Loro Parque, Tenerife

May 2008



Recently hatched Pesquet's Parrot (*Psittrichas fulgidus*)

Now the breeding season is approaching its climax. Over 400 youngsters have been already ringed, and a lot of eggs have been laid. This year we would again like to present some highlights about this.

A special surprise was the number of eggs laid by the St. Vincent Amazons (*Amazona guildingii*). There were three of them, but all infertile. The birds are still producing eggs, so we hope the next clutch will be successful.

The mentioned egg-laying of the Greynaped Amazons (*Amazona mercenaria*) of last month resulted as partially successful. Just two of four eggs were fertile. One of them was unfortunately bad, but one chick survived and now is growing in the baby station of Loro Parque.

Meanwhile, his parents are about to produce the next clutch of eggs, which they are going to incubate and rear themselves. Gratifying was also the hatching of two young Salvin's Amazons (*Amazona autumnalis salvini*), the result of an old pair which after a long break from breeding started again. They laid two eggs, both of them fertile, and the chicks have already hatched.

Our Lear's Macaws (*Anodorhynchus leari*) suddenly started to breed again. After their breeding last year, with two chicks adopted by other parents and one chick being raised by themselves, these macaws produced three new eggs. They all were fertile, but two of them were so damaged with small holes and partially squashed, that the embryos could not survive in spite of some repair work on the egg-shell. No one chick has hatched and is being fed by hand. His hatch weight was 21,7 g. Today he is 13 days old and his weight is approaching 143 g., that's to say, 6 times more than by his birth weight.

After a short period the same pair of birds

had another round of breeding, where all the eggs were fertile. Two eggs were damaged as before and also got some help with glue on the egg-shell. However they died too. The other two eggs developed very well and are now together with their adoptive parents. This pair of Green-winged Macaws (Ara chloroptera) will rear the chicks after their hatching. This experienced older breeding pair, as well as rearing its own chicks, last year raised two Buffon's Macaws (Ara ambigua), these chicks being green, and the year before red! This year the babies are expected to be coloured blue. Usually, small pink featherless macaw chicks all look almost the same. The parent-offspring relationship of these birds is normally so strong, that if the chicks later develop another colour, the parents do not have any problems with the rearing. All of the adoptions have been successful

In April the 10th Workshop of Parrots took place in Loro Parque in collaboration with Papageien magazine. Almost 40 participants stayed for one week in Loro Parque, each wanting to learn from our biologists and veterinarians the latest in the treatment, breeding and diseases of parrots. There were some special guest presenters such as Mr. Thomas Arndt from Germany, the publisher of Papageien magazine, as well as Bernd Marcordes, the curator of Cologne Zoo. For the first time, all of the participants had an opportunity to give a small presentation of their own work with parrots.Thus it was a collaboration with a really good result for both the participants and the organizer of this event. There was a lot of detailed discussion about the parrots and some new aspects about this topic, and the event was also very important for the development of connections.

> Dr. Matthias Reinschmidt, Curator, Loro Parque Tenerife

Vogel Park (Walsrode Birdpark)

June 2008

The breeding season is in full progress and numerous young birds can be seen everywhere in the park, but it is in particular behind the scenes that things are really busy at the moment. More than a third of our birds are kept off-exhibit for breeding purpose.

The notes below are a short summary of some of the developments in May:



The Bewick's Swan (*Cygnus colombianus bewicki*) incubated and hatched four young.

The Bewick's Swan (*Cygnus colombianus bewicki*) incubated and hatched four young. This was good news as most of the other Swan species in the Park has been unsuccessful this season.

Nest-controls revealed that the colony of White-faced Whistling-ducks (*Dendrocygna viduata*) has produced more than 60 fertile eggs up until now. As it will be a significant problem for the park to surplus all of these ducks a restriction of the breeding has been introduced by puncturing a large number of the eggs in the nests.

The single chick produced by the Magellan Goose (*Chloephaga picta leucoptera*) is quite enough as this species is notorious for their aggressive behaviour, as any visitor coming too close to their enclosure will experience first hand. Placing the offspring can therefore be somewhat of a problem as they will invariably try to terrorize any other bird in the same enclosure.

African Pygmy-goose (*Nettapus auritus*) male died the third loss in this species over the past few months putting our breeding-population at jeopardy. In the recent years breeding with this species has been rather successful in Walsrode, however only a single male chick was reared this year and we also lost the old main breeding female which lived for more than 25 years in Walsrode Birdpark. We now hope that a younger female will prove to be just as prolific in the long term.

