

Parrots in Southeast Asian Public Collections

Aviculture has greatly evolved during the past 50 years, from keeping a collection of colorful birds to operating captive breeding programs to sustain trade and establish a viable captive population for threatened species. Many bird families are now fairly well represented in captivity, but parrots have a special place.

Story and photography
by Pierre de Chabannes





Previous page, a Blue and Yellow Macaw (*Ara ararauna*). Above, a bizarre version of a Black Lory, maybe *Chalcopsitta atra insignis*.

What makes parrots so attractive to both professional breeders, birdwatchers and zoo visitors is a combination of many factors, including their bright colors, their conspicuousness, their powerful voice coupled with complex behaviour that allows them to be spotted easily in the field and, most important of all, their ability to interact with humans and even “learn” new kinds of behaviours from them.

Today, many species of parrots, including macaws, cockatoos, parakeets, lorries, amazons and more are showcased and often bred in zoological institutions all around the world, even in third world countries. As many zoo directors would state, a modern zoological collection wouldn't be complete without a few big parrots species which will always be popular for most visitors.

Southeast Asia has been and still remains a dream destination for any bird enthusiast because of the huge variety of unusual and

colorful species to be found there and the big areas of unexplored forests, both inland and insular, that could provide the discoverer with many new bird varieties like it did recently in Papua New Guinea.

The diversity and distribution of parrots in this region follows a pattern described by Alfred Russel Wallace in the 19th Century with the clear separation from the Asian and the Australian zoogeographical zones by the transitional area known today as Wallacea, which has the Wallace's line as western boundary and the Lydekker's line as eastern limit.

The Australian zoogeographical zone encompasses all Australia and its satellite islands, along with a few archipelagos like Solomon Islands, Micronesia, but also includes New Guinea. Here the tropical rainforests are mostly monsoon forests and the general climate is drier during most parts of the year. The Asian zoogeographical zone is here represented by mainland

Southeast Asia, the Philippines and the four main Islands of western Indonesia, namely Borneo, Sumatra, Java and Bali, along with their satellite islands. Here, the forests are mostly to be qualified as tropical wet rainforests with a much more humid climate throughout the year and less important seasonal variations.

Finally, Wallacea is really a transitional zone which has characteristics of both Asian and Australian zoogeographical areas. It features both humid rainforests and dry monsoon forests and, according to the location, can show stronger or less marked seasonal climatic variations. The area extends from Sulawesi and Nusa Tenggara archipelago in Indonesia to the Moluccas.

Fauna distribution is clearly following this separation pattern and is particularly striking for birds, even on a family basis. Some bird families such as *Paradisaeidae* are present in the Australian region and only one species extends to the far-east side of



An Obi Violet-necked Lory (*Eos squamata obiensis*) at Kuala Lumpur Bird Park

Wallacea. On the opposite side, leafbirds and fairy blue birds are typical Asian species and are not represented in both Wallacea and Australian zoogeographical zones.

Parrots are more complex as they're represented in all three zoogeographical zones, but they generally follow this separation pattern concerning the geographical repartition of highly distinctive species group. All cockatoos and lorries are basically restricted to Wallacea and Australian region, with the exception of one subspecies of the Rainbow Lorikeet which is also present on Bali, the Mount-Apo Lory (*Trichoglossus johnstoniae*) and the critically endangered Philippines Cockatoo (*Cacatua haematuropygia*) in the Philippines archipelago. The biggest diversity of parrots is to be found in the Australian zoogeographical area with some highly representative birds such as the odd Pesquet's Parrot (*Psittrichas fulgidus*), many small species like the pygmy parrots (*Micrositta*), the Fig Parrots (*Cyclopsitta*

and *Psittaculirostris*), the Tiger Parrots (*Psittacella*) and some more conspicuous species, particularly the Eclectus Parrots and the King Parrots (*Alisterus*).

