





**ANNUAL REPORT 2005  
ZOO NEGARA**

**THE MALAYSIAN  
ZOOLOGICAL SOCIETY**

**PREPARED BY THE  
MANAGEMENT COMMITTEE**



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<b>SECRETARIES</b>	Fiscal Corporate Services Sdn. Bhd.																		
<b>AUDITORS</b>	Khoo, Wong & Chan																		
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I would like to welcome on board and introduce the new Director of Zoo Negara, Dr Mohamad Bin Ngah. He has over 25 years of animal husbandry experience, ranging from the research in livestock at Malaysian Agricultural Research and Development Institute (MARDI), development as well as commercialized the livestock at Kumpulan Guthrie Berhad. His last posting before joining the Zoo was with Monash University Malaysia at Sunway.

## INCOME AND EXPENDITURE

We continued to control our expenditure and tried hard to create activities within the year 2005. I am delighted to report that by the end of the year; again we showed a better operating surplus of RM 278,000.00 as compared to RM 54,000.00 in 2004.

I would like to acknowledge the Public Affairs and Marketing Department for the hard work to achieve the record high donations from the public of close to RM 600,000.00.

## DEVELOPMENT

Two development projects which comprised 80% of the development expenditure and therefore justified to be highlighted are: - (1) Refurbishment of Akuarium Tunku Abdul Rahman (RM 2,300,000.00) (2) Earthwork and Installation Interlocking Pavers at the Picnic Area opposite the Marrybrown Family Restaurant (RM 189,759.00).

The refurbishment of the Akuarium Tunku Abdul Rahman took off in two parts. The first part involved in the evaluation of the existing physical structure and its usability. The second component was the real refurbishment of the aquarium.

The Akuarium Tunku Abdul Rahman was targeted to open early in 2006; however it took a longer period of time to solve the leaking problems with some tanks, the target for the opening was moved to middle of 2006.

Another development project that needs to be highlighted was the 12,000 sq ft area designed with monier. This new facility can accommodate comfortably up to 4000 people suitable for family day, birthday and other social functions. In fact among those numerous functions which were carried out last year at the Wakaf area, one that deserved to be mention was the wedding of Encik Mohd. Sham Semawi and his bride from Kluang, Johore. This was the first wedding ceremony carried out at Zoo Negara Malaysia.

## EVENTS

### TV3 Goes Green with Zoo Negara on April 24<sup>th</sup>

I would like to express my appreciation to a local broadcasting company in the country, Sistem Televisyen Malaysia Berhad (TV3), which had given us the fullest support in 2005. With the Earth Day Celebration in April, TV3 and Zoo Negara had agreed to an MOU giving us the opportunity to promote various activities on their network.



Zoo Negara's Earth Day Celebration themed 'TV3 Goes Green with Zoo Negara' marked the beginning of a fruitful one-year relationship promoting many other meaningful events such as Environmental Day and TV3's Sure Heboh Carnival.

The Earth Day Celebration was a notable success with activities such as tree planting by TV3 personalities and staff; and an awareness campaign on Endangered Malaysian Wildlife.

#### Malay Mail Big Walk – Save the Milky Stork Fund from May - Sept

News Straits Times Press – The Malay Mail, had chosen us as the theme for their annual Big Walk in 2005. Zoo Negara, notable for many breeding successes would need as much support as we can get from various organizations to aid us further in Wildlife Conservation.

The Malay Mail chose our successful breeding programme on Milky Storks as their annual theme to gather funds to build a bigger nesting aviary for the birds. The Malay Mail Big Walk would gather RM 1 from each registered participants. The promotion on the 'Save the Milky Stork Fund' lasted for over 5 months and ended with a successful walk in September 2005. Besides gaining funds, the five-month promotion in the local paper had created the much needed awareness on these birds.

#### Universal Children's Day Celebration on Nov. 20<sup>th</sup>

Zoo Negara celebrated Universal Children's Day with the support from the United Nations Association of Malaysia, over 10 NGO's and three main local broadcasting networks – TV3, NTV7 and fly.fm radio.

Friends of the zoo – Petrosains, MenaraKL, SPCA, WWF Malaysia, Malaysian Nature Society and many others had also come together to provide a unique blend of activities for children and teenagers.

Local conservationist and performer, Zainalabidin and friends had also spent their time on this meaningful day entertaining children with their popular renditions. The Universal Children's Day on 20 November 2005 was officiated by the Vice-President of UN Association of Malaysia, Yang Berbahagia Tan Sri Razali Ismail.

#### FUTURE PLANS

The Society submitted a development plan to the Federal Government through PERHILITAN for funding consideration under the 9<sup>th</sup> Malaysia Plan. We await the positive outcome in 2006 and looking forward to start our development projects. These projects are designed to bring Zoo Negara closer to the world class zoo which is targeted to be achieved in 2015.

Steps to gain ISO 9001/2002 certification for the Zoo have started. It is our dream that with this certification, Zoo Negara Malaysia will fulfill customer requirements and enhance customer satisfaction whilst achieving continual improvement in the pursuit of excellence in managing the National Zoo.

I would like to thank the members of the Council for their advice and directives throughout 2005, members of the Society for their loyal support and the Zoo Staff for their hard work and loyalty.



I took up office on 2<sup>nd</sup> January 2005 as the Director of Zoo Negara Malaysia. The appointment was made amidst the rather unfavourable reports regarding Zoo Negara in the local newspapers.



These negative advertisements and publicity caused a significant drop of 50% of the much needed corporate sector support. On the contrary, the public continued to bring their families to visit Zoo Negara, ignoring the negative publicity. As a result, there was a significant increase in the number of visitors to the Zoo recorded in 2004 compared to the previous year.

The heightened interests and overwhelming response from the public could be due to these adverse reports by the press. However, to date, it is both heartening and encouraging to have the total support of the local press and media in Zoo Negara's management targets to accelerate the expansion of facilities and activities to benefit the public.

It was essential that in 2005, we strived to focus on our strengths and forged forward. The Aquarium Committee continued its concerted efforts to refurbish the Aquarium Tunku Abdul Rahman. Zoo Negara's target by the first quarter of 2006 was to complete and ensure a fully operating Aquarium. At the end of 2005, the progress of refurbishment was on schedule. It will be the first and the largest ecosystem-based aquarium consisting of Malaysian flora and fauna.

At Zoo Negara, innovative activities or events must constantly be created, developed and directed towards diverse market segments.

Where possible, these targeted market sectors should be reachable with minimal costs. For this, we are grateful to Yang Berbahagia Dato' Farid Ridzuan, the Chief Executive Officer of TV3 who agreed to initiate the collaboration and promotion of Zoo Negara by (i) ensuring consistent and sustained media exposure, (ii) the organization and promotion of relevant activities or events held at Zoo Negara, (iii) the procurement of sponsorships for the activities at Zoo Negara, and (iv) development, creation and implementation of ideas. We are looking at a good year ahead!

The 2005 exciting activities and entertaining events are reported in the Public Affairs & Marketing Department Report. Following successes of these activities and events, our loyal, regular and new sponsors came forward and spurred donations of about RM600, 000.00. We are appreciative of these contributions and donations to reach this phenomenal amount. And we wish to say to all the sponsors ***Terima Kasih.***



Also, for the record, on 4<sup>th</sup> June 2005 as the nation celebrated the Agong's Birthday, the country witnessed Zoo Negara's first Night Animal Show and also the first for Malaysia. The main attraction was the nocturnal animals such as the Otter, Raccoon, Owls and Snakes and this stirred much curiosity from the public to further visit Zoo Negara. Needless to say, the cooler ambience at night also offered the much needed alternative relaxing time for the city folks and their families.

In 2005, Zoo Negara was honored to receive many local and international guests from various Zoos and Theme Parks. From Singapore, we had the pleasure to welcome Ms. Fanny Lai, Executive Director of Singapore Zoo, Dr Ho Yew Kee, Executive Director of Singapore Wildlife Reserves and Singapore Zoo Staff namely, Barry Chong Peng Wee, Kumar Pillai, Alagappasamy Chellaiyah, Ahmad Surasa Adi Omar and Dr Chris Furley, the Chief Veterinarian, further discussed and exchanged views with our Zoo Hospital staffs.

We were delighted to receive official international visitors like Mr. Vladimir Frolov, Deputy Director of Moscow Zoo and his two Staff, Sergey Kudryavtsev and Sergei Mamet. Also, on official visits were the Staff from Saigon Zoo – Vietnam; Chiang Mai Night Safari – Thailand; Adelaide Zoo – Australia. The discussions encompassed plans to exchange experiences of mutual benefit, foster better relationship and linkages in the future.

The new facilities of direct benefit to the public, developed in 2005, was the picnic area (wakaf area) which promoted and further enhanced interactive and dynamic events in the Zoo for Family Day, birthdays and other social functions. About 12,000 sq ft area was designed with monier tiles and can accommodate comfortably up to 4000 people. The photo corner, launched on 20<sup>th</sup> August 2005, became a favourite hot spot and must-visit location for visitors to record their memorable moments with our wildlife.

Zoo Negara has worked very hard on the captive breeding programs of several species, particularly those that are endemic to Malaysia and the region. Of particular importance are the efforts to protect and breed the Milky Stork (*Mycteria cineria*). Reports have indicated that there are only about six Milky Storks left in the wild of Malaysia, while declining numbers remain sighted in countries like Indonesia, Cambodia and Vietnam. Currently, Zoo Negara has bred in captivity over 120 Milky Stork chicks. Following this success, we have conducted the release program of the Milky Stork in Kuala Selangor, in collaboration with PERHILITAN and the Malaysian Nature Society.

We are now planning on the second debut in the same area. Further, this year with the cooperation from the Malay Mail Big Walk 2005 themed **“BE AWARE, GET INVOLVED AND MAKE A DIFFERENCE!”** Zoo Negara has launched the Milky Stork Fund to help us in setting up a new breeding aviary, tracking equipments and related facilities.

In addition, Zoo Negara is the first organization in Malaysia to successfully run a captive breeding program for the False Gharial (*Tomistoma schlegelii*). This shy species of freshwater crocodile numbers fewer than 2,500 heads in the wild in Malaysia, Indonesia and other parts of Borneo. Reports indicated that, in Thailand the population is now believed to be extinct. We are excited with the opportunity to map the release program.

New animal arrivals and births have always been a crowd puller. Vibrant baby pictures of 2005 in the following pages are the testimony of some of the successes of captive breeding program at Zoo Negara in 2005. Apart from these attractive, fresh faces of 2005, Zoo Negara also has an ongoing animal exchange program with Singapore Zoological Gardens.

