# NEW TEAM TACKLES WORLD'S RAREST PARROT

By Paula Harris

Efforts to save the Echo Parakeet have intensified in the aviary and in the wild with the appointment of two senior biologists to the project.

Kirsty Swinnerton did not have to travel far to take up her new post as manager of the Mauritius government's aviaries at Black River. She simply descended from the campsite in the Macchabe Forest where, since 1988, she has led the field team reintroducing captive bred pink pigeons back into the wild, as well as monitoring and managing the remaining wild population of the aptly named Pigeon Wood. When Kirsty arrived in Mauritius from the U.K., the wild population of pink pigeons numbered less than 20 and the first attempt to reintroduce pink pigeons into the island's Royal Botanical Gardens had been abandoned when the pigeons were killed by predators ranging from mynahs to young boys with slingshots.

Captive populations in Black River and at the Jersey Wildlife Preservation Trust were well established, however, so Kirsty began new releases in a remote location and launched a programme of predator poisoning and supplemental feeding for the free-living birds. By the spring of 1993 the population had increased threefold, over 50 free-living captive bred pigeons had been returned to the wild and had themselves bred a new generation of wild pigeons - at least 20 at the last count! Kirsty has also had years of hands on aviculture experience, first at Twycross Zoo and later coaxing captive pigeons to breed and rear their own chicks in Black River. Now she will manage breeding programmes for the pigeon, Mauritius kestrel, Rodrigues fruit bat and the Echo Parakeet.

Kirsty takes over the running of the aviaries from Dr. Leslie Smart who spent a year working on the project. Leslie did detailed studies on the nutrition of the parakeets with Monica Wroebel, a Canadian Zoo Biologist. The work of Leslie and Monica has left some sound management techniques which Kirsty can now develop.

*Kirsty Swinnerton meets a friendly cockatoo at Paradise Park.*

## Echos Breed in Captivity for the First Time

After a brief autumn holiday (including a visit to World Parrot Trust Headquarters at Paradise Park) Kirsty returned to Mauritius to take up her new post and found herself instantly confronted with a challenge. Only three of seven captive Echo Parakeets survived when disease swept through the Black River aviaries last spring, but two birds were an established pair just approaching breeding age. Recently they laid two eggs. Both proved fertile and both hatched, but one bird was obviously sickly and died within days. Watching the adult birds closely, Kirsty could see that they were parenting poorly and the surviving chick was getting little to eat. Hoping to encourage the parents to rear the chick, but anxious to ensure it received adequate food, Kirsty spent several days and nights removing the chick for supplemental feeds and returning it to the nest. Sadly the adult parents did not improve and the chick became very feeble.

In the past, Echo eggs and chicks taken from the wild have been successfully reared by foster Indian Ring-necked parakeets. When World Parrot Trust veterinarian Andrew Greenwood visited the aviaries following the Echo deaths in April, his test results showed Gram negative bacteria and polyomavirus in some of the Ring-neck parakeets. University of Georgia lab results on samples taken from the dead Echos suggest two birds were negative for disease, but two tests were inconclusive and will be run again.

Kirsty faced a terrible dilemma: disease in the Ring-necked birds may be contributing to the Echo mortalities, so it would be unwise to give the newly hatched Echo to the Ring-necked parakeets for fostering, but fostering may be the only chance to keep the chick alive. Late night decisions were taken with Andrew on the telephone. Since the Echo parents themselves had been reared by Ring-necked parakeets, the diseases (if any) may already have been transmitted to the chick. Little further harm could be done by foster parents. The Echo chick is doing well under the Ring-necked fosters and Kirsty hopes removal of the chick may mean the adults will cycle again.

## World Parrot Trust Funds Field Biologist

*The second new member of the Echo Parakeet team travelled from New Zealand to manage the wild population as the World Parrot Trust's field biologist. We asked Tim Lovegrove for his first impressions of the project:*

## From Kakapo to Echos

In mid September I joined the team on Mauritius where I am running the field programme to conserve the Echo Parakeet. During the past year I assisted with the Kakapo conservation project on Little Barrier Island in New Zealand. My previous experience in endangered species work has included island translocations of endemic New Zealand passerines, a PhD study of the effects of introduced predators (especially rats) on the saddleback (an endemic New Zealand wattlebird now confined to predator-free islands); and surveys of threatened forest birds on several islands in the South-west Pacific.

In contrast with Kakapo, in which the 50-odd surviving birds have been translocated to safe island sanctuaries (where the only potential predator is the small polynesian rat), the Echo has to be managed in the degraded forests of mainland Mauritius, where the birds face a suite of potential predators. Unfortunately, at present Mauritius has no suitable offshore islands to which Echos could be translocated. Mainland management involves the use of various lifeline conservation measures such as predator control, habitat enhancement (e.g. provision of artificial nest sites, as well as fixing old ones which have fallen into disrepair), supplemental feeding and where necessary, brood manipulation and captive rearing.

*Andrew Greenwood and Carl Jones in the aviaries on Mauritius.*

The mere fact that the Echo has managed to survive for so long on Mauritius in spite of the degraded habitat and predators such as ship rats, monkeys, mongooses and feral cats suggests that it is something of a tenacious survivor. It may be that manipulation of just one or two factors could be sufficient to tip the balance in favour of the wild Echos.

Although the existing forest is overrun with woody exotics, I believe there is sufficient habitat for many more birds than currently exist (15-20 according to Kevin Duffy, my predecessor's most recent estimate). Although there are fewer Echos than Kakapo, I think that the potential for recovery is much greater, mainly because they can breed every year.

Clearly it is important to ensure that every nesting attempt in the wild is successful. Ship rats are the prime culprits as nest predators, and an all-out effort is currently underway to reduce rat numbers (by poisoning and trapping) in the known territories of nesting pairs. Anti-coagulant poison has been laid in special bait stations (designed to reduce take by non-target species), for up to a month before the birds are expected to lay. The poison is laid on 50 x 25 metre grids placed out to 100 metres on all sides of the nest trees.

At present three pairs of Echos are being closely managed, but there are two other pairs in the same part of Macchabe Forest. The locations of their nest trees are unknown at present. We are endeavouring to locate these so that predator control can be initiated. However, locating Echo nests is not easy, because the birds are extremely secretive near their nest. The birds can be very silent and they do not flush easily. Thus the birds and their nests are very easily overlooked. Much perseverance, and perhaps a good measure of luck is needed to locate them.

For the next five months I will be assisted in the work by a Danish biology student, Line Wadum, who will be studying aspects of the conservation work (e.g. predator control, nest site enhancement and manipulations), and breeding ecology for her thesis. When Line returns home, she and her partner Michael Iversen will continue to develop a new branch of the World Parrot Trust in Denmark.

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*Looks a bit like a dog's breakfast, but this is actually the rarest parrot in the world.*