The Hanging Parrots (*Loriculus*) are the only variety to inhabit all three zones with a range going from mainland Asia to New Guinea. The unusual and elusive Racket-tailed Parrots (*Prioniturus*) are featured both in the Asian zone and in Wallacea. The Asian zoogeographical area is home to a less impressive number of parrots with only three genus represented in Malayan peninsula, namely the Ring-necked Parakeets (*Psittacula*), the unique Blue-rumped Parrot (*Psittinus cyanurus*) and two species of Hanging Parrots. More parrots varieties inhabit islands and archipelagos in the Asian zone, such as members of the genus *Tanygnathus* and six species of Racket-tailed Parrots in Philippines. A further two Hanging Parrots species are living in the Philippines and on the Island of Java.

Southeast Asian zoos are, of course, showcasing parrots in their collection and sometimes obtain good results in breeding. Unfortunately, most of the parks from Malaysia to Indonesia are not well known as very few reports are available on their activity.

I was lucky to spend some time in Malaysia, Singapore and on Java, which allowed me to visit most of the important zoos and bird parks featured there and get a fairly accurate vision of aviculture in this part of the world. Sharing my thoughts and giving you insights on Southeast Asia's bird collections (from Malaysia to Java) are the main focuses of this article.

Currently, the biggest captive bird collection in our target area is in Singapore's Jurong Bird Park. This institution houses more than 400 species of birds in beautifully landscaped exhibits, sometimes aviaries, sometimes huge greenhouses, including one of the biggest walk-in aviaries ever built.

The parrot collection comprises more than 50 species, most of which are on exhibit in an area called "Parrot paradise." It's quite tricky to establish an accurate list of species shown per aviary as many birds were moved from one visit to another. The two biggest aviaries are home to most macaw species kept in Jurong Bird Park, including two of the most important birds for the institution, namely the Hyacinth Macaw (*Anodorhynchus hyacinthinus*) and the critically endangered Blue-throated Macaw (*Ara glaucogularis*) which are both the only specimens of these species kept anywhere in mainland Southeast Asia. They both cohabitate with Green-winged Macaws (*Ara chloropterus*), Scarlet Macaws (*Ara macao macao*), a flock of Blue and Yellow Macaws (*Ara ararauna*), a pair of Military Macaws (*Ara militaris*) of unknown subspecies, one lone specimen of Red-fronted Macaw (*Ara rubrogenys*) and some Blue-headed Parrots (*Pionus menstruus*). Smaller macaws are nearby and live together in a smaller aviary. There are some Chestnut-fronted Macaws (*Ara severa*), a

group of Noble Macaws (*Diopsittaca nobilis nobilis*), some Yellow-collared Macaws (*Ara auricollis*) and, until 2007, a pair of the now very rare Red-bellied Macaw (*Orthopsittaca manillata*).

The visit goes on with a colony of Monk Parakeets (*Myopsitta monachus*) and a row of cages showcasing more South American parrots. Among them, we can find Blue-headed Conures (*Aratinga acuticauda*), Crimson-fronted Conures (*Aratinga finschii*), a flock of Sun Conures (*Aratinga solstitialis*), Jandaya Conures (*Aratinga jandaya*), Gold-capped Conures (*Aratinga auricapilla*), Nanday Conures (*Nandayus nenday*), a big breeding group of Patagonian Conures (*Cyanoliseus patagonus patagonus*), Black-headed Caiques (*Pionites melanocephala*), Yellow-thighed Caiques (*Pionites leucogaster xanthomeria*), the common White-crowned Parrot (*Pionus senilis*), a small group of Hawk-headed Parrots (*Deroptryus accipitrinus accipitrinus*) and the rarely seen Dusky Parrot (*Pionus fuscus*).

Many Amazon species are also kept

there; among them the Cuban Amazon (*Amazona leucocephala*), a White-fronted Amazon (*Amazona albifrons*) living with a Panama Yellow-fronted Amazon (*Amazona ochrocephala panamensis*), a group of Bodinus' Amazons (*Amazona festiva bodini*), some endangered Green-cheeked Amazons (*Amazona viridigenalis*), a group of Red-lore Amazons (*Amazona autumnalis autumnalis*), some Blue-fronted Amazons (*Amazona aestiva aestiva*), a group of Orange-winged Amazons (*Amazona amazonica*), Mealy Amazons (*Amazona farinosa farinosa*) and three beautiful Yellow-headed Amazons (*Amazona oratrix oratrix*) with one individual said to be belonging to Tres Marias subspecies (*Amazona oratrix tresmariae*) but that remains doubtful.