The new arrivals in 2005 were the Agile Wallabies, Capybaras, Nyalas, Hyaenas, Gir Lion and Meerkats. They have undergone the mandatory quarantine measures and are now in their respective habitat surroundings. We reciprocated by sending Charlie, our lovable Orangutan, to Singapore Zoological Gardens.





The Development and Planning Committee (DPC) continued with its policy of improvement within the Zoo during 2005.

## Development Projects:

	WORKS COMPLETED BY 31 DECEMBER 2005	COST (RM)
1	Renovation and refurbishment at old office building.	16,805.00
2	Upgrading works at the old Giraffe's enclosure.	28,070.50
3	Proposed upgrading Car Park A & B.	66,271.00
4	Upgrading Penguin House.	36,677.00
5	Upgrading stainless steel cages and doors at Ape Centre section.	68,062.00
6	Installation of barb wire repaired damaged perimeter brick walls and security fencing.	92,281.00
7	Repaired damaged gabion walls along Sungai Kemensah and Sungai Pandang.	25,314.00
8	Construction of artificial rockwork for Photo Corner.	31,830.00
9	Construction of artificial tree trunk with branches for Painted Stork resting and nesting and feeding trough.	44,280.00
10	Earth works and Installation Interlocking Paver at Picnic Area opposite Marrybrown.	189,759.00
11	Upgrading of amphitheatre at the Show Area.	36,265.00
12	Construction Staffs' motorcycle parking shed.	11,533.00
13	Premix Construction of car parking bay to road shoulder of Jalan Kemensah.	32,661.00
14	Office Renovation at Rotunda.	37,773.00
15	Upgrading works at Mammal Kingdom	67,106.00
16	Construction of Parrot Enclosure.	8,255.00
17	Upgrading works to Camel Night quarters.	12,050.00

	<b>WORKS IN PROGRESS BY 31 DECEMBER 2005</b>	<b>COST (RM)</b>
1	Proposed restoration of existing Aquarium Tunku Abdul Rahman building.	RM 2,300,000.00
2	Proposed upgrading and air conditioning to the existing Wakaf in front of Elephant Enclosure. Requested and sponsored by GlaxoSmiteKline	RM 25,000.00

### **PROPOSED DEVELOPMENT PROJECTS FOR YEAR 2006.**

In addition to the work already carried out, a number of projects have been proposed by the various members of the Committee and Zoo staffs. The List below itemizes those projects which are now under consideration:

	<b>WORKS IN PROGRESS BY 31 DECEMBER 2005</b>
1	Upgrading of the Nile Hippopotamus Enclosure.
2	Refurbishment work of the Bearded Pig Enclosure.
3	New Meerkat Enclosure.
4	Upgrading of Animal Show Night Quarters.
5	Refurbish Public Toilet
6	Upgrading of the Spotted Leopard Enclosure.
7	New Public Toilets at the Bird Area.
8	Upgrading of Elephant Night Quarters
9	Upgrading KFC Building

As can be from the above list, at number of new developments are planned for the future. A system of priorities and procedure will be used before final decisions are taken on implementation. This is to ensure the best results for the upgrading.



The annual income for Zoo Negara normally comes from the gate collection, rentals, sponsorships, interest on fixed deposits, subscription and miscellaneous income.

This year's gate collections of about RM6.2 million continued to be our main source of income and contributed 80.4% of our total income of RM7.7 million.

Rental income from car park and F&B operators showed an increase from RM512, 600 last year to RM680, 400. The most significant increase in income came from Sponsorships RM191, 025 in 2004 to RM557, 488 this year.

Our operating expenditure was about RM7.5 million which represents an increase about 1.9% from last year (RM7.3 million); with salaries making up 30% of costs and animal food and maintenance contributing 23.5%. On operating level, we registered a net operating profit of over RM278, 000 by the year end. Refurbishment of Tunku Abdul Rahman Aquarium was initiated early in the year and expected to cost about RM2.3 million.

The year under review was not going as smooth with regard to the staff Common Agreement (CA) which expired on 31<sup>st</sup> December 2004. Because of very high demand and some items are not negotiable, the Management proposed to adopt the old CA for another three years which will end on 31<sup>st</sup> December 2007.

The staff however, did not agree to the proposal after six meetings. At the time of the writing this report, the CA deadlock will be brought to the Industrial Court for judgment.



The Public Relations and Marketing Department was expanded during the year and now includes Customer Services and is known as the Public Affairs & Marketing Department.



Year 2005 has shown a substantial increase in the sponsorship programme to over half a million Ringgit collected from companies and individuals. One major contributor was the HSBC Bank which during the year contributed a total of RM 162,000.00.

Two companies have pledged a four-year sponsorships; Petroliam Malaysia Berhad (Petronas) and The Lion Group. ExxonMobil Exploration Inc. made a contribution for education purpose and continued to support this purpose by sponsoring the latest school poster on Nocturnal Animals. The zoo has also received two new sponsors this year – A&W Malaysia Sdn. Bhd. and O’Bon International.

The department has organized and co-hosted a variety of events during the year to attract more visitors to the zoo. Thirty five events were held on festive and other days. Major events were the Malay Mail Big Walk – Save the Milky Stork Project, Earth Day – TV3 Goes Green With Zoo

Negara, Universal Children’s Day Carnival and the First Wedding at Zoo Negara. During festive days such as Chinese New Year or Hari Raya Aidil Fitri, a variety of activities were held throughout the day to cater to foreign and local visitors.

The new attraction for 2005 was the first Night Animal Show in Malaysia which featured mostly nocturnal animals. This show is held during Zoo Negara by Night on Saturdays, Sundays and Public Holidays. For the convenience of visitors, the visiting hours on Zoo Negara by Night has been revised to open throughout the day from 9.00 am till 11.00 pm.

Launch in August was the ‘Photo Corner’ located near the zoo entrance. Visitors may take photos with orang utans, flying foxes, birds and snakes for no extra charges.

During the year, the department negotiated an MOU with a local broadcasting network – Sistem Televisyen Malaysia Berhad (TV3). Similar agreements were held with O’Bon International, a company that manufactures pencils from recycled paper and with Wall’s Ice Cream a Division of Unilever Sdn. Bhd.



The department received more than fifty requests during the year for filming, interviews and photo shoots from production houses, advertising agencies and from foreign and local media. These activities have aided the zoo in promotions throughout the year. Such request including the National Geographic filming on Reticulated Pythons and the Leo Burnett Advertising Agency for a photo shoot on tigers.



Another year of exciting new activities has come and gone for the Education Department. 2005 saw the development of our skills and department resources. We also moved our office to the previous administration building and sharing the first floor with the Zoology Department, Development & Maintenance Department and the ISO office. The library is still in the process of being upgraded to a resource centre. We received a tourism student from Kolej Hulu Langat, Noremilya, who carried out her practical training for a period of 5 months. The department's clerk, Mrs. Victoria Sundaraj, resigned at the end of the year and we wish her all the best.



## Education Services

Educational services were provided to a total of 266 schools/groups during the year (12,806 individuals). This accounts to a slight increase of 43 groups. However, the total of individuals dropped by 14%. As in previous years we have found that most groups visited between July and September.

The highest number of individuals was 2,381 in July, followed by 2,270 in September. August which usually sees a high number experienced a drop because of cancellations due to the haze. Services provided were guided tours on the road trains, talks, animal contact sessions, worksheets and handouts.

*(The figures above do not include; i) schools/groups that chose to visit the Zoo without calling upon the services of the Education Dept., ii) Tours provided to dignitaries, VIPs and visiting guests from other zoological organizations and iii) Adult chaperones accompanying children in groups)*

Education based event organizers continued to use our services in 2005. The department's detailed requirements towards these organizations' visits to the zoo prevented a lot of the problems encountered in the past.

As the current Education Department move into our fifth year of service, we are beginning to see the same schools and groups coming back to the department for assistance to enhance their educational experience.

These include several international schools, kindergarten franchises, private schools and a number of Government secondary schools. Other repeat visitors are the Vocational Training Opportunity Centre of YWCA and the Selangor Tourist Guide Association (SGTA). Both have come back for their 3rd and 5th consecutive years, respectively.

The Department was also contacted by the Education Ministry's Division in Selangor for the 2nd consecutive year to provide guided tours for the national level programme called "Perkhemahan Alam Semulajadi Sekolah-sekolah Rendah Peringkat Kebangsaan 2005" in July. Worksheets provided the year before were given to the students as part of a booklet (primary school level).

## Department Milestone

One major project which started early in the year was a collaboration between Zoo Negara and Hitachi International for their 7th Hitachi Young Leaders Initiative which was held in Kuala Lumpur from 11th – 15th July. Themed “Balancing People, Planet & Profit in Asia’s Future”, the initiative comprised of forums with distinguished leaders, workshops and community work activities.

A total of 40 participants from 6 Asian countries; Indonesia, Japan, Malaysia, the Philippines, Singapore and Thailand took part.

Our collaboration was to “translate environmental awareness into action”. After numerous meetings and discussions with Hitachi International’s representative here in KL, Edelman Public Relations Worldwide Sdn. Bhd., the Education Department developed an information-activity pack of 6 threatened Malaysian animals.

Spending a whole day at the zoo, participants teamed up with their partners from the Malaysian Federation of the Deaf and completed activities at each of the 6 animal enclosures. The Malaysian Federation of the Deaf translators were at each section to assist.

Although this collaboration was challenging and faced with many obstacles, the experience was well worth the effort. The development of the information-activity pack has been beneficial as it has also been very useful for other programmes.

Initial efforts to promote more in-depth educational programmes in the beginning of 2005 were met with some interest by NGOs, but did not produce any results.

However, in June 2005, our colleagues at FRIM-MNS-SHELL Nature Education Centre (NEC) booked us for a session of ‘*Tak Kenal, Maka Tak Cinta*’ – focusing on Tigers.

The 20 odd group of enthusiastic children participated in a half day programme which included a short introduction lecture about tigers, enrichment activities in the tiger enclosure and going behind-the-scenes at our Big Cats holding area. Everyone was thrilled with the opportunity to be able to come close to these magnificent animals and work in their homes.

This soon led on to two more similar programmes, focusing on Orangutans (24 August) and finally on Pythons (14 December). We would like to thank the educators from FRIM-MNS-SHELL NEC for having faith in our new programme and supporting us.

## Presentations off-site

Another worth mentioning collaboration was with LESCA who is an educational event organizer, endorsed by the government to conduct science camps for primary school children at a national level. We were invited to give a talk on wildlife at the National Science Centre on 15 March. The packed auditorium of 300 primary school children also took part in a short quiz at the end of the presentation.

The Education Department was also invited to give short talks to employees of KL Aquaria and the Department of Forestry. Both created the opportunity to provide the most current information on environmental and wildlife conservation, conservation education and to promote the zoo.



## Training, Workshops and Seminars

Head of Department, Ms. Renee Yee, was invited to be a facilitator at 'Teachers for Tigers' workshop at IKB Bukit Rengit, Lanchang, Pahang, from 7 till 15 January. This environmental education workshop was jointly organized by the Department of Wildlife and National Parks (PERHILITAN) and Wildlife Conservation Society (WCS). A subsequent follow-up workshop was held at Melaka Zoo from 24th till 27th July. Education Officer, En. Suzalinur Manja attended as a participant.

Both Ms. Renee Yee and Encik Suzalinur Manja participated in a science workshop, entitled "Petrosains Sharing Session" at the Kuala Lumpur Convention Centre on 8th July. The presentations were interesting and brought up the subject of the effectiveness of scientific organizations on creating awareness on science.

Before the year ended, the department was approached by Malaysian Conservation Alliance for Tigers (MYCAT), a governmental and non-governmental movement working for the conservation of the Malayan Tiger in Peninsular Malaysia. Together with their partners, they organized an awareness workshop for local press and media from 5th – 6th December. A total of 20 participants, including MYCAT partners were present to share their thoughts on how to increase and improve tiger (and other wildlife) issues through media.

## Exhibitions and Special Events

The Education and Public Affairs & Marketing Departments worked closely to organise events

and visitor activities, whether they take place on site in the zoo (mainly during the festive seasons) or outside at bookstores, shopping centres and at exhibitions.

Zoo Negara was invited a few times in 2005 to participant in TV3's Sure Heboh Carnival. Before the year ended, we organized the Universal Children's Day celebration on Saturday, 20th November. Officiated by the Vice-President of United Nation's Association of Malaysia, Tan Sri Razali Ismail, the event was supported by generous sponsors. The department was in charge of organizing activities for children; Essay Writing, Story-telling and Costume Competitions.

## Appreciation

The Department still regularly receives group volunteers from higher learning institutions such as Kolej MARA Banting. We also saw an increase of secondary school students volunteering at the zoo as a requirement for Moral subject.

Large groups, however, were slightly problematic. Therefore, we rewrote the terms for the Volunteer Programme and have inserted clauses for groups. At the same time, to prevent 'one-time only' volunteers, we are also going to ask that all volunteers complete a quota of at least 8 hours a month beginning 2006.

Meanwhile, our most helpful volunteer has returned from the United States. Mr Larry Reiten has been volunteering every year since 2001 for a stretch of 3 to 4 months. His and the other volunteers' commitment and dedication continue to be appreciated.



The Department was accountable to ensure the Zoo's landscape remain at a high standard. The job included the maintenance, beautification and the daily cleaning of the Zoo compound.

2005 was a flourishing year for the Department. Besides the usual overall landscaping works, the Department has also involved in four major events held in the Zoo.

## Earth day 2005

The celebration of the Earth Day was carried out through a one day event known as "TV3 goes Green with Zoo Negara". It was held on 24<sup>th</sup> April 2005 as a joint event between Sistem Televisyen Malaysia Bhd (TV3) with Zoo Negara.

One of the major activities installed was "**The Planting of 100 trees**". The trees were planted by the VIPs from TV3, Forest research Institute of Malaysia (FRIM), Walls and TV3 personalities.

The young wood trees were planted in various sites around the Zoo as an effort for a greener earth. Most of the trees were planted outside the perimeter of the Mammal Kingdom, Savannah Walk, Bear Complex and tiger section.

There were altogether 6 different types of local hard wood trees which were donated earlier by FRIM. Among the tree planted were; *Pteleocarpa lamponga*, *Pometia piñata*, *Syzygium grande*, *Sterculia* sp. and *Syzygium campanulatum*.

Each individual tree was then labeled as a memory of the event. The Department and surely the Management of the Zoo were more than grateful for FRIM kind donation.

## Sure Heboh Carnival

Regard to the MOU with TV3, Zoo Negara was invited to be part in the ever popular event; the "Sure Heboh Carnival". Zoo Negara was given a closed fully air-conditioned tent. The overall setup took place on 1<sup>st</sup> September 2005, with a theme of "**Walk on the wild side with Zoo Negara**".

To provide an in-door natural surrounding, the Department had supplied quite a big quantity of fresh plants such as young wood trees, shrubs and herbaceous plants.

These plants were still in their polybags which make them easier to be transferred, and they were all taken off from the Zoo nursery. Besides plants, plants derivatives; portioned-cut branches, tree barks and stacks of dried leaves were also supplied.

## Herbal Garden

The Department has worked closely with FRIM to create an "Herbal Garden" in the Zoo as an addition to the present collection. The main purpose was to educate visitors about the herbal plants species in Malaysia and their medicinal values.

12 herbs plants species were planted in a small plot outside the Mammal Kingdom, behind the Malayan Porcupine (*Hystrix brachyura*) enclosure. Among the herbs planted were; *Clerodendron paniculatum*, *Kaempferia galangal*, *Orthosiphon granddiflorus*, *Melastoma imbricatum*, *Jasminum sambac*, *Phaeomeria imperialis*, *Lantana camara*, *Piper longum*, *Eurycoma apiculata*. This project was accomplished with the help of two practical students from University Malaysia Sabah.





## Botanical Guide Book

The idea to produce a Botanical Guide Book came from the Management. As the project was still underway, the main objective was to give the visitors a better understanding about the botanical entities around the Zoo's vast landscape. Following the book will be "The Botanical Tour" in which will be an added value to the whole project.

With a planned work frame, the first step was to record the botanical entities that will be inserted in the book. To achieve this, the Department had been working together with the Education Department that was responsible to capture the digital photographs of the plants. Plants characteristics such as flower, fruit, leaves etc were added in. With the production of this book, visitors will both experience the wildlife and the botanical entities that can be found in our mega diverse country.

## Replanting

There are many reasons to replanting; one of them is to create a better panoramic view to the areas of which the previous plants failed to provide. By introducing a more suitable plant, we ensure that the specific area matched with the surrounding; enclosure, thus improving the overall landscape.

There were several beautification projects that had taken place around the Zoo which involved replanting. Most of the areas had been replanted with cover crops; *Ophiopogon jaburan*, or small flowered-plants; *Lantana camara*, or flowered shrubs; *Sanchezia nobilis*, *Turnera troniflora*, *Iresine* sp., *Canna* sp., to add more colour.

Besides the facelift, replanting also resulted in other advantages. The *Malvaviscus arboreus mexicans* for instance produced flower that was favored by small wild birds, and flower from *Quisqualis indica* produced a strong lovely scent at night.

One of the major replanting projects in 2005 was the replacement of the previously planted *Baphia nitida* with *Heliconia rostrata*, outside the Bird House's aviaries. By removing the *B. nitida*, visitors have had a clearer view of the birds from outside.

## Maintenance

The up keep of the landscape also involved the use of fertilizer. As in previous years, both chemical and organic fertilizer had been widely used. The organic fertilizer utilized the poo that was collected everyday from animal's enclosure and was kept at the Zoo's nursery. Only the decayed poo was used.

The big trees also received their uplift and health check which involved pruning and termite control. Pruning was delivered quarterly to keep the tree's canopy in balanced and also to cut off the nearly dead branches from falling dangerously on visitors or animals. Besides that, the termites' control which concerned the selected trees was sprayed with chemicals, around 2 feet from the base.

The Department was responsible to guarantee the cleanliness of Zoo's compounds. Cleaning was carried out as a daily routine. Another responsibility was the fogging programme which was done twice a month. The fogging was done either in the early morning or late evening.



## MAMMALS

The year saw changes to the types and number of mammals at the Zoo. By the year end, we had 95 mammal species as compared to 89 from the previous year. Similarly, the number of mammal individuals was also higher from 538 in 2004 to 557 in 2005, respectively.

### Primates

The Primate Section produced 10 new individuals in 2005. The new births were from Anubis Baboon (*Papio anubis*), Bonnet Macaque (*Macaca radiata*), Silver Leaf Monkey (*Presbytis cristatus*) and White Handed Gibbon (*Hylobates lar*).

In November 2005, a group of 3.7.0 Silver Leaf Monkey (*Presbytis cristatus*) was brought in from Kuala Selangor area. With this new bloodline, inbreeding will be reduced among the Silver Leaf Monkey.

All the 3.5.0 Bornean Orangutan (*Pongo pygmaeus*) and 2.4.0 Sumatran Orangutan (*Pongo abelii*) had undergone the normal medical check-up in 2005, however with two additional protocols for DNA analysis and the insertion of microchips subcutaneously as a new tagging system.

A male Sumatran Orangutan (Charlie) was sent to Singapore Zoo on the 7<sup>th</sup> June 2005 for the animal exchange programme.



### Mammal Kingdom

A pair of Asian Clawed Otters (*Aonyx cinerea*) which was donated to the Zoo last year again gives birth to four pups in August. This family of eight otters can now be observed in the exhibit to the left of the bear complex.

Two colonies of Capybara (*Hydrochoerus hydrochaeris*) gave birth to seven lovely babies and all of them are growing very well. Underwater World Langkawi loan a pair of Capybara from Zoo Negara for the launching of one of the largest sea water aquarium in Malaysia.

A pair of Ostrich (*Struthio camelus*) in the enclosure opposite the tiger enclosure was moved to an empty enclosure beside the Ankole cattle (*Bos Taurus*). We replaced the emptied enclosure with a pair of striped Hyena (*Hyaena hyaena*) which was brought in from Singapore Zoo.

A female Malayan Tiger (Kitty) (*Panthera tigris jacksoni*) from the holding Center was transferred to socialize with the adult Malayan Tiger (Bingo) in the Malayan Tiger enclosure. The Gir Lion (Sheba) died on the 24<sup>th</sup> December 2005 after a long stay of over 20 years at Zoo Negara.

### Hoof

The year started with the successful translocation of a pair of Malayan gaur (*Bos gaurus hubbacki*) from the Seladang Breeding Centre in Jenderak, Pahang to Zoo Negara Malaysia. They were kept indoors about four weeks for observation and acclimatization before they were released into the exhibit. Feeding and water were given ad libitum.

On the animal exchange programme with Singapore Zoo, 2.2.0 Nyala (*Tragelaphus angasi*) were brought in last year and successfully socialized with our present two females.

At the end of the year 2005, a total 48 births were recorded from the followings; 2.2.0 Giraffes (*Giraffa camelopardalis*), 1.2.0 Zebra (*Equus burchelli*), 3.2.0 Banteng (*Bos javanicus*),

3.1.0 Hog Deer (*Axis porcinus*), 1.1.0 Barking Deer (*Muntiacus muntjak pelharicus*), 1.1.1 Indian Gaur (*Bos gaurus gaurus*), 2.0.0 Sable Antelope (*Hippotragus niger*), 1.7.1 (Axis) Spotted Deer (*Axis axis*), 1.0.0 Pony (*Equus caballus*), 0.0.4 Bearded Pigs (*Sus barbatus*), 2.1.0 Ankole Cattle (*Bos Taurus*), 1.2.0 Sambar Deer (*Cervus unicolor equines*), 0.0.1 Red-Legged Pademelon (*Thylogale stigmatica*), 0.0.1 Javan Deer (*Cervus timorensis*), 1.0.0 Red Lechwe (*Kobus leche leche*) and 2.0.0 Common Goat (*Capra aegagrus*).

We continue to open the entire South East Asian and African animal exhibits for "Zoo By Night" on every Saturday, Sunday and on the evening of holidays. Night feeding have been introduced for several species, namely the Spotted Deer (*Axis axis*), Banteng (*Bos javanicus*), Indian Gaur (*Bos gaurus gaurus*), Red Legged Pademelon (*Thylogale stigmatica*), Malayan Tapir (*Tapirus indicus*), Barking Deer (*Muntiacus muntjak pelharicus*), Dromedary Camel (*Camelus dromedarius*), Ostrich (*Struthio camelus*), Giraffe (*Giraffa camelopardalis*) and Nile Hippo (*Hippopotamus amphibious*).

Zoo Negara Malaysia recognizes that environmental enrichment is an important and necessary part of husbandry practices for our captive animals. Apart from feeding stimulus, creating sensory stimulus by using spices and plant items enhanced opportunities for animals to display their natural behavioral needs. For example; White Rhinoceros (*Ceratotherium simum*) were observed for three months to record a baseline for their behavior. After the scent treatment was given, the Rhino's started to show aggressive behavior and followed by mounting behavior which we suspected copulation to occur on 5<sup>th</sup> December 2005.



## BIRDS

In 2005, the Bird Section was occupied with the creation of natural habitats for birds, both in the exhibits of the bird house and also around the lake. We attempted to plant some mangrove tree saplings at one corner of the lake. This would give a more natural habitat for more than 300 free flying painted storks (*Mycteria leucocephala*). Some non bird species such as Squirrels, Iguanas, Mousedeer, Kangaroo, Wallabies and Flying Lemurs were incorporated in multi-species exhibit and cared by the team in the Bird Section.

The Section continued to excel in breeding of the following species in 2005: 0.0.36 Painted Storks ( *Mycteria leucocephala*), 0.0.27 Milky Storks (*Mycteria cinerea*), 0.0.20 Black Crowned Night Heron (*Nycticorax nycticorax*), 0.0.13 Crestless Fireback (*Lophura erythrophthalma*), 0.0.11 Malayan Peacock Pheasants (*Polyplectron malacense*), 0.0.6 Pink Backed Pelican (*Pelecanus ruescens*), 0.0.4 Silver Pheasants (*Lophura nycthemera*), 0.0.4 Common Peafowl (*Pavo cristatus*), 0.0.2 African Spoonbill (*Platalea alba*), 0.0.1 Greater Hornbill (*Buceros bicornis*),



0.0.1 Rhinoceros Hornbill (*Buceros rhinoceros*), 0.0.1 Nicobar Pigeon (*Caloenas nicobarica*), 0.0.1 Emu (*Dromaius novaehollandiae*) and also 0.0.2 Agile Wallaby which shared exhibit space with the Emu (*Dromaius novaehollandiae*).

The Humboldt Penguin (*Spheniscus humboldti*) had laid two eggs which were collected for artificial incubation at the Bird House. Both eggs had embryos; however the fully formed embryo had died during development.

This year Zoo Negara continued to exchange captive bred birds with Penang Birdpark, Kuala Birdpark and Johore Zoo as part of our contribution to conservation. Zoo Negara Malaysia collaborated with Universiti Putra Malaysia, Universiti Malaya, Universiti Kebangsaan Malaysia and others, not only in the Bird Section but also in other Sections such the Zoo Hospital, Mammal Section and the Hoof Section.

The Bird Section assisted the Sekolah Menengah Taman Connaught in Cheras in their "Eksplorasi Alam Kerjaya" competition which was held at national level in July last year.

Mr Gary Robbins and John Corder from the World Pheasant Association, United Kingdom came for a visit to Zoo Negara Malaysia.

Other distinguished guests that visited the Bird House in 2005 include Staff of Sabah Zoological Park, Langkawi Birdpark, Taman Hidupan Liar Sabah, Indonesia Rescue Center, Kuala Lumpur Birdpark, PERHILITAN and Saigon Zoo Director.

The Staff from the Bird Section also attended the MAZPA course held in Zoo Negara Malaysia. And some senior staff participated as facilitators or demonstrators at the MAZPA course.

The course in Taxidermy which was held in Melaka Zoo on 24<sup>th</sup> June 2005 was attended by three staff from Zoology Department.

## PHOTOS FROM MAZPA'S KEEPER TRAINING COURSE (28th MARCH - 6th APRIL 2005)



## REPTILES

The exhibits for the Reticulated Python (*Python reticulatus*) and the King Cobra (*Ophiophagus Hannah*) were further improved to attract visitors to the reptile house. These are the two main attraction exhibits of the reptile house. Most of the visitors were interested in the handling and the management aspects of their pets such as iguanas and snakes.

The Dwarf Crocodile (*Osteolaemus tetrapsis*) produced six new young ones from 14 eggs after 95 days in incubator. We helped to hatch by breaking the shells. The eight eggs were infertile. The Shore Pit Viper (*Trimeresurus purpureomaculatus*) gave birth to 12 babies.

There were reptile donations from the public as well as the Fire Department. These include the King Cobra (*Ophiophagus Hannah*), Malayan Water Monitor (*Varanus salvator*), Reticulated Python (*Python reticulatus*), Copperhead Racer (*Elaphe radiata*) and some tortoises.

### PHOTOS FROM MAZPA'S KEEPER TRAINING COURSE (28th MARCH - 6th APRIL 2005)



Since its closure in 2002, the Aquarium Committee of Zoo Negara has been finding means and ways to reopen Akuarium Tunku Abdul Rahman (ATAR). However, due to the lack of funds and the threat of moving the entire zoo, the work of refurbishing the aquarium had to be stalled.

Nevertheless, somewhere in January of 2004, funds were made available for the refurbishment of ATAR and the newly elected Aquarium Committee decided to carry on with the refurbishment works.

In the meantime, and as a substitute to the larger aquarium complex, several smaller sections have been open to display smaller tanks with various fish, namely the Children's World Aquarium and the Fishes of The World Aquarium located next to the Marrybrown Restaurant. The Arapaima tank however has not been changed and still provides visitors with a breathtaking display of large fish such as the Arapaima, River Catfish, Pacu and the Redtail Catfish.

### The New Aquarium Committee Members

The new aquarium committee is now headed by Dato' Jimin Idris who is a long standing member of the MZS Council. After much discussion and deliberation, several capable and experienced individuals in the field of aquarium management were chosen as the members of the new Aquarium Committee. They are as follows:

1. En. Majdi Khairuddin - Aquarium Hobbyist, member of the Aquarium Club at Zoo Negara. Managing Director; Impact Assets. Aircraft Maintenance Engineer.
2. Mr. Peter Leong - Aquarium Hobbyist, member of the Aquarium Club at Zoo Negara. Manager Pricewaterhouse Coopers. Accountant.
3. Mr. Brian Chee - Managing Director; Unique Bubbles. Aquarium Consultant
4. Mr. Patrick K.Y. Lee - Scientific Officer AMCAL University of Malaya. Ecologist

### Ex - Officio:

1. Herman Bernard Ganapathy - Zoo Negara. Assistant Curator of Aquarium Tunku Abdul Rahman. Ecologist
2. Ms. Claire Beastall - Zoo Negara. Zoo Consultant for Zoo Negara. Zoologist.
3. Dato' Haji Zaharin - Council Member MZS. Quantity Surveyor.
4. En. Shahril Shariff - Zoo Negara. Maintenance and Development Officer.

### Refurbishment works

The new aquarium committee had commissioned a study on the integrity of the aquarium tanks within the aquarium complex following reports of the curator that some of the tanks had shown signs of severe deterioration.

Following this two independent engineering companies were called in to give their view on the matter. In general, both had indicated that there was indeed a problem with the tanks and that further investigation had to be carried out to determine the seriousness of the problem before any refurbishment work can be done.

The committee also discussed in depth other aspects of the aquarium in particular the Life Support System (LSS), the glass and sealants, lighting, rewiring, ventilation, signages as well as flora and fauna for the new aquarium.



Currently quotes are being obtained for the LSS and other areas of refurbishment. Action Base Consultants (ABC) was officially appointed as project consultant for the refurbishment works. The actual work started off with the Structural Condition Surveys of the entire building and its tanks. This commenced in April 2005. Following this a report was produced by the consultants with detailing the various areas of work needed for the aquarium.



By July 2005, several potential companies were invited to submit their tender proposals. Kim Han Construction Sdn Bhd was awarded the tender after evaluation by the ABC consultant, the Aquarium Committee and the DPC. Site possession and actual construction work only commenced in August 2005. The work is to be completed by February 2006.

### Fish Health

Fish health in general proved satisfactory but the Arapaima pool still had a problem with its current filtration system. The inability to cope with the high loads of waste caused deterioration in the water quality.

### Projects

Among others, the various works carried out at the aquarium for the whole of 2005, include the followings:

1. Routine work of maintaining all the various sections within the aquarium such as the Marrybrown Aquarium, Children's World Aquarium, the Arapaima tank and the main aquarium block together with the holding center, the nursery and the gardens.
2. Re-landscaping the front portion of the aquarium building so that this section can be opened to the public. Works here include replanting of the areas surrounding the entrance and adding of new but smaller aquariums around the area.
3. Formation of a Fern/Herb garden next to the aquarium with various fern and herb species including pitcher plants and aquatic plants
4. A new program by ATAR is the Fish Club which is aimed at fish hobbyists. Currently there are no specialized clubs for fish enthusiast. Thus ATAR has taken the first step in providing an avenue where fish enthusiast can gather and discuss matters concerning the hobby. To date this group has met about four times with only a small initial group of six to ten members but plans to expand once the aquarium is up and running. Other than discussions on topics concerning aquatic life, the group has also gone for two field trips. Amongst others the aims of the club would be:
  - To provide an avenue of discussion for aquatic related topics
  - To provide hobbyists the opportunity to be involved with the daily running of a public aquarium
  - To provide a platform for hobbyists to be involved in serious research and conservation efforts by the Zoo in particularly ATAR
  - To provide an avenue for interaction between various hobbyists
  - To assist ATAR to reach its goal as a 'people's aquarium'

The year saw changes in the overall management of Zoo Veterinary Hospital. Due to the restructuring of Zoo Negara, Dr. Mat Naim Hj. Ramli has taken the position of Zoo Head Veterinary Hospital from Dr. S. Vellayan.

The position of Field Assistant Veterinarian has been occupied in June 05 by Dr. Azlan Che Amat but he later resigned by the end of 2005 to pursue his Masters degree. Mr. Khairul Naim was hired as Laboratory technician in early June 05 and was fully in charge of the laboratory in Zoo Veterinary Hospital.

### Internal Laboratory Work

The main function and focus of zoo lab was to examine or analyse faecal samples of each species of zoo animals. Faecal examinations were carried out on a regular basis and throughout the year 2845 faecal samples were screened for parasitology.

Of these 550 found positive for a various type of internal helminthes ova and larva such as strongyle, trichuris sp, hookworm and protozoa such as Balantidium and amoeba spp.

Three (3) techniques of faecal examination namely direct faecal smear (Normal saline & Iodine), concentrated Brine floatation and formalin – ether sedimentation were applied and remained the effective analysis method of helminths.



### External Laboratory Work

Besides faecal samples other specimens were sent to external laboratory facilities such as PJ Lab (under Department of Veterinary Services) UKM, VRI, Chemistry Department and UPM commonly for bacteriology, virology, histology, biochemistry, genetic and DNA analysis. A total of 437 specimens were sent to the external lab throughout the year.

### Post Mortem

A total of 300 post mortem were carried out that includes 28.3%, reptile, 33.3%, birds, 15%, hoofstock, 13.3% rodents, 6% feline and 4.5% primates. Typical signs of bacterial infection still dominating the post mortem lesions and it shows this microorganism remained the biggest problem facing by zoo animals. Specimens sent to either PJ Lab or UPM revealed positive culture for various bacteria such as E.coli, Klebsella sp., Salmonella sp. and etc.

### Field Cases

The hospital worked hard to maintain a high standard of animal care. Routine investigation and treatment were carried out either as inpatient or out outpatient. Smaller and manageable animals with serious signs were brought to zoo hospital and treated as inpatient. Others like ungulates species and carnivores treatment took place in the field. A total number of 131 patients were admitted during the year 2005. Sumatran tiger 'May Gagah' was put to sleep after more than two years in zoo hospital due to chronic emaciation and Leptospira positive.

### Animal Tranquillized

A total of 46 animals were tranquillized for various reasons. Suturing wound due to fighting among males in primates enclosure is among the popular reason of sedation. Other reasons of course for fully medical checkup, severe wound treatment and blood collection.



Under the collaboration effort with Wildlife Department, 12 orang utan for both species Bornean and Sumatran were tranquillized for blood collection for DNA analysis and implanting microchip identification.

### Microchip Identification

After umpteen years without individual identification, except names and cages, we have applied microchip identification system starting October 2005. By year 2005, 32 animals were implanted with microchip subcutaneously that includes large and small cat, orang utan, king cobra and some lesser primates.

### Quarantine and Holding Centre

In year 2005 suggestion was given to zoology department to separate the function of holding center as a place for temporary holding an unexhibits specimens and at the same time is also a quarantine area for new animals. It was a normal practise that new animals in quarantine area shouldnt be mixed with other existing animals in zoo. Quarantine is a vital step in bringing a new animal into a zoo's collection and this produce is to upgrade the standard of keeping zoo animals in general.

### Preventive Medicine

Preventive medicine is the backbone of any medical program in a zoo due to inherent problem in diagnostic produces and treatment of wild animals. Preventive medical procedures are recorded and become the start of the animals' medical record. Complete records are essential to all programs.

Preventive medicine includes;

#### 1. Vaccination

A total of 32 felines were vaccinated with Feline Leukemia Rhinotracheitis – Calici – Panleukopemia – Chlamydia psittaci and 10 canines were vaccinated against Canine distemper, Adenovirus type 2–Parainfluenza Parvovirus and Leptospira canicola.

#### 2. TB Testing

TB testing and culture was done for orang utan 'Charlie' before sending to Singapore Zoo for breeding purpose and found to be positive TB (Mycobacterium tuberculosis) Pest Control.

The zoo's on going pest control programme resulted in the capture of 3288 crows, 25 stray cats, 22 python, 6 palm civet, 18 monitar lizard and hundred rats in the zoo compound. These program is to minimise the risk of disease transmission through carrier host animals.

#### 3. Deworming

Spesific deworming based on faecal examination result has been practiced throughout the year. A total of 284 has been dewormed with antihelminth drug.

#### 4. AI Screening

A total of 48 birds were screened randomly for AI and all are negative results.

### Volunteer and Students Training

Zoo Veterinary Hospital continues to be among the favourite section in Zoo Negara for voluntarily works by students in Klang Valley and also for undergraduate university completing their two months industrial training course. In 2005 zoo hospital received about 27 volunteers and 21 university students under semester breaks training course.



NAME OF DONORS / SPONSORS	ANIMAL / ITEM SPONSORED	RM
<b><i>Sponsorship / Donation under RM 200,000</i></b>		
HSBC Bank Malaysia Berhad	7 Sun Bear, 3 Brown Bear 1 Sumatran Tiger, 1 Veterinarian	162,000.00
<b><i>Sponsorship / Donation under RM 100,000</i></b>		
AmMerchant Bank Berhad	Calender Year 2006, 3 Camel	67,500.00
Tractor Malaysia Sdn Berhad	3 White Rhinos	60,000.00
Exxonmobil Exploration & Prod Malaysia	3 Malayan Tiger, Education Posters	60,000.00
<b><i>Sponsorship / Donation under RM 50,000</i></b>		
Malayan Banking Berhad	1 Sumatran Tiger & 6 Fish Owl	36,500.00
Petroliam Nasional Berhad	Children's World	30,000.00
Unilever (M) Holdings Sdn Berhad	1 African Lion	30,000.00
ING Insurance Berhad	1 Gir Lion	20,000.00
<b><i>Sponsorship / Donation under RM 20,000</i></b>		
OM Education Sdn Berhad	1 Bengal Tiger & 2 Mouse Deer	18,900.00
Carlsberg Malaysia Berhad	1 Elephant	15,000.00
Dato' Zaharin Md Arif	Trip to Zoo Thailand	13,050.00
A&W Malaysia Sdn Berhad	1 Asiatic Black Bear, Zoo Negara Signage	10,460.00
<b><i>Sponsorship / Donation under RM 10,000</i></b>		
KL Kepong Berhad	1 Bengal Tiger	7,300.00
O'Bon International	1 Aldabran Tortoise	5,000.00
<b><i>Sponsorship / Donation under RM 5,000</i></b>		
F&N Coca-Cola (M) Sdn Berhad	Zoo Negara Guide Map	4,250.00
Harvard Honour Sdn Berhad	1 OrangUtan	2,100.00
Sekolah Sri Inai Junior Kuala Lumpur	1 Miniture Horse, 1 Zebra & Signage	2,070.00
Kiwanis Club of Kuala Lumpur	1 Small Clawed Otter	2,000.00
Malaysian Nature Society	Milky Stork Training & Survey	2,000.00
Majlis Daerah Hulu Selangor	Donations	2,000.00
The International School of Kuala Lumpur	1 Wreathed Hornbill	1,500.00
Klinik Seri Melawati Sdn Berhad	Medical Aid	1,000.00
Universiti Putra Malaysia	1 Mouse Deer	1,000.00
<b><i>Sponsorship / Donation under RM 1,000</i></b>		
Tengku Muda of Pahang	Donations	900.00
Cik Puan Julita Aishah	Donations	500.00
KTT Product Corporation Sdn Berhad	Orange Chinese New Year	500.00
Puan Balkis Bte Mat Hadzir	Donations	500.00
Azhar Abdul Aziz	1 White Crested Cockatoo Pigeon	500.00
Mohd Seth Bin Ismail	1 Dove	250.00
Choo Su Su	Donations	200.00
Azmi Haji Akob	Donations	100.00
Sumitra Param	Donations	100.00
Khalifah Institute	Donations	100.00
Michelle Low	Donations	8.00
	<b>TOTAL</b>	<b>557,288.00</b>

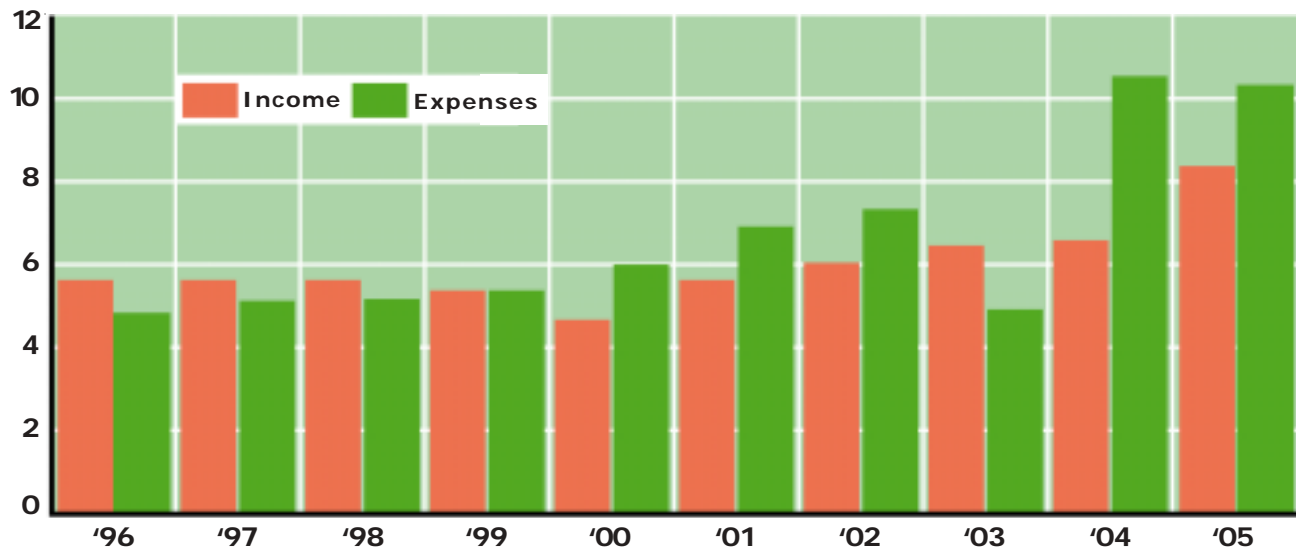
# STAFF LIST

## AS AT 31 DECEMBER 2005

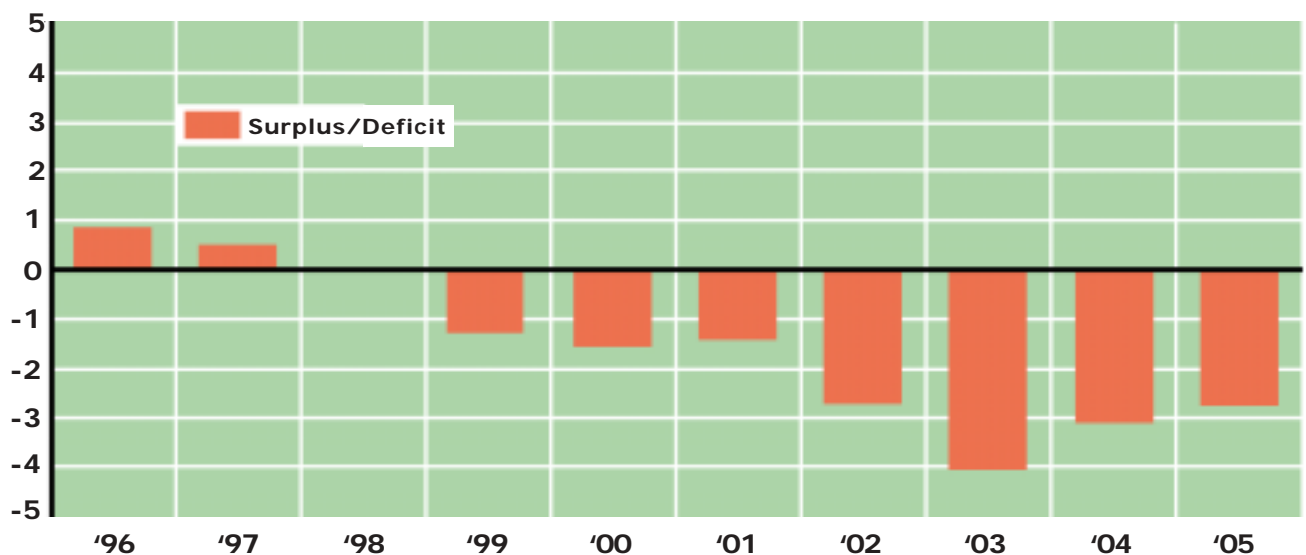
DIRECTOR	Dr. Mohamad Bin Ngah, Ph.D.		
ASST. DIRECTOR (ISO 9001)	Dr. S. Vellayan (As at 1st July 2005)		
CONSULTANT	Claire Beastall (Until 1st October 2005)		
<b>ADMINISTRATION</b>			
Finance Manager	Ngiam Yiew Woon		
Administartion Exec.	Linda Binti Salim		
Human Resource Exec.	Mohd Husny Bin Mustaffa		
Chief Security Officer	Abdul Kadir Bin Ngah		
General Clerk	Fairuzzalina Binti Abdul Kirom		
Receptionist	Nezah Binti Kassim		
Driver	Ali Bin Mohd Som	Suhaimi Bin Jamaluddin	
Office Boy	Muhammad Shahid Bin Othman		
<b>PUBLIC AFFAIRS &amp; MARKETING</b>			
Head	Selena Binti Zahiruddin		
Officer	Junaidi Bin Omar	Mazrul Bin Mahadzir	
Clerk	Zariatul Zita Binti Taharim		
Customer Service Off.	Mariyah Binti Kadir		
Customer Service Asst.	Asmida Binti Abu Samah	Chen Nyet Moy	
	Mesahah Binti Alimen	Halimah Binti Abi	
	Kuyong Anak Jilin		
<b>EDUCATION</b>			
Head	Renee Yee Oi Yen		
Officer	Suzalinur Manja Bin Bidin		
Clerk	Victoria a/p Sundaraj		
<b>VETERINARY HOSPITAL</b>			
Veterinarian	Dr Mat Naim Bin Hj Ramli (As at 1st July 2005)		
Lab. Asst. Officer	M. Khairul Na'im Bin Norzahidi		
General Clerk	Noor Arita Binti Mohd Daud		
Keeper	Ahmad Azwan Bin Muhamad Azli	Christopher Caine Xavier	
Kitchen Supervisor	Aminuddin Bin Hashim		
Kitchen Staff	Arulmani a/p Savarimuthu	Mohd Noor Hishan Bin Mohd Nasir	Noor Fhadillatul A.M. Abd Latif
	Che Yaakob Bin Che Harun	Muhammad Fakarudin Md Daud	Paniselon a/I Manikam
<b>HORTICULTURE</b>			
Supervisor	Muhamad Bin Ismail		
<b>MAINTENANCE &amp; DEVELOPMENT</b>			
Executive	Shahril Bin Shariff		
Officer	Azrul Bin Sa'adin	Badrol Hisham Bin Othman	
Asst. Supervisor	Ahmad Bin Noor Mohammed		
Handyman	Mohamad Salihin Bin Senawi	Wan Nazlie Bin Wan Salleh	
	Kamarul Amirudin Bin Kamaruzaman	Shahrul Nizam Bin Ismail	Ishak Bin Salim
<b>ZOOLOGY</b>			
Head / Curator	Tumar Bin Said		
Asst. Curator	Doreen Khoo Say Kin	Herman Bernard Ganapathy	
Supervisor	Amirul Siva Bin Abdullah	Rozwan Bin Abdul Majid	
	Wahid Bin Jantan	Mohd Daud Bin Abdul Majid	
Senior Animal Trainer	Seevalingam a/I Arjunan, PJK		
Asst. Supervisor	Mohd Nasir Bin Sadan	Musa Bin Awang	
	Jamsari Bin Mohamad	Ishak Bin Bakar	
	Mat Iza Bin Ariffin	Mohd Yusof Bin Musa	
Animal Trainer	Abdul Rahman Bin Othman	Che Hassan Bin Che Man	
	Mohd Noor Bin Mohammed Che An	Mahat Bin Mohamed	Zainal Abidin Yahya
Senior Keeper	Ganesan a/I Ramachandran	Mafrat Bin Kerinting	Ramlee Bin Ismail
	Mohd Faisal Bin Nordin	Paniselon a/I Manikam	
	Sukor Bin Mohamed	Masilamony a/I Sinnapan	
Keeper	Abdul Nabi Bin Ahmad	Knight Joachim Anthony	Mohd Idham Bin Muhamad Yusof
	Abdul Rahim Bin Ayub	Maran a/I Rengasamy	Mohd Nizar Bin Kamarudin
	Abdullah Fadzil Bin Tasharuddin	Mark Igang Anak Igang Anyi	Mohd Nor Azman Bin Abdullah
	Ahmad Fazli Bin Mokhtar	Mohamad Azman Bin Abdul Aziz	Muhamad Salleh Bin Zakaria
	Ahmad Nazuri Bin Esa	Mohamad Razif Bin Ramlee	Muhammad Fuad Bin Nawawi
	Ahmad Nizam Bin Zainuddin	Mohamed Fitri Mohamed Yusoff	Norkhaizam Bin Mokhtar
	Ahmad Sirajuddin Bin Md Alias	Mohd Ariff Bin Bustaman	Nur Bintul Hudah Binti Surani
	Akmal Hadi Bin Samsuddin	Mohd Azizi Bin Md Salim	Parwaiz Bin Abdul Sattar
	Azrennizam Bin Ibrahim	Mohd Effendi Bin Radzuan	Pathmanathan a/I Jayaram
	Che Firhan Bin Che Mansor	Mohd Fakhri Bin Osman	Rostam Bin Ahmad
	Edie Azwar Abdullah	Mohd Faizal Bin Wahid	Salina Binti Aszali
	Fasdlin Binti Zohri	Mohd Fareed Bin Mohd Dzulkifli	Shamsudin Bin Mat Jusoh
	Gunasegar a/I Letchumanan	Mohd Farkhan Bin Ahmad Alias	Sharif Bin Iberahim
	Habib Bin Md Ali	Mohd Hafiz Thanabalan	Spencer William Anak Narok
	Haidrol Azmi Bin Ahmad	Mohd Hamdan Bin Abdul Hamid	Vijayendran a/I Rajendran
	Hamdan Bin Hamid	Mohd Hamzah Bin Mohatar @ Mokhtar	Zaidi Bin Rusli
	Hazlie Bin Zainuridin	Mohd Helmi Bin Abdullah	
	John Anak Dana	Mohd Hisham Bin Ahmad	



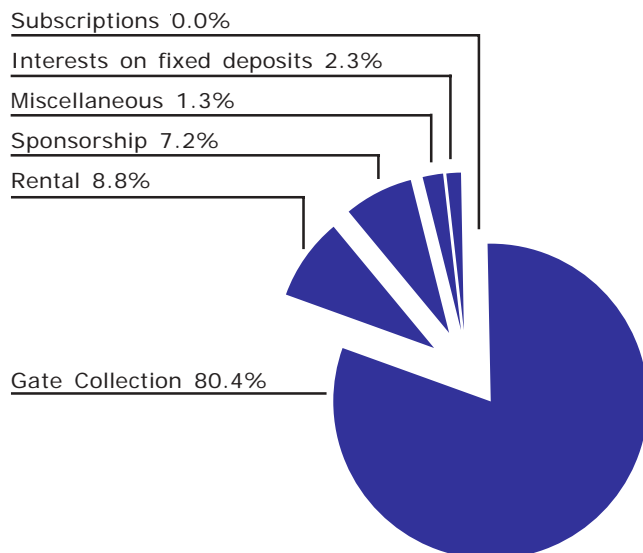
## Annual Income / Expenses 1996 - 2005 (RM 000,000)



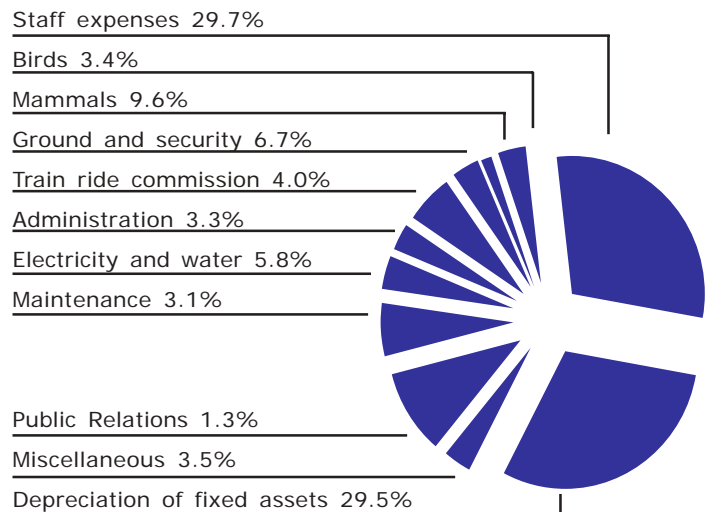
## Annual Surplus / Deficit 1996 - 2005 (RM 000,000)



## Annual Income 2005



## Annual Expenses 2005



## 2005 CENSUS

CLASS	SPECIES	SPECIMEN
Mammals	95	557
Birds	134	1323
Reptiles	59	314
Fish	114	1201
<b>Total</b>	<b>402</b>	<b>3395</b>

## 2004 CENSUS

CLASS	SPECIES	SPECIMEN
Mammals	89	538
Birds	130	1255
Reptiles	64	349
Fish	126	1854
<b>Total</b>	<b>409</b>	<b>3996</b>

## 2003 CENSUS

CLASS	SPECIES	SPECIMEN
Mammals	94	545
Birds	129	1181
Reptiles	63	369
Fish	119	1305
<b>Total</b>	<b>405</b>	<b>3400</b>

M	F	UNKNOWN
8	8	0

### MAMMALS

MARSUPIALIA		
<b>Macropodidae</b>		
Grey Kangaroo	<i>Macropus giganteus</i>	1.0.0
Agile Wallaby	<i>Macropus agilis</i>	3.4.1
Red-Legged Pademelon	<i>Thylogale stigmatica</i>	1.1.1
CHIROPTERA		
<b>Pteropodidae</b>		
Malayan Flying Fox	<i>Pteropus vampyrus</i>	6.10.0
PRIMATES		
<b>Lorisidae</b>		
Slow Loris	<i>Nycticebus coucang</i>	3.0.0
<b>Ceboidea</b>		
Brown Capuchin Monkey	<i>Cebus apella libidnosus</i>	2.0.0
<b>Saimiri</b>		
Squirrel Monkey	<i>Saimiri sciureus</i>	1.0.0
<b>Cercopithecus</b>		
Stump-Tailed Macaque	<i>Macaca arctoides</i>	3.5.0
Long-Tailed Macaque	<i>Macaca fascicularis</i>	1.5.0
Rhesus Macaque	<i>Macaca mullata</i>	0.1.0
Pig-Tailed Macaque	<i>Macaca nemestrina</i>	5.8.0
Bonnet Macaque	<i>Macaca radiata</i>	9.12.0
Lion-Tailed Macaque	<i>Macaca silenus</i>	1.0.0
Anubis/Olive Baboon	<i>Papio anubis</i>	6.7.0
Mandrill	<i>Mandrillus sphinx</i>	1.0.0
Silver Leaf Monkey	<i>Presbytis cristatus</i>	7.11.2
Common/Entellus Langur	<i>Presbytis entellus</i>	0.1.0
Dusky Langur	<i>Presbytis obscurus</i>	1.1.0
<b>Pongidae</b>		
White Handed/Lar Gibbon	<i>Hylobates lar</i>	7.5.1
Bornean Gibbon	<i>Hylobates muelleri</i>	0.3.0
Siamang	<i>Hylobates syndactylus</i>	1.0.0
Bornean Orangutan	<i>Pongo pygmaeus</i>	3.5.0
Sumatran Orangutan	<i>Pongo abelii</i>	2.4.0
Chimpanzee	<i>Pan troglodytes</i>	5.1.0
LAGOMORPHA		
<b>Leporidae</b>		
Old World Rabbit	<i>Oryctolagus cuniculus</i>	1.3.0
RODENTIA		
<b>Sciuridae</b>		
3 Striped Ground Squirrel	<i>Lariscus insignis</i>	0.0.1
Prevost Squirrel	<i>Callosciurus prevosti</i>	2.1.0
Cream-coloured Giant Squirrel	<i>Ratufa affinis</i>	1.1.0
Hamster		0.0.5
<b>Hystriidae</b>		
Brush-Tailed Porcupine	<i>Atherurus macrourus</i>	0.0.2
Malayan Porcupine	<i>Hystrix brachyura</i>	6.7.9
Long-Tailed Porcupine	<i>Trichys fasciculata macrotis</i>	1.0.0
<b>Caviidae</b>		
Guinea Pig	<i>Cavia porcellus</i>	0.0.17
<b>Hyrochaeridae</b>		
Capybara	<i>Hydrochoerus hydrochaeris</i>	2.4.9
CARNIVORA		
<b>Canidae</b>		
Asiatic Wild Dog/Dhole	<i>Cuon alpinus</i>	1.1.0
<b>Ursidae</b>		
Malayan Sun Bear	<i>Helarctos malayanus</i>	3.5.0
Sloth Bear	<i>Melursus ursinus</i>	0.1.0
Asiatic Black Bear	<i>Selenarctos thibetanus</i>	1.2.0
Brown Bear	<i>Ursus arctos</i>	1.2.0
<b>Procyonidae</b>		
Raccoon	<i>Procyon lotor</i>	4.4.0
<b>Mustelidae</b>		
Ferret	<i>Mustela putorius furo</i>	0.1.0
Small-Clawed Otter	<i>Aonyx cinerea</i>	6.1.3
Smooth-Coated Otter	<i>Lutra perspicillata perspicillata</i>	1.0.0
<b>Herpestidae</b>		
Slender-Tailed Meerkat	<i>Suricata suricata</i>	4.1.0
<b>Viverridae</b>		
Binturong	<i>Arctictis binturong</i>	3.0.0
Small-Toothed Palm Civet	<i>Arctogalidia trivirgata</i>	1.0.0
Common Palm Civet	<i>Paradoxurus hermaphroditus</i>	1.1.1
Masked Palm Civet	<i>Paguma larvata</i>	4.0.0
Malay civet	<i>Viverra zangalunga</i>	2.0.0
<b>Hyaenidae</b>		
Striped Hyaena	<i>Hyaena hyaena</i>	2.2.0
<b>Felidae</b>		
Leopard Cat	<i>Prionailurus bengalensis</i>	4.0.2
Golden Cat	<i>Catopuma temmincki</i>	1.0.0
Jungle Cat	<i>Felis chaus</i>	1.0.0
Flat-Headed Cat	<i>Prionailurus planiceps</i>	1.0.0
African Lion	<i>Panthera leo</i>	1.0.0
Gir Lion	<i>Panthera leo persica</i>	1.3.0
Leopard (Spotted)	<i>Panthera pardus</i>	1.1.0
Leopard (Black)	<i>Panthera pardus</i>	2.1.0
Indochinese/Malayan Tiger	<i>Panthera tigris jacksoni</i>	0.3.0
Sumatran Tiger	<i>Panthera tigris (sumatrae)</i>	3.1.0
Bengal Tiger	<i>Panthera tigris (tigris)</i>	2.2.0
Puma	<i>Profelis concolor</i>	0.1.0
PINNIPEDIA		
<b>Otariidae</b>		
Californian Sealion	<i>Zalophus californianus</i>	1.0.0
PROBOSCIDEA		
<b>Elephantidae</b>		
Malayan Elephant	<i>Elephas maximus hirsutus</i>	1.2.0
PERISSODACTYLA		
<b>Equidae</b>		
Common Zebra	<i>Equus burchelli</i>	2.5.0
Horse (miniature)	<i>Equus caballus</i>	2.0.0
Horse	<i>Equus caballus</i>	5.5.0
Donkey	<i>Equus asinus</i>	4.0.0
<b>Tapiridae</b>		
Malayan Tapir	<i>Tapirus indicus</i>	0.1.0
<b>Rhinocerotidae</b>		
White Rhinoceros	<i>Ceratotherium simum</i>	1.2.0
ARTIODACTYLA		
<b>Suidae</b>		
Bearded Pigs	<i>Sus barbatus</i>	6.5.3
<b>Hippopotamidae</b>		
Pygmy hippo	<i>Hexaprotodon liberiensis</i>	1.0.0
Nile Hippo	<i>Hippopotamus amphibius</i>	1.2.0
<b>Camelidae</b>		
Arabian Camel/Dromedary	<i>Camelus dromedarius</i>	2.2.0
<b>Tragulidae</b>		
Lesser Mousedeer	<i>Tragulus javanicus</i>	2.1.1
Greater Mousedeer	<i>Tragulus napu</i>	3.1.1
<b>Cervidae</b>		
Axis/Spotted Deer	<i>Axis axis</i>	12.15.5
Bawean Deer	<i>Axis khuli</i>	2.0.0
Hog Deer	<i>Axis porcinus</i>	4.5.1
Javan Deer	<i>Cervus timorensis</i>	4.2.2
Sambar Deer	<i>Cervus unicolor equinus</i>	6.5.1
Barking Deer/Muntjak	<i>Muntiacus muntjak pelharicus</i>	4.7.6
<b>Giraffidae</b>		
Giraffe	<i>Giraffa camelopardalis</i>	5.6.0
<b>Bovidae</b>		
Malayan Gaur	<i>Bos gaurus hubbacki</i>	1.1.0
Indian Gaur	<i>Bos gaurus gaurus</i>	6.7.3
Lowland Anoa	<i>Bubalus depressicornis</i>	1.1.0
Serow	<i>Naemorhedus sumatraensis</i>	0.2.0
Banteng	<i>Bos javanicus</i>	11.8.0

M	F	UNKNOWN
8	8	0

Scimitar-Horned Oryx	<i>Oryx dammah</i>	0.2.0
Oryx X Gemsbok	<i>Oryx hybrid</i>	1.0.0
Nyala	<i>Tragelaphus angasi</i>	2.4.0
Nilgai	<i>Boselaphus tragocamelus</i>	2.0.0
Goat	<i>Capra aegagrus</i>	5.3.0
Red Lechwe	<i>Kobus leche leche</i>	5.1.0
Sable Antelope	<i>Hippotragus niger</i>	5.6.0
Ankole Cattle	<i>Bos taurus</i>	5.2.0



## BIRDS

### STRUTHIONI FORMES

#### ***Struthionidae***

Ostrich	<i>Struthio camelus</i>	4.4.0
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### CASUARIIFORMES

#### ***Dromalidae***

Emu	<i>Dromaius novaehollandiae</i>	2.2.20
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### SPHENISCIIFORMES

#### ***Spheniscus***

Humboldt Penguin	<i>Spheniscus humboldti</i>	1.1.1
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### PELECANIFORMES

#### ***Pelecanidae***

Eastern White Pelican	<i>Pelecanus onocrotalus</i>	3.0.0
Spotted-Billed Pelican	<i>Pelecanus philippensis</i>	0.0.1
Pink-Backed Pelican	<i>Pelecanus rufescens</i>	3.3.29

### CICONIIFORMES

#### ***Phalacrocoracidae***

Great Cormorant	<i>Phalacrocorax carbo</i>	0.1.1
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#### ***Ardea***

Little Green Heron	<i>Butorides virescens</i>	2.2.10
Black Crowned Night Heron	<i>Nycticorax nycticorax</i>	0.0.18
Cattle Egret	<i>Bubulcus ibis</i>	1.1.1

#### ***Ciconiidae***

Storm Stork	<i>Ciconia stormi</i>	0.1.2
Greater Adjutant Stork	<i>Leptoptilos dubius</i>	0.0.1
Marabou Stork	<i>Leptoptilos crumeniferus</i>	0.0.1
Milky Stork	<i>Mycteria cinerea</i>	8.10.69
Painted Stork	<i>Mycteria leucocephala</i>	20.20.269
Milky x Painted Stork	<i>M. cinerea x M. leucocephala</i>	0.0.5
Black-Neck Stork	<i>Ephippiorhynchus asiaticus</i>	1.1.0

#### ***Threskiornithidae***

Black -Headed Ibis	<i>Threskiornis melanocephalus</i>	4.4.33
Hadada Ibis	<i>Bostrychia hagedash</i>	0.0.1
African Spoonbill	<i>Platalea alba</i>	0.1.5
Greater Flamingo	<i>Phoenicopterus ruber</i>	25.20.20
Caribbean Flamingo	<i>Phoenicopterus ruber ruber</i>	0.0.24

### ANSERIIFORMES

#### ***Anatidae***

Lesser Tree Duck	<i>Dendrocygna javanica</i>	2.1.0
Common/Swan Goose	<i>Anser cygnoides</i>	2.2.0
Black Swan	<i>Cygnus atratus</i>	2.2.5
Mandarin Duck	<i>Aix galericulata</i>	4.2.0
Egyptian Goose	<i>Alopochen aegyptiacus</i>	1.1.0
Mallard Duck	<i>Anas platyrhynchos</i>	1.0.0
Mute Swan	<i>Cygnus olor</i>	0.0.2

### FALCONIFORMES

#### ***Accipitridae***

White-Bellied Sea Eagle	<i>Haliaeetus leucogaster</i>	0.0.2
Brahminy Kite	<i>Haliastur indus</i>	0.0.5
Black Kite	<i>Milvus migrans</i>	0.0.1
Crested Serpent Eagle	<i>Spilornis cheela</i>	0.0.2
Changeable Hawk Eagle	<i>Spizaeus cirrhatus</i>	0.0.1
Blyth's Hawk Eagle	<i>Spizaeus alboniger</i>	0.0.1

### GALLIFORMES

#### ***Cracidae***

Greater Currasow	<i>Crax rubra</i>	1.1.0
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#### ***Phasianidae***

Blue-Breasted Quail	<i>Coturnix chinensis</i>	2.1.0
Turkey	<i>Meleagris gallopavo</i>	2.1.0
Great Argus	<i>Argusianus argus</i>	7.5.0
Golden Pheasant	<i>Chrysolophus pictus</i>	1.2.0
Ayam Serama	<i>Gallus gallus (Bantam)</i>	5.5.4
Big Chickens	<i>Gallus gallus (Large)</i>	0.0.0
Polish Chicken	<i>Gallus gallus (Poland)</i>	1.0.0
Red Jungle Fowl	<i>Gallus gallus</i>	2.5.0
Green Jungle Fowl	<i>Gallus varius</i>	1.0.0
Crestless Fireback	<i>Lophura erythrothalma</i>	10.9.1
Crested fireback	<i>Lophura ignita ignita</i>	2.2.0
Silver Pheasant	<i>Lophura nychthemera</i>	3.3.4
Common Peafowl	<i>Pavo cristatus</i>	14.20.4



Mountain/Rothschild's		
Peacock Pheasant	<i>Polyplectron inopinatum</i>	3.0.0
Malayan Peacock Pheasant	<i>Polyplectron malacense</i>	9.6.5
Crested Guineafowl	<i>Guttera pucherani</i>	0.0.1
Helmeted Guineafowl	<i>Numida meleagris</i>	0.0.7

### GRUIFORMES

#### ***Rallidae***

White-Breasted Water Hen	<i>Amaurornis phoenicurus</i>	2.2.0
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M	F	UNKNOWN
8	8	0

#### COLUMBIFORMES

##### ***Columbidae***

Nicobar Pigeon	<i>Caloenas nicobarica</i>	3.3.3
Emerald/Green-Winged Dove	<i>Chalcophaps indica</i>	5.3.0
JavaneseTurtle/Collared Dove	<i>Streptopelia bitorquata</i>	4.2.0
Spotted(Necked) Dove	<i>Streptopelia chinensis</i>	4.3.1
Rock Dove	<i>Columba livia</i>	0.0.105
Green Imperial Pigeon	<i>Ducula aenea</i>	0.0.1
Pied Imperial Pigeon	<i>Ducula bicolor</i>	0.1.6
Zebra/Peaceful Dove/Merbok	<i>Geopelia striata</i>	4.0.0
Pink-Necked Green Pigeon	<i>Treron vernans</i>	4.4.0
Blue-Crowned Pigeon	<i>Goura cristata</i>	0.0.3

#### PSITTACIFORMES

##### ***Loriidae***

Black Lorikeet	<i>Chalcopsitta atra</i>	0.0.1
Rainbow Lory	<i>Trichoglossus haematodus</i>	0.0.2

##### ***Cacatuidae***

White Cockatoo	<i>Cacatua alba</i>	0.1.0
Goffin's Cockatoo	<i>Cacatua goffini</i>	0.0.1
Salmon-Crested Cockatoo	<i>Cacatua moluccensis</i>	2.0.0
Sulphur-Crested Cockatoo	<i>Cacatua galerita</i>	
Lesser Sulphur-Crested Cockatoo	<i>Cacatua sulphurea</i>	0.1.0
Little Corella	<i>Cacatua sanguinea</i>	0.0.1

##### ***Psittacidae***

Fischer's Lovebird	<i>Agapornis fischeri</i>	15.15.36
Black-Masked Lovebird	<i>Agapornis personatus</i>	1.1.1
Lovebird (Masked x hybrid)	<i>Agapornis sp.</i>	0.0.1
Blue and Yellow Macaw	<i>Ara ararauna</i>	1.1.2
Green-Winged Macaw	<i>Ara chloropterus</i>	1.0.2
Scarlet Macaw	<i>Ara macao</i>	0.0.1
Eclectus Parrot	<i>Eclectus roratus</i>	1.1.0
African Grey Parrot	<i>Psittacus erithacus</i>	0.0.3
Lesser African Grey Parrot	<i>Psittacus erithacus</i>	0.0.1
Ring-Necked/Rose-Ringed Parakeet	<i>Psittacula krameri</i>	5.0.0
Blue-Crowned Hanging Parrot	<i>Loriculus galgulus</i>	2.0.0
Budgerigar	<i>Melopsittacus undulatus</i>	3.3.0
Cockatiel	<i>Nymphicus hollandicus</i>	0.0.0

#### STRIGIFORMES

##### ***Tytonidae***

Barn Owl	<i>Tyto alba</i>	0.1.8
Bay Owl	<i>Phodilus badius</i>	0.0.1

##### ***Strigidae***

Barred Eagle Owl	<i>Bubo sumatranus</i>	0.0.4
Malay Fish Owl	<i>Ketupa ketupu</i>	0.0.7
Brown Hawk Owl	<i>Ninox scutulata</i>	0.0.1
Scops Owl	<i>Otus irenae</i>	0.0.2



#### PASSERIFORMES

##### ***Pyconotidae***

Grey -Bellied Bulbul	<i>Pycnonotus cyaniventris</i>	0.0.1
Stripe -Throated Bulbul	<i>Pycnonotus finlaysoni</i>	0.0.2
Yellow-Vented Bulbul	<i>Pycnonotus goiavier</i>	0.0.11
Red-Whiskered Bulbul	<i>Pycnonotus jocosus</i>	0.0.19
Black-Crested Bulbul	<i>Pycnonotus melanicterus</i>	0.0.2
Black-Headed Bulbul	<i>Pycnonotus atriceps</i>	0.0.2
Straw-Crowned Bulbul	<i>Pycnonotus zeylanicus</i>	1.1.0
Scaly-Breasted Bulbul	<i>Pycnonotus aurigaster</i>	0.0.18
Collared Finch-Billed Bulbul	<i>Spizixos semitorques</i>	0.0.2
Ochraceous Bulbul	<i>Alophoixus ochraceus</i>	0.0.2

##### ***Irenidae***

Gold-Fronted Leafbird	<i>Chloropsis aurifrons</i>	0.0.5
Fairy Bluebird	<i>Irena puella</i>	2.1.0

##### ***Muscicapidae***

White-Rumped Shama	<i>Copsychus malabaricus</i>	2.1.0
Maggie Robin	<i>Copsychus saularis</i>	3.1.0
Black-Throated Laughing Thrush	<i>Garrulax chinensis</i>	0.0.2
Red-Tailed Laughing Thrush	<i>Garrulax milnei</i>	0.0.1
Chestnut-Capped Laughing Thrush	<i>Garrulax mitratus</i>	0.0.1
White-Crested Laughing Thrush	<i>Garrulax leucolophus</i>	0.0.14
Pekin Robin/Red Billed Leothrix	<i>Leiothrix lutea</i>	0.0.1

##### ***Estrildidae***

Java Sparrow	<i>Padda oryzivora</i>	3.5.2
Pin-Tailed Parrotfinch	<i>Erythrura prasina</i>	0.0.10

##### ***Ploceidae***

Baya Weaver	<i>Ploceus philippinus</i>	4.5.0
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##### ***Sturnidae***

Common Myna	<i>Acridotheres tristis</i>	0.0.7
Glossy Starling	<i>Aplonis panayensis</i>	1.0.2

##### ***Oriolidae***

Black-Naped Oriole	<i>Oriolus chinensis</i>	0.0.2
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##### ***Dicruridae***

Ashy Drongo	<i>Dicrurus leucophaeus</i>	0.0.1
Black Drongo	<i>Dicrurus macrocercus</i>	0.0.1

##### ***Corvidae***

Blue Magpie	<i>Urocissa erythrorhyncha</i>	0.0.5
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##### ***Capitonidae***

Lineated Barbet	<i>Megalaima lineata</i>	