Northern Cormorants (*Phalacrocorax* carbo) were among the first birds on the large ponds to start breeding behaviour, only minutes after being released from their wintering-quarters in March they started gathering nesting material and place it in the nest baskets. Currently the three pairs are rearing 11 chicks together. The pairs consistently favour the same nesting-site year after year even though the baskets are exchanged before

every spring.

In contrast to last year were the Secretary Bird (*Sagittarius serpentarius*) produced only a single egg clutch they this year incubates a clutch with two eggs. In the previous season the pair successfully reared the one chick with out any interference. The nest-site was directly on the ground which is rather unusual. The chicks are expected to hatch in the first days of June and this year it will be a challenge for



the keepers to monitor if the parents will be able to rear both chicks.

For the first time all pairs of cranes which is exhibited in the park actually nested simultaneously, not all were successful in there efforts but it was interesting for the visitors to be able to directly compare the nesting behaviour of 9 different cane species. As the fertility in different eggs are determined it is part of our management to relocate fertile eggs from genetically important birds to be fostered by other pairs that are having infertile eggs or perhaps are less important for the breeding programmes. This allows us to reduce the need for hand-rearing in cranes quite significantly. This is unfortunately not quite possible to ovoid all together, in some cases chicks must be removed when there is a health problem and not all the parent birds prove to be perfect parents. These few birds in the hand-rearing also allow us to maintain the skills needed for this aspect of the breeding.

Several Cranes are still being artificially inseminated this is particular important in the birds that are pinioned and therefore not able to mate successfully themselves. During this



spring two Grey Crowned-cranes (Balearica regulorum gibbericeps) two Red-crowned Cranes (Grus japonensis), one Hooded Crane (Grus monacha) and four Demoiselle Cranes (Anthropoides virgo) hatched so far.

Predator control is an important aspect of daily management in the birdpark but what to do when the predator is a protected species? We were both pleased and worried to discover that wild Great Eagle-owls were present in the park. These fantastic owls are making a comeback in the German landscape after being present only in low numbers for decades. An abandoned nest-mould was detected in one of the play-grounds of the park.

The only reason that we are not entirely pleased with this news is that Great eagleowls seem to have a particular liking for Waterfowl. The discovery leaves us with no other choice than providing the Waterfowl with sufficient cover. On two very dark nights we lost two Greater Flamingos (Phoenicopterus ruber roseus) the necropsy proved that they had been killed by a Great Eagle-owl. Thereafter the Flamingos were provided with housing for the night which they somewhat reluctantly accepted.

The Cuckoo species have also started breeding

The Roadrunners (Geococcyx californianus) are very actively displaying and nest-building however the pair does not incubate their eggs well which is why they must be incubated artificially and subsequently hand-reared. The young Roadrunners are placed in a brooder at fairly high temperatures around 37 centigrade 24 hours after hatching. The steady diet for the young, which are fed every two hours by their surrogate parents, are based on pinky Rats. Initially only the inner organs are fed and as the chicks grow older additional diet items are gradually added to their diet.

The hatch of the first Giant Silky-cuckoo (Coua gigas) of this year was exciting news that quickly turned into disappointment as the chick died a few days later. However a follow up clutch were laid and this time the chick seems to thrive and is growing at a stunning speed in the hand-rearing station.

The Sunbitterns (Eurypyga helias) were disturbed on their nest by aggressive tropical ants that have been unintentionally introduced to the Tropical house many years ago. The single egg was pulled for artificial incubation and the chick hatched in mid-may. The young Sunbittern displays many behaviours and postures that we otherwise only see in adult Sunbitterns. It is quite unusual to see the small chick barely 6-8 centimetres long standing in its nest cup with its wings spread in defence-display. The Kagu (Rhynochetos jubatus) which based on recent studies seem to be the nearest living relative of the Sunbittern were also scheduled to hatch this month, but unfortunately the chick died just before hatching.

The two European forms of Kestrels the Common Kestrel (Falco tinnunculus) and Lesser Kestrel (Falco naumanni) physically resemble each other but are strikingly different in behaviour. The semi-colonial Lesser Kestrel feeds mainly on insects where as the territorial Common Kestrel is a specialized rodent hunter. Both species currently breed in the birdpark normally both species also rear the young on their own accord without problems but unfortunately one of the male Lesser Falcons died just before the chicks in the nest he was attending were due to hatch. We decided to pull the eggs and hand-rear the young. Simultaneously the Common Kestrels



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Male Lesser Kestrel

Northern Hawk-owl (Surnia ulula) chicks, bred only sporadically at the Walsrode Birdpark.

decided to lay the eggs on the ground in their aviary and their eggs were also pulled for artificial incubation.

