

ACTION FOR THE CONSERVATION OF THE ENDANGERED SWIFT PARROT *Lathamus discolor*

by David Waugh

In 2010, a team began conducting research into the breeding biology and migratory behaviour of the Swift Parrot *Lathamus discolor*, in order to obtain information essential for the effective conservation of this endangered species. The project is supported by the Loro Parque Fundación (LPF) and the Australian Research Council and is being undertaken by Prof. Robert Heinsohn of the Fenner School of Environment and Society, the Australian National University, and team members Dr Debra Saunders and Dejan Stojanovic. The project's objectives include documenting critical aspects of the breeding biology and ecology of the Swift Parrot in relation to land management and, especially, forestry practises.



Dejan Stojanovic

Swift Parrot at nest entrance.

A lot of important data was obtained during the past breeding season, which generated substantial interest amongst key stakeholders in the conservation of the Swift Parrot. Work on its breeding requirements, including its choice of nesting hollows and food sources, was especially successful, with 21 nests being found. During the past breeding season, due to the widespread occurrence of flowering trees throughout the region, Swift Parrots nested across a large area of south-eastern Tasmania. Because of the extent of the flowering and the small size of the parrot population,

*Dejan Stojanovic*

Juvenile Swift Parrot.

nest densities were low and nests took time to locate. The 21 nests were found across an area stretching over 300km (approx. 186 miles). The team monitored the growth of the 53 nestlings and found that 96% of the chicks fledged. The results show that the nestling period is approximately 35 days and the average clutch consists three to four chicks. Crop samples collected from nestlings revealed that, contrary to the assumption that the Swift Parrot is mainly nectarivorous, the parents feed a high proportion of invertebrates to the nestlings.

All of the nests were in cavities with specific characteristics and a comparison was made between the trees and tree cavities used for nesting and those that were not used by the birds. The results suggest that the parrots significantly prefer to use large, old trees for nesting, and that these trees have more hollows. Furthermore, the parrots prefer to nest in hollows which are deep and wide, but have a small entrance. The researchers found that survey techniques used to search for tree cavities in Tasmanian forests are prone to error and are planning improvements which will help in the conservation of the Swift Parrot.

Blood samples were collected from the 53 nestlings and screened for psittacine beak and feather disease (PBFD). The results showed that one chick had been exposed to the virus (circovirus). This chick had been

exposed to a strain of the virus typically carried by the Sulphur-crested Cockatoo *Cacatua galerita* and the nest in which the chick was found had been subjected to severe flooding due to rain. The low rate of exposure to PBFD during the past breeding season will be compared to successive seasons for a better interpretation of the dynamics of disease in this species. During the next breeding season the researchers will, for example, collect samples of substrate from Swift Parrot nests as part of an investigation into the possible transmission of PBFD between parrot species which use the same tree cavity successively over the course of a breeding season.

Another important objective of the project is to develop techniques for tracking Swift Parrots, in order to determine better how they locate their food sources and other resources. To this end, the researchers successfully undertook the first trial of transmitters, which they attached to Swift Parrots living in aviaries at Adelaide Zoo.

The aim of the trial was to identify a tracking device which can be safely deployed on breeding adult Swift Parrots, to obtain accurate data from which to interpret the behaviour of breeding birds. Three transmitter designs, each using ultra-lightweight materials - one collar and two backpacks of different weights - were tested on different groups and there was a control group, the birds of which did not have a transmitter attached. No differences were observed in the bodyweight or the condition of the birds in any of the groups - either those with transmitters attached or those of the control group. These trials clearly showed, however, that the collar is more suitable than either of the backpacks. It can be attached in only one minute and, furthermore, the bird does not bite the transmitter and there is very little risk of it becoming entangled in vegetation. Further modifications to the design will reduce the overall weight of the transmitter, in readiness for tracking Swift Parrots in the wild using this highly innovative technology.

Dr David Waugh is Director of the Loro Parque Fundación, Loro Parque, Tenerife, Canary Islands, Spain. Website: www.loroparque-fundacion.org

SUCCESSFULLY BREEDING THE LILAC-BREASTED ROLLER *Coracias caudatus*

by Dick Jaquest

For more than 25 years we have been breeding waterfowl with some degree of success in our back garden. However, several years ago during a storm the power went off and so did our electric fence. The family of foxes living next door had a field day killing some 20 of our birds, including one of the best breeding pairs of New Zealand Brown Teal *Anas aucklandica* we had ever had.