Next on line are some African parrot species kept in similar conditions, the two subspecies of African Grey Parrots, namely the common Grey Parrot (*Psittacus erithacus erithacus*) and the Timneh Parrot (*Psittacus erithacus timneh*) being shown together and the last aviary housing a pair of Brown-

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necked Parrots (*Poicephalus fuscicollis fuscicollis*) together with a group of Senegal Parrots (*Poicephalus senegalus versteri*).

All the other aviaries are filled with Asian and Australian parrot species. Most of them are quite well known in captivity apart from the beautiful Iris Lorikeet (*Psittoteles iris iris*), which is getting increasingly rare in today's aviculture; and the odd-looking Pesquet's Parrot, which is often kept in Asian zoos but bred only at Jurong Bird Park. We also find two species of King Parrots, namely the Moluccan King Parrot (*Alisterus amboinensis*) and the Papuan King Parrot (*Alisterus chloropterus*); some lorries, such as the Blue-streaked Lory (*Eos reticulata*), the Duyvanbode's Lory (*Chalcopsitta duyvanbodei*) and the endangered Purple-naped Lory (*Lorius domicella*), are also bred at the park.

Finally, cockatoos are also very well represented, including the rarely seen Yellow-tailed Black Cockatoo (*Calyptorhynchus funereus*), a pair of Red-tailed Black Cockatoos (*Calyptorhynchus banksii*), some Palm Cockatoos (*Probosciger aterrimus*), which are common in Asian collections, some Galahs (*Eolophus roseicapillus*), Major Mitchell's Cockatoos (*Cacatua leadbeateri*), a group of Sulphur-crested Cockatoos (*Cacatua galerita*), the highly endangered Lesser Sulphur-crested Cockatoo (*Cacatua sulphurea*), the Salmon-crested Cockatoo (*Cacatua moluccensis*) and the endangered White Cockatoo (*Cacatua alba*).

The second parrot hot spot in Jurong Bird Park is the gigantic dome called Lory Loft, where more than 1000 lorries are free-flying in a beautifully landscaped area, visible to the public from a platform 10 meters above the ground. Here, we find more than 10 varieties of lorries, including huge groups of both Green-naped Rainbow Lorikeets (*Trichoglossus haematodus haematodus*) and Swainson's Rainbow Lorikeets (*Trichoglossus haematodus moluccanus*). Also shown are some Red-collared Lorikeets (*Trichoglossus haematodus rubritorquis*), a big group of Red Lorries (*Eos bornea*), some rarely seen Blue-streaked Lorries, the Violet-necked Lory (*Eos squamata riciniata*) and



A Blue-naped Parrot (*Tanygnathus lucionensis*) at Jurong Bird Park.

the much rarer Obi Violet-necked Lory (*Eos squamata obiensis*), a small flock of Dusky Lorries (*Pseudeos fuscata*), the endangered Chattering Lory (*Lorius garrulus garrulus*), a few specimens of the rarely seen Musk Lory (*Glossopsitta concinna*), some equally rare Scaly-breasted Lorikeets (*Trichoglossus chlorolepidotus*), the beautiful Black-capped Lory (*Lorius lory lory*) and the Yellow-bibbed Lory (*Lorius chlorocercus*). Other subspecies of lorries such as the Forsten Lorikeet (*Trichoglossus haematodus forstenii*) and two varieties of Black-capped Lorries, namely *Lorius lory erythrothorax* and *Lorius lory Salvadorii*, are said to be kept there but I never

saw them in four visits. During my first stay in this park, in 2005, two Palm Cockatoos were also free roaming in this exhibit, but in December 2008, when I came again, I found a free Pesquet's Parrot there and no more Palm Cockatoos.