In both species the rearing is straight forward however it is crucial to provide the birds with the opportunity to socialize with their siblings. The main differences in the two species during rearing are the activity level. The Lesser Kestrels are much more active and vocal throughout the nestling-phase. We also discovered that the Lesser Kestrel can be easily sexed on hand of the upper-tail coloration with less than 4 weeks of age. Males develop a grey coloration whereas females remain barred brown on the tail.

A new arrival in May was three pairs of Black Crakes, (*Limnocorax Amaurornis*) flavirostris not the first time this species was kept in Walsrode but a species that has been absent from the collection since the '70s. This small African Crake is completely black with a stunning yellow bill. They are active birds that mostly move around in the vegetation at ground-level however the quickly mover to higher ground if disturbed. The Birdpark have started an initiative with the Copenhagen Zoo in Denmark and the Antwerp Zoo in Belgium in the effort to set up several unrelated pairs of this attractive species for the purpose of long term population management.

A pair of Common Mynahs (*Acridotheres* tristis) started nesting completely unnoticed

by their keepers. This phenomenon is typically for many Starlings. The parent birds leave the nest with the slightest of disturbance and particularly when they hear the sound of the keeper pulling his key-chain out of his pocket to enter the aviary complex. This way the only indication of the Mynahs reproduction effort was the discovery of a dead chick on the ground of the aviary. For the rearing of young Starlings it is generally imperative to add additional rations of live food several times a day. The discovery of the dead chick allowed us to get ahead on developments and the two siblings are well taken care of by the parents, at least they look well fed and content with 4 additional meals a day provided in the aviary, however it was still not possible by the keepers to observe the parents actually feeding the chicks in the nest due to their secretive behaviour.

Northern Hawk-owl (*Surnia ulula*) has only been bred sporadically at the Walsrode Birdpark in the past and is a very rare owl in European aviculture and zoos. This interesting owl is distributed in the far north. Similar to the Snowy Owl (*Nyctea scandiaca*) their eye-sight is well adapted for the long hours of daylight in the summer. Therefore the Northern Hawk-owl can be considered almost diurnal and in the park remain one of the most active owls in the daytime. This year two pairs of Northern Hawk-owls started incubating simultaneously, one off-exhibit and the other in the new Owl-castle in the Birdpark. The female from the off-exhibit pair developed an eye infection during incubation and had to be removed for treatment. At the same time the eggs were removed for artificial incubation and hand-rearing. Also the pair in the park experienced problems. As their nest-box became loose, they abandoned their clutch and we had to remove the eggs.

The hand-rearing of the Northern Hawkowl was reported as notoriously difficult and no reference was available for their rearing protocol. We decided for a progressive feeding strategy, due to the high level of activity in this species, and fed the chicks every two and a half hours for the first 5–8 days, which is unusual in owls. The strategy paid off and the young owls developed well due to a good start, however we found it to be important to reduce feedings drastically after the first 5 days down to 4 feedings a day which became the chicks well. The main food for the young owls was young rats portioned in suitable sizes.

July 2008

The Starlings and Mynas (*Sturnidae*) is a very interesting and modern Family of Passerines with a series of adaptations that have enabled some of the species to be among the most successful bird species in the world. Rare in Passerines, most Starlings walk instead of

hopping and as a rather unique feature that they share only with Corvids and some Icterids is the fact that they often use their bill to pry open any crevices by inserting their closed bill and then open the mandibles. Many Starling species are adapted to the open landscape particularly grasslands where the use this method to search in the ground for insects and earth-worms.

The European starling (*Sturnus vulgaris*) and the Common myna (*Acridotheres tristis*) are particularly well known for their ability to settle in the vicinity of man and their Live-stock. They benefit from the human activities and therefore have been able to spread their distribution and prosper as a species. As invasive species particularly the Common myna and the European starling are causing devastation to native bird species which have problems with the competition for food and nesting sites. The Common myna are very frequently seen around livestock in pursuit of insects and will happily nest around human settlements.

