

More Wild Echo Parakeets Found

Report from the Echo team

The 1996/97 Echo Parakeet *Psittacula eques* breeding season in Mauritius is shaping up to be most successful.

Field work started one month earlier this season (August rather than the usual September) to search suitable areas of the Black River Gorges National Park for Echos. Large areas of the Park had not been surveyed for breeding Echos before. So far we have located four previously unknown breeding groups which exceeded all expectations. We have also found two new breeding groups within the known breeding range. This brings the number of active wild breeding groups to 13, almost doubling the seven known last season. Further breeding groups may still be discovered as we have not yet searched all potential areas.

The Mauritian Wildlife Foundation (MWF) (recently renamed) has made the Echo their priority project for the season. The field team is led by Rachel Shorten and Mike Thorsen from New Zealand who both worked with the Echos last season and have both worked on the Kakapo *Strigops habroptilus* programme in New Zealand. The other team members are Graeme Buchanan from Scotland who also worked with Echos last season, Sam Williams from England who breeds parrots and is about to embark on a university degree, and Vicky Jones from England who worked for MWF with Pink Pigeons for the past year. Vicky is funded from money donated by the *World Parrot Trust USA* and this extra help has certainly proved necessary. Other MWF staff are on call to help out if needed. All our work is carried out in close collaboration with the Government (National Parks and Conservation Service).

FUTURE ACTION

The main focus of the project is to maximise Echo productivity. To achieve this the following actions will be undertaken:-

1. Locate all wild nests. All nests are then rigged with climbing gear, and if necessary, the entrances enlarged or access doors fitted to allow us access.

2. First clutches are removed from selected breeding groups with the purpose of initiating double clutching. The progeny from these harvested clutches will either be hand-reared or raised by Ringneck



Echo Parakeets in the wild: male on left, female on right.

Photo: T. Lovegrove

Parakeet foster parents at the Gerald Durrell Endemic Wildlife Sanctuary (GDEWS). Second clutches will be left with the parents to rear.

3. Each wild nest will be restricted to a maximum of two nestlings as wild Echo parents seem unable to rear more than two chicks. Any surplus will be redistributed to other wild nests or reared at GDEWS. Every effort will be made to ensure all wild nests fledge at least one chick even if we have to supplementary feed the chick in-situ.

4. All active nests are monitored daily. Nestlings are weighed, inspected for nest fly larvae and general health noted so we can intervene if there are any problems.

NESTS TREATED

5. Nest linings are changed every three days during the nestling phase. This lining consists of hardwood shavings treated with insecticide (to protect against parasites) and fungicide. Cavities are also weather proofed where necessary.

6. All active nests are intensively protected from predation by rats by a poison grid extending 100 metres from the nest tree, and saturating the area around the nest tree with snap-traps.

7. The first release of captive reared Echo fledglings is planned for December-January. This will be undertaken by Kathryn Murray from England who trialed the techniques using Ringneck Parakeets last season.

8. If possible we would like to manipulate wild nests so they fledge as many female chicks as possible

in an attempt to rectify the current sex imbalance of 2.4 males per female.

9. As many Echos as possible will be captured and ringed with unique colour combinations for future identification. As the same time blood samples for disease screening, genetic studies, and in the case of nestlings, sexing are also taken.

10. Jim Groombridge at the Institute of Zoology in London is undertaking a PhD thesis on the genetics of Echos, Pink Pigeons, and Mauritius Kestrels to look at population genetics and the effects

of population bottlenecks. This information will allow better genetic management of the wild population and may also give an indication of the roles of 'extra' males in the breeding groups.

11. Dr Andrew Greenwood of the International Zoo Veterinary Group, WPT's consultant vet and consultant to the Echo Parakeet project, will again be visiting the project in December.

THANKS TO WPT

A very large thanks to the WPT for their support both financially and advisory over the past seasons and hopefully into the future. The progress made over the last few seasons has been substantial, which has been due to the support of the WPT.

As of 20th October 1996 seven of the wild breeding groups have laid. Four of these clutches have been harvested, the eldest two eggs have just hatched at the GDEWS and the next two are pipping. We expect the first chicks in the wild in two weeks. Echos do not appear to have any fertility problems: so far all the eggs have been fertile.

Here's hoping the good season continues. Further updates will be sent as the season progresses.



A member of the Mauritius team climbs to inspect a nest cavity. Photo: A. Greenwood