Other parrots are kept in different exhibits around the park. Among them we find Red-bellied Parrots (*Poicephalus rufiventris*), African Grey Parrots (*Psittacus erithacus*) and Fischer's Lovebirds (*Agapornis fischeri*) roaming freely in the huge Waterfall Aviary in which are kept more than 100 species of African birds, ranging from touracos to Guinea fowls and starlings. Another



The Van Oort's Palm Cockatoo (*Probosciger aterrimus stenolophus*) at Ragunan Zoo.

big walk-in aviary, located nearby, showcases Southeast Asian birds in both free-roaming halls and closed aviaries. In there, we find a pair of the very rare Blue-naped Parrot (*Tanygnathus lucionensis lucionensis*), many Blue-crowned Hanging Parrots (*Loriculus galgulus*) which are very common in Asian zoos, a flock of Moustached Parakeets (*Psittacula alexandri fasciata*) and a small group of Blossom-headed Parakeets (*Psittacula roseata*).

More macaws are shown in the main bird show and some are exposed on a photo booth located near the penguin house, but again, mostly common species. Further parrots,

mainly Yellow-fronted, Yellow-naped and Blue-fronted Amazons, along with a few African Grey Parrots, are displayed in very small cages, easily accessible to the public to showcase their “talking” abilities. Finally, with luck, one may notice three parrot species, namely the Blue-headed Parrot, the Hawk-headed Parrot and the rarer Painted Conure (*Pyrrhura picta picta*).

Jurong Bird Park holds by far the biggest parrot collection ever displayed in any East Asian zoological institutions. What struck me most was the incredible number of South American birds shown and bred compared to the rather low proportion of

Asian species among the whole parrot stock. Singapore also holds other animal parks, the most famous being the Singapore Zoological and Botanical Gardens where Blue and Gold Macaws, Green-winged Macaws, a flock of New Guinea Eclectus Parrots (*Eclectus roratus polychloros*) and some Red Lorries are showcased in different presentation areas, including animal shows. The Sentosa Butterfly Park and Insect Kingdom also houses Blue and Yellow and Green-winged Macaws, along with one Sulphur-crested Cockatoo, which have been trained to be part of a newly created bird show, along with a Toco Toucan (*Ramphastos toco*).

Finally, there are also parrots which are kept in the Mandai Bird Sanctuary in small breeding aviaries. Here, more interesting species can be found such as the Short-billed Black-Cockatoo (*Calyptorhynchus latirostris*), the Buffon's Macaw (*Ara ambigua*) and the endangered Red and Blue Lory (*Eos bistris talautensis*) but unfortunately, this place is not always opened to public. Most birds here belong to a private breeder named Ruppert Gwee, who seems to be very famous around Asia for his amazing parrot collection, a small part of which is displayed in Mandai Bird Sanctuary.

Approximately one and a half hours south of Singapore is the Indonesian island of Java, well known for its two enormous cities, Jakarta on the west side and Surabaya on the east side, both counting several millions inhabitants. Indonesia is home to several different parrot species, both from the Asian, Wallacean and Australian zoogeographical zones. One could expect a huge diversity in the avian collections belonging to Indonesian zoos, but I have to admit that I was quite disappointed by the three collections I saw.

Surabaya Zoo was once very famous for its remarkable bird collection, which was the biggest in Southeast Asia more than 20 years ago. Although we can still find a few Indonesian specialities like the endangered Maleo (*Macrocephalon maleo*)—a Sulawesi endemic megapodidae—most rare species are long gone and the small outdated aviaries are completely inadequate to house any

fragile tropical bird today.

The first parrots to come on view are lorries, kept in awfully small aviaries with almost no perches, no light and absolutely no vegetation. We can find a pair of Black Lorries (*Chalcopsitta atra atra*), one Yellow-backed Chattering Lory (*Lorius garrulus flavopalliatus*), one old Red Lory, one Rainbow Lory (*Trichoglossus haematodus*) of unknown subspecies and one Black-capped Lory (*Lorius lory salvadorii*) belonging to a subspecies not often seen in captivity. All other parrot species are to be found at the far end of the zoo, in big but almost empty cages with dusty ground and very few perches. Here are found a group of Aru Eclectus parrots (*Eclectus roratus aruensis*) recognizable with the female's pure blue belly patch, some Sulphur-crested Cockatoos (*Cacatua galerita triton*), a big group of Tanimbar Corellas (*Cacatua goffini*) which are quite rarely seen in Asian zoos, and a flock of Fischer's Lovebirds, which is the commonest member of its genus kept in Asia.