As a result, we realised that we had to rethink how we house our collection. Those of you who have seen it, will know how difficult this was for us, as we live in a very congested residential neighbourhood, where we are surrounded by six other houses.

The first thing we did was to invest in a very expensive Gallagher PowerPlus MR2500 energizer (to provide electric current) and, just to be on the safe side, we bought a second one in case the first should fail. Our next step was to house some of our birds, such as the African White-backed Ducks *Thalassornis leuconotus*, New Zealand Brown Teal, full-winged Hottentot Teal *A. hottentota* and whistling ducks *Dendrocygna* spp. in aviaries.

In a small garden such as we have, space is at a premium, so in order to make the best use of as much of the space as possible, we decided to keep some smaller birds in the aviary, and chose a species which would nest high up. Hoopoes *Upupa epops* were our first choice, but following a few accidents, it soon became clear that it was not a good idea to keep such long-beaked birds in this aviary. It was 24ft x 8ft x 10ft (approx. 7.3m x 2.4m x 3m), but we have Herring Gulls *Larus argentatus* living on the roof of our house and, they scared the Hoopoes so much, that on two occasions they flew into the wire and broke their beaks.

The next birds we obtained were some full-winged Madagascar Teal *A. bernieri*, which proved to be a bad decision, because after living with African Pygmy Geese *Nettapus auritus* at their original home, on arrival here they promptly killed our pygmy geese.

We then decided to try Lilac-breasted Rollers *Coracias caudatus*. The first two birds settled in very quickly and got on well together and were fun to watch, but failed to produce any eggs. We had no idea how old they were and, to be honest, were not absolutely certain that they were a true pair, although they had been seen feeding each other with mealworms, etc., and we were pleased to have them.

We had been toying with the idea of getting a second pair, but before we



Dick Jaquest

Brooding two small chicks and an unhatched egg.



Dick Jaquest

The chicks seem unaware that the parent has arrived back at the nest with food.



Dick Jaquest

Watched by the photographer, the parent feeds one of the rapidly growing chicks.



Dick Jaquest

Taking a mealworm from the hand, watched by three African White-backed Ducks.

had got any further with this idea, we woke one morning to find one of the first pair dead in the pond. We found that the dead bird was a female and began to look for a replacement. A company in the Netherlands had a female available, so we made arrangements to bring her over to the UK.

It was not difficult to divide the aviary into two, and we housed the new female on one side and the male on the other side for about a week and allowed them to get used to each other. At the weekend we removed the partition separating them and both of us took turns to watch them and see that nothing went wrong. Sadly, however, a couple of weeks later the male killed the female.

A few weeks passed and after advertising everywhere we could think of for another female, we were offered a pair which we were told was old and had been together for some time but had never laid any eggs. The pair was housed in the second of our aviaries. I tried splitting them up and putting the female with our original male, but it soon became very obvious that this was not going to work and so I reunited the old pair. To our great surprise, shortly afterwards the first eggs were laid and we were even more surprised to discover that they were fertile. The very first youngster to be hatched was a male. Although we were obviously delighted, we would have preferred it to have been a female, which was what we needed.

We continued to search for another female for three years. Then, we were given hope, when we received a phone call from Birdland, which had a female and was looking for a male in order to make up an unrelated pair. It was a three-hour drive to Birdland, but proved to be well worth it. The new female and our original male were housed in separate aviaries for approximately two to three weeks to get used to each other and were then put together in the original aviary. Within six months of being introduced to each other, the first eggs were laid. The pair later produced a second clutch of eggs and the other pair also produced a second clutch of eggs, which resulted in us being able to set up further unrelated pairs.

Only a quarter of the roof of our aviaries is covered, but the sides facing the sea are screened to shelter the birds from the wind. The aviaries have two heated boxes, but the birds never use these even during the cold weather. The nest boxes are placed as high as I can get them and the birds have a choice of at least four boxes. Our pairs move from one nest box to another each time they nest. For perching I use hemp rope and natural branches and give the birds plenty of space in which to fly around.

