# Kakapo - management and recovery

The kakapo (owl parrot) *Strigops babroptilus* is a large, flightless, nocturnal, parrot endemic to New Zealand. This unique, lekbreeding bird was once abundant throughout the country. Human activity and introduced predators have led to the kakapo's decline. Its population was only 50 birds in 1995. Kakapo breeding coincides with the mast fruiting of Podocarp trees. The birds are now confined to three predator-free islands, off southern New Zealand. Intensive management of the species has raised the total to 86, representing a 72% population increase in 8 years.



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Rimu fruit

### **General management**

To save the kakapo, a dedicated National Kakapo Team was established within the Department of Conservation, with strong support from our sponsor, Comalco.



Feeder

Attaching a transmitter

#### **Key techniques**

#### Telemetry

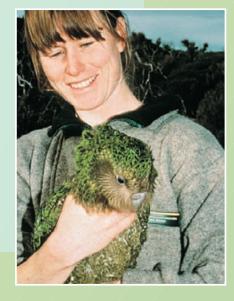
All birds wear radio transmitters so their movements can be monitored.

#### Supplementary feeding

Most birds receive supplementary food to improve their condition and induce breeding; and to assist the females in providing for their chicks. At feeding stations, dataloggers record the presence and weights of individual birds. This allows a better understanding of the birds' condition and manipulation of food allocations accordingly.

#### Fertility testing

Increasing the fertility of eggs has the potential to greatly increase the kakapo's rate of recovery. The technique of electro-ejaculation has been used to test the viability of male sperm. Infertile males are translocated to another island: their removal from the breeding population avoids fruitless competition with fertile individuals.



### **Breeding season management**

#### Nest management

Nests are found by using careful telemetry (radiotracking of females).

Eggs are candled to assess their viability. Infertile eggs are removed to induce females to double-clutch.

Eggs are transferred between nests to ensure that each female hatches no more than two chicks, and that the young are of equal age.

Nest chambers are modified when necessary, to enable monitoring and intervention in an emergency.

All nests are monitored day and night, with the females' activities videotaped so that any anomalies can be detected.



Volunteer nest minder



Modified nest

Hand feeding

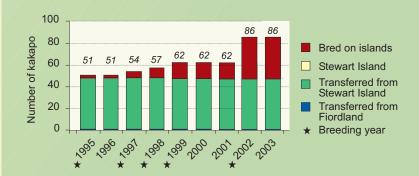
#### Chick health

Chicks are weighed regularly. The data are used to determine normal growth curves and establish thresholds from which chick health and development can be assessed and managed.

Underweight chicks may require hand-raising before being returned to the wild.

## **Progress on recovery 1996-2003**

- 21 new females
- 17 new males
- 72% increase since 1996



At this point all targets of the Kakapo Recovery Plan 1996-2005 (published in June 1996) have been exceeded.