specimens, sometimes belonging to highly endangered species such as Javan Hawk-eagles (*Spizaetus bartelsi*) are sold each year in Pasar Jatinegara and Pasar Pramuka bird markets in total illegality. The most common parrots seen there are mostly lorries, along with a few King Parrots from Australia. Luckily, there are also legal ways of seeing these beautiful birds, the easiest being to go to the huge Ragunan Zoo which is located in the Pasar Minggu area. This park, covering more than 150 hectares, is well known for its huge animal collection (although most of the times kept in unsuitable conditions) and is a favored spot by birdwatchers who can see, within a day, many interesting birds, including some Yellow-throated Hanging Parrots (*Loriculus pusillus*), a species endemic to Java and Bali that has been very rarely brought into captivity.

Captive birds are shown in two main areas in the park, the first being the children's zoo, where lorries, cockatoos and macaws are being kept in awfully small aviaries with basically nothing for them to do other than watch people. Blue and Yellow Macaws are showcased there along with Green-winged

Macaws and a few Grand Eclectus Parrots (*Eclectus roratus roratus*). There are also some Black-capped Lorries and a few Timor Lesser Sulphur-crested Cockatoos (*Cacatua sulphurea parvula*), a subspecies recognizable by its large yellow ear-patch, which is not so common in aviculture today.

Going to the other side of this huge place will lead us successively to the reptile and monkey area, and finally to more aviaries where most of the tropical birds collections, including some very nice local specialities are to be found. Unfortunately, as almost everywhere in Indonesia, the housing conditions of animals are absolutely not adequate, the aviaries being too small or too exposed and nothing has been done to provide any hiding places for animals. Two sets of aviaries are showcasing parrots, the first one just by the side of the house for small mammals. Here, aviaries are bigger and equipped with more perches than usually seen in Indonesian parks. The first set is composed of a huge central aviary where many species live together, including the endangered and rarely seen Black-winged Lory (*Eos cyanogenia*), some Blue-streaked Lorries, Red Lorries

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(*Eos bornea bornea*), a pair of Red-winged Parrots (*Aprosmictus erythropterus*), Dusky Lorries, a flock of Javan Moustached Parakeets (*Psittacula alexandri alexandri*) which can be recognized with the red color of the bill showcased on both mandibles, some Rainbow Lorries, Black Lorries, Black-capped Lorries and a group of budgerigars (*Melopsittacus undulatus*) showing several domestic morphs. Smaller exhibits are located on each side of the big aviary. In here, we find Red-flanked Lorikeets (*Charmosyna placensis placensis*), a pair of Green-winged King Parrots (*Alisterus chloropterus chloropterus*) belonging to a rare subspecies, a pair of Duyvanbode's Lorries, some Chattering Lorries and a flock of Fischer's Lovebirds. Tanimbar Corellas and Eclectus Parrots are showcased in two aviaries located close by, near the food market of the zoo.

Our final stop in Ragunan Zoo is in a big double row of tall aviaries where more parrots are kept in weird conditions, with no vegetation and very few perches available. Two species of Sulphur-crested Cockatoos are found there, namely the Eleonora's (*Cacatua galerita eleonora*) and the Blue-eyed. Other birds shown are White Cockatoos, Lesser Sulphur-crested Cockatoos (*Cacatua sulphurea sulphurea*), some Blue and Yellow Macaws, a flock of Grand Eclectus Parrots, one lone Pesquet's Parrot and a Blue-fronted Amazon (*Amazona aestiva xanthopteryx*) misidentified as Tres Marias Amazon. The highlights of this section are the pair of seldom shown Blue-backed Parrots (*Tanygnathus sumatranus sumatranus*) and the large group of the very rarely seen Van Oort's Palm Cockatoos (*Probosciger aterrimus stenolophus*), which are larger than the specimens usually seen in zoos and have thinner crest feathers, allowing them to be differentiated from the other two known subspecies of Palm Cockatoos.