When we believe the young are old enough, we remove them from the nest box and take samples for DNA sexing and place two sets of rings (bands) on each bird. This saves us from catching up related birds when we are trying to pair them up. At the same time, we clean out the nest box and

refill it with fresh, clean material and clean it out again a few weeks later. This does not worry the parents or the young.

As the accompanying photos show, the parents appear happy for us to watch them feeding their young. I feel that this is important, as it helps us check that all of the chicks are being fed and there are no problems. In the past, if I felt a chick was being neglected, I have fed it whilst the parent was feeding the other chicks.

The diet fed to our birds consists of Whiskas cat food in jelly (with the jelly removed), soaked puppy and small bite mixture pellets, mixed with Witte Molen insectivorous food, with the jelly from the Whiskas added and then topped with large and small mealworms. Each day during the summer each roller also gets a pinkie mouse. If one of the birds is not quick enough, this will be stolen by its partner, so we have to make sure that the birds get just one each.

Up until now (2011) we have bred nine Lilac-breasted Rollers, one of which was killed, we believe, by a Sparrowhawk *Accipiter nisus*, when the young female roller was perched close to the roof of the aviary and, sadly, the very old male died whilst in the nest box with chicks. The female is now paired with an unrelated young male (a toy boy!) and the two seem quite happy together.

Dick and Kay currently have some spare males which they would consider swapping for one or even two new females to make up further unrelated pairs.
E-mail: d-jaquest@toucansurf.com/Website: www.ornamentalwaterfowluk.co.uk/Tel: 01273 584737/Mobile: 0785 1190176.

* * *

CZECH VISIT

The society has arranged a trip to the Czech Republic. The departure date is Friday, September 14th 2012, followed by a visit to Prague Zoo on Saturday, September 15th, Plzen (Pilsen) Zoo on Sunday, September 16th and to a private collection on Monday, September 17th, before returning home later that day. Further information about the collections to be visited can be obtained from Mike Curzon. E-mail: mcurzonmbe@hotmail.co.uk/Tel: 01373 824077. Details of the travel arrangements, accommodation, costs and booking information are available from Karli Lisiecki, Howard Travel, 12/13 Church Walk, Trowbridge, Wiltshire BA14 8DX. E-mail: karli@howardtravel.com/Tel: 01225 777227.

A BIRD EXTRAVAGANZA WITH A FRENCH ACCENT

by Pierre de Chabannes

Most French zoos and animal parks rarely have more than 50 species of birds and these consist mostly of common species such as ostriches, rheas, macaws, pheasants and ducks. Having a park devoted entirely to the wonderful world of birds seemed at first fairly unusual, but the Parc des Oiseaux de Villars les Dombes - Villar des Dombes birdpark - created in 1970 and located a few kilometres (miles) from Lyon (France's second largest city) was up to the challenge and within a few years became one of the most beautiful and interesting animal parks in France. Today, it houses more than 2,000 birds of 400 different species on a 35 hectares (approx. 86 acres) site located in the centre of a legally protected area of natural marshes and lakes known as Les Dombes.



Pierre de Chabannes

Australian Shoveller.

The tour of the park begins by a pond surrounded by aquatic vegetation, which is home to a large breeding group of Caribbean Flamingos *Phoenicopterus ruber*. The flamingos share this with a number of other species which occur in the Caribbean and South America, such as White-faced Whistling Ducks *Dendrocygna viduata*, Fulvous Whistling Ducks *D. bicolor*, Bahama Pintails *Anas bahamensis*, Chiloe Wigeon *A. sibilatrix*, Ruddy Ducks *Oxyura jamaicensis* and the most prolific breeding group of Argentine Ruddy Ducks or Lake Ducks *O. vittata* in any zoological collection in France.



Waugh, David. 2011. "Action For The Conservation Of The Endangered Swift Parrot Lathamus Discolor." *The Avicultural magazine* 117(4), 166–174.

View This Item Online: <https://www.biodiversitylibrary.org/item/253063>

Permalink: <https://www.biodiversitylibrary.org/partpdf/314775>

Holding Institution

Smithsonian Libraries and Archives

Sponsored by

Biodiversity Heritage Library

Copyright & Reuse

Copyright Status: In Copyright. Digitized with the permission of the rights holder

License: <https://creativecommons.org/licenses/by-nc-sa/4.0/>

Rights: <http://www.biodiversitylibrary.org/permissions/>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.