



Research note

Eradication of alien predators in Seychelles: an example of conservation action on tropical islands

NIRMAL JIVAN SHAH

BirdLife Seychelles, P.O. Box 1310, Mont Fleuri, Mahé, Seychelles (e-mail: birdlife@seychelles.net)

The Seychelles, an archipelago of 115 granite and coral islands in the Indian Ocean, is home to a number of endangered fauna. Threats include introduced mammalian predators, notably rats and cats. The islands do not hold any native land mammals. Within the granitic Seychelles only four islands were considered rat-free before 1995. In that year, Brown rats (*Rattus norvegicus*) were accidentally introduced to one of these, Frégate island, and the animals quickly became established. This privately owned island of 219 hectares is home to approximately 50% of the world's population of the Seychelles Magpie-robin (*Copsychus sechellarum*), a critically endangered species.

Mid 2000, the Seychelles Government co-ordinated a large project to eradicate rats from Frégate and both rats and feral cats from Curieuse and Denis islands. Curieuse is the fifth largest granitic island (286 hectares) and is part of a Marine National Park. Denis, a small, flat coralline island (143 hectares) is privately owned and operated as a tourism resort. Island managers and BirdLife Seychelles, a local non-governmental organization, were involved in the planning and execution of this costly operation with the Ministry of Environment and Transport. The Government and island owners funded the costs of eradication.

The eradication operation was conducted between June and July 2000 by a team from New Zealand. A helicopter was used to drop poison bait on the islands. The poison used was Brodifacoum which, although highly poisonous to mammals, is less dangerous to birds and reptiles and poses no risk to invertebrates, such as snails or insects. The formulation is designed to minimize danger to birds.

The operation on Frégate posed more difficulties compared to the other islands because of the populations of endemic birds, Seychelles Magpie-robin as well as Seychelles Fody (*Foudia sechellarum*). A small population of indigenous Moorhens (*Gallinula chloropus*) also occurs there. The other islands held seabirds, shorebirds and alien land birds. The sea and shore birds were not at risk from the poison bait. BirdLife Seychelles planned and managed a program to hold all the endemic birds in captivity. The Royal Society for Protection of Birds (RSPB) and the BirdLife Seychelles Avian Ecosystem Management project (funded by the Global

Environment Facility) provided support for the captive management program. Seven BirdLife Seychelles staff members were directly involved in the program with another four providing logistical back-up.

The entire population of Magpie-robins was caught and held in 18 purpose-built aviaries positioned in the territories of the birds all over the island. Over 300 Seychelles Fodies and 10 Moorhens were also kept in captivity. The birds were held in captivity for several months. It was an especially difficult program because of the numbers of birds in cages, the range of specialised skills required for management and problems in sourcing equipment, bird food, veterinary supplies and other materials in the Seychelles. However, the Magpie-robins conditioned well and even bred in captivity. By September 2000 the birds had all been released. They adapted well to freedom. One pair of Magpie-robins started breeding on their first day of liberty. The wild population of Seychelles Fody seems not to have been affected by the poison, although on the other islands alien species such as Madagascar Fody (*Foudia madagascariensis*) and Barred Ground Dove (*Geopelia striata*) were severely impacted.

Eight months after the last poison drop in July, no rats have been seen and the eradication is deemed a success. Feral cats on Denis and Curieuse have also been exterminated. Re-invasion is a possibility and various control measures have been put in place, particularly on Frégate. BirdLife Seychelles, in collaboration with island managers and the Ministry of Environment and Transport, is going ahead with plans for further habitat work and translocation of threatened bird species on Curieuse and Denis islands in 2001 and 2002.