Our overview of Javan parrot collections ends with the small but very interesting bird park located in the amusement garden known as Taman Mini Indonesia Indah. Here are shown only Indonesian bird species, which are kept in two big dome-shaped walk-in aviaries,



At left, a Timor Cockatoo (*Cacatua sulphurea parvula*) in Ragunan Zoo. At right, a Long-tailed Parakeet (*Psittacula longicauda*) at Kuala Lumpur Bird Park.

each having a geographical theme. The first one displays birds from western Indonesian Islands up to Wallacea. Many interesting species are shown there, including the Greater Racket-tailed Drongos (*Dicrurus paradiseus formosus*) and the Black-winged Magpie (*Platysmurus leucopterus*), but the only parrot species on display here is the Javan subspecies of Moustached Parakeet. In the second dome, we find eastern Indonesian birds with more parrots, especially Lesser Sulphur-crested Cockatoos, White Cockatoos, Salmon-crested Cockatoos and a pair of Greater Sulphur-crested Cockatoos. Finally, four small aviaries are located close to the exit of the park. In there, we find one Blue-backed Parrot, one Palm Cockatoo of unknown subspecies, a Blue and Yellow Macaw and a Scarlet Macaw.

The mainland part of Malaysia is our final destination for this article. Most if not all big zoological institutions are easily reachable by train, busses or even planes for the bigger cities. For foreign travellers having their base in Singapore, it's very easy to get a night train and go to Kuala Lumpur. From here, more trains are available to the cities of Melaka, Taiping and Butterworth (harbour city which faces Penang Island) where I visited several zoos and bird parks. The three biggest Malayan parks, being Taiping Zoo, Melaka Zoo and Zoo Negara

in Kuala Lumpur area, don't show a huge diversity of parrots in their collection.

Zoo Negara ("National Zoo" in English) is currently the biggest public zoological park in Malaysia. Despite housing a very interesting bird collection, probably the finest in the country for a general zoo with the only known captive Storm's Storks (*Ciconia stormii*) displayed to the public in Malaysia, almost no parrots are shown to public, apart from the impressive breeding colony of Fischer's Lovebirds kept in a big and nicely landscaped aviary. All the other parrot species listed on the zoo's inventory document are either kept backstage or shown to public during the animal show held several times in a day. They include Rainbow Lorries; Bare-eyed Cockatoos (*Cacatua sanguinea*), which are very rarely seen in Asian zoos; Salmon-crested Cockatoos; Sulphur-crested Cockatoos; Lesser Yellow-crested Cockatoos, White Cockatoos; some Black-masked Lovebirds (*Agapornis personatus*); Ring-necked Parakeets (*Psittacula krameri*); some African Grey Parrots; and three species of macaws, the Scarlet (*Ara macao*), Green-winged (*Ara chloroptera*) and the Blue and Yellow Macaw.

During my last trip, thanks to the bird curator Doreen Khoo and her assistants, I was fortunate to go backstage and have a look at their last specimen of Black Lory



At left, a Blue-rumped Parrot (*Psittinus cyanurus cyanurus*). At right, a Pesquet's Parrot (*Psittrichas fulgidus*). Both are at Kuala Lumpur Bird Park.

(*Chalcopsitta atra*) which is strongly and oddly tinged with red on the wings and legs, but not on the head. It may be either an aberrant variation of a Radjah Lory (*Chalcopsitta atra insignis*) or Bernstein Lory (*Chalcopsitta atra bernsteini*), or it may also be an hybrid specimen of nominate subspecies of Black Lory along with another species showcasing bright red on its feathers, possibly a member of genus *Eos*, which still remains to be investigated.

Kuala Lumpur has another large bird collection concentrated in the Kuala Lumpur Bird Park, located on a forested hill only a few miles from the city center and easily accessible by car or walk through trails from the railway station and the KL tower. Some small parrots species, including a huge group of Fischer's and domestic mutations of Rosy-faced Lovebirds (*Agapornis roseicollis*), along with Black-capped Conures (*Pyrrhura rupicola*) are kept in a newly built hall that precedes the biggest free-flight area of the park. After going through the hornbills section, we find ourselves in front of a huge photo booth where many bird species, including rare ones such as Chestnut-bellied Eagle (*Hieraaetus kienerii formosus*) are displayed and used to attract tourists who can have a picture taken with basically any bird in the stand for a few Malayan ringgits. Among parrots, we can find two Sulphur-crested

Cockatoos, one White Cockatoo, some Sun Conures, several African Grey Parrots, a pair of New Guinean Eclectus Parrots, a pair of Red Lorries, one Palm Cockatoo, one Green-winged Macaw, one Blue and Yellow Macaw, one hybrid Macaw (*A. ararauna* x *A. militaris* probably), a pair of Yellow-naped Amazons (*Amazona auropalliata auropalliata*) and a specimen of Orange-winged Amazon.