Other species are strongly adapted to a forested habitat and some are restricted to remote and undisturbed forests. Among the



best known forest species are the Hill-myna (*Gracula religiosa*) revered for their ability to imitate human speech they still belong to the more primitive species

in the family of Starlings. Most of the forest dwelling species are so dependent on their dwindling habitat that they are becoming increasingly scarce in numbers and several may become endangered faster than we would like to think, a well known example of a severely threatened starling species is the Bali-myna (*Leucopsar rothschildi*).

The classic Glossy Starlings have their distribution in Africa this is a highly diverse group of birds with the most incredible metallic colours that can be imagined. The gloss effect is not caused by pigmentation but be feather structures that reflect the sunlight in certain colours. The Superb glossy starling (*Spreo superbus*) from East Africa is a well known savannah bird often seen around villages or at tourist sites. They are also well known in aviculture and breed quite readily if a compatible pair is found. Like most starlings the utilize





crevices or nest boxes but this species is also perfectly capable of building a domed nest of twigs with a lining of grass and mammal hairs freely suspended in a tree or bush. The Golden-breasted glossy starling (*Cosmopsarus regius*) are said to be among the most beautiful Far left, a Bali-myna. Above, a Yellow-faced myna. At left, a Sulawesi king starling.

birds although previously frequently imported they seem more delicate in captivity. They origin from very dry regions and best results are achieved with these birds when they are kept under warm and dry conditions, damp lushly planted tropical have proven to be poor holding conditions for this species.

The Rüppel's long-tailed glossy starlings (*Lamprotornis purpuropterus*) not only have a long name but also boost with extraordinary long and broad wings as well as elongated tail. These birds make fabulous flight displays in sunny weather flapping slowly and with a fanned tail.

Unusual for glossy starlings and indeed most starlings the Amethyst starling (*Cinnyricinclus leucogaster*) shows a strong sexual dimorphism where the male are glossy purple above and white below where as the females are drab grey and white streaked. Juvenile males may maintain "female-plumage" for several years when kept with a fully plumed dominant male and can easily be mistaken for females.

The Starlings are lively and attractive aviary birds and therefore well represented in the Walsrode Birdpark and more than 21 species can be seen in the park. Among the more important are the Bali-mynah breeding which is now visible for the visitors, by placing the breeding facilities on exhibit rather than off exhibit we achieve an opportunity to show the important work of breeding and managing an endangered species however also through the concept of positive stress we believe that the birds do benefit from the exposure to the public. This is not true for all species but Bali-myna's which are kept in isolated off-exhibit quarters tend to suffer from boredom related problems such as feather plucking or even mutilation of their young. For many other bird species it is more likely to be the other way around.

The Walsrode birdpark Foundation supports a parallel in-situ project for the Blackwinged Starling (*Sturnus melanopterus*) in Indonesia this species has become endangered due to similar factors as the Bali-myna.

The Hill-myna's are surely among the most popular birds in the park often keeping children and adults alike spellbound with their linguistic skills. Several of the primitive myna species from Asia have very unique feather structures on their heads. These features have been poorly studied but evolutionary very interesting. The species of the genus Acridotheres have tufts on the forehead to a varying degree from rudimentary in the Common myna to the extreme in the Crested myna (Acridotheres cristatellus) both also have elongated neck feathers that curl backwards like a perfect "James Dean haircut." The Golden-crested myna (Ampeliceps coronatus) moves one step further with the fantastic "haircuts" with its shiny golden crown this species that is otherwise restricted to the treetops of South-east Asia is ready for Hollywood. The Sulawesi king starling (Basiliornis celebensis) is also one of the extremes when it comes to unusual head feathering as if they want to provoke someone they posses a compressed feather comb from the nostrils to the nape. The Yellow-faced myna (Mino dumontii) has large patches of partially naked skin on each side of the head, stubby and modified feathers are present on the patches as well as on their nape a feature occasionally thought to be moult related.

Most of the tree-dwelling mynas are strongly frugivores and seek fruiting trees in the forest where often several birds of different congregate to forage. They will not turn any insects or other small creatures that cross their path down as a side snack but rarely hunt actively for these unless they are feeding their young that need additionally protein. In captivity they should be fed an almost exclusive fruit diet in order to keep them healthy. They are prone to suffer from obesity and especially iron storage disease if fed wrongly. Ironically



Above, a Hill-myna. At right, a long-tailed glossy starling.

the closely related Common and Crested mynas which are adapted to a life foraging for insects and other invertebrates on the ground also depend on an animal protein based diet in captivity and thereby show none of the problems found in Hill-mynas and their allies.

Kind Regards, Simon Bruslund Jensen, Zoological Director



