or visitors.



2) To describe the demographic structure of a spectacled flying-fox population to determine average longevity of the species in the wild and possible vulnerable stages in the life history. This data can then be used in population viability modelling.

A rigorous investigation into unknown aspects of the biology and ecology of this species is important to permit informed decisions on future management of the spectacled flying-fox.