Next comes an exhibit appropriately named "World of Parrots." It is basically a big structure composed of a free-flight area with a few branches and feeding points and a row of big but quite empty aviaries, all this surrounding a path from where visitors can see both kinds of exhibits at the same time. The free-flight area is occupied by some specimens of the rare Citron-crested Cockatoo (*Cacatua sulphurea citrinocristata*), some Lesser Sulphur-crested Cockatoos, a big group of Rainbow Lorries, a pair of Duyvanbode's Lorries (*Chalcopsitta duivanbodei*), a pair of the rarely seen Yellow-streaked Lory (*Chalcopsitta scintillata*), some Black Lorries, a flock of Red Lorries, the rare Obi Violet-necked Lory and the more common Violet-necked Lory, some Yellow-bibbed Lorries, a few Chattering Lorries, the beautiful Plum-headed Parakeet (*Psittacula cyanocephala*) which is not common in South-east Asian collections, some Ring-necked

Parakeets (*Psittacula krameri manillensis*) and two specimens of the rare Long-tailed Parakeet (*Psittacula longicauda longicauda*). The aviaries are occupied by bigger parrots, including one Green-winged Macaw living with a Scarlet Macaw, one lone specimen of Pesquet's Parrot, some Blue and Yellow Macaws, the very common African Grey Parrot, the impressive Palm Cockatoo, one Mealy Amazon shown with an Orange-winged Amazon, a pair of White Cockatoos, some Salmon-crested Cockatoos and a group of Black-capped Lorries. It is to be noted that the park housed many more parrots in the past, including some Red-bellied Macaws (*Orthopsittaca manilata*), which are now extremely rare in aviculture.

Finally, we also find some smaller parrots species in the "rare bird aviaries" which are located at the far end of the park. Here, three birds-of-paradise species are shown to public, along with bulbuls, pheasants and some toucans, but almost no breeding of any species has been achieved there. Parrots are represented by the rare Long-tailed Parakeet; the Grey-headed Parakeet (*Psittacula finschii*), which is equally rare in public collections; a big flock of Blue-crowned Hanging Parrots; and one specimen of the Vernal Hanging Parrot (*Loriculus vernalis*), which is surprisingly rare in mainland Asia's bird collections.

Two hours from Kuala Lumpur is the city of Melaka (Malacca), well known to tourists and historians for its Dutch-colonies heritage buildings, which are still highlighted today. All animal parks are located in the touristy areas of Ayer Keroh and A'Famosa resorts, with the zoo being the only collection that houses more than one parrot species. First on exhibit, is a single Salmon-crested Cockatoo shown on a perch just at the entrance of the zoo, for greeting visitors. Then we find a small enclosures with many perches and some vegetation where are exhibited Scarlet, Green-winged and Blue and Yellow Macaws.

The last medium-sized parrot species are kept in a walk-in dome-shaped aviary located in a newly renovated complex that holds lesser pandas, binturongs, flying-foxes and

lemurs. In there, we find a few Chattering Lories, a pair of Black-capped Lories, some Black Lories, a pair of Yellow-streaked Lories and some Lesser Yellow-crested Cockatoos.

Finally, in the lower part of the park close to the lake, there is a block of huge walk-in aviaries where, among many small birds like fruit-doves and bulbuls are found some Blue-crowned Hanging Parrots, one lone specimen of Vernal Hanging Parrot and a single male of the very rarely kept Blue-rumped Parrot (*Psittinus cyanurus cyanurus*). This small parrot species showing a strong sexual dimorphism has never been common in captivity anywhere, including in Malaysia where they're only bred at Penang Bird Park today. Kuala Lumpur Bird Park kept a pair until 2006, but did not obtain any chicks.

Returning to the capital city of Kuala Lumpur, known for its Petronas Twin Towers, which are absolutely beautiful, especially at night, we can take a night train and head north in the mountains to the city of Taiping, which has one of the most beautiful zoological gardens in Malaysia, thanks to a formidable landscaping work and beautiful enclosures. The place is really worth visiting and a full day must be planned there in order to enjoy both the park and the hilly surroundings where many bird species, including wild hornbills, can be seen without too many difficulties. The zoo holds a very nice collection of rare mammals including the only known specimens of Spotted Linsangs (*Prionodon linsang*) and Brown Forest Wallaby (*Dorcopsis veterum*) in a Malayan zoo, but also some very interesting bird species, especially local bulbuls and the only known specimen of Oriental Pratincole (*Glareola maldivarum*) kept in a Southeast Asian zoo. Concerning parrots, there aren't any really rare species but most individuals are kept in fairly good living conditions and breeding has been recorded for some species. The most interesting birds for a parrot lover here are probably the Palm Cockatoos and the Citron-crested Cockatoos. We can also find a flock of the Little Corella, which is rarely seen in Southeast Asian zoos, some White Cockatoos, some Lesser Yellow-crested Cockatoos and a

mixed group of Fischer's and Rosy-faced Lovebirds. Green-winged Macaws and Blue and Yellow Macaws are shown in an open enclosure with lots of branches near the animal show area.

Our final destination for this trip is Penang Bird Park, a privately owned and run zoological institution that is famous for its amazing collection of local bird species and its breeding successes recorded for several species that are notoriously hard to breed or forgotten by breeders around the world. Among them are several species of bulbuls, flycatchers and even sunbirds or flowerpeckers. Many hornbills are also kept, including the extremely rare and spectacular Helmeted Hornbill (*Rhinoplax vigil*). There's also a very nice and comprehensive collection of parrots, including the noticeably big breeding group of Blue-rumped Parrots, which is kept in a row of aviaries with lories, including Yellow-streaked Lories, Red Lories, Rainbow Lories, Black-capped Lories, Chattering Lories and Duyvanbode's Lories. Also featured there is a breeding group of Long-tailed Parakeets, some Black-capped Conures, a pair of Moustached Parakeets of unknown subspecies, some Plum-headed Parakeets and a pair of Black Lories.

A big double row of aviaries has been specially designed to house most of the park's parrots. Nests are regularly provided for breeding and several successes have been recorded despite of the relatively small size of the exhibits. A comprehensive list of species kept there could start with the big breeding group of Eclectus Parrots, with some specimens also shown in the bird show area. There are also many Sulphur-crested Cockatoos, including the very rare Fitzroy's subspecies (*Cacatua galerita fitzroyi*); a pair of Palm Cockatoos; the Ducorps Cockatoo (*Cacatua ducorpsi*), which is very rarely shown in Asian parks; the Salmon-crested Cockatoo; the White Cockatoo, which is often kept but rarely bred in Malayan collections; some Ring-necked Parakeets; some Blue-headed Conures; the usual African Grey Parrot; the Patagonian Conure; a nice group of Sun Conures; the Tanimbar Corella, which is

not shown anywhere in Malaysia; the Nan-day Conure; some Blue and Yellow Macaws; and a pair of Alexandrine Parakeets (*Psittacula eupatria siamensis*).

Here ends this small tour of parrots collections featured in public parks in Southeast Asia. What struck me most is the lack of local species in places like Indonesia or Malaysia, knowing that parrots like all Racket-tailed species are getting rarer due to loss of habitat. Perhaps because of a lack of knowledge, of good working conditions, or perhaps simply a lack of will, Asian zoos are more likely to focus on foreign and easily bred parrots rather than trying to establish breeding programs and viable captive populations of locally endangered birds.

The most problematic aspect of aviculture in Asia, no matter the birds on which it is focused, is the fact that it's permanently gangrened with illegal bird trade and all other kinds of animal traffic. Wildlife offices face an incredible and overwhelming challenge trying to regulate these traffics while improving living conditions for captive animals and encouraging the development of breeding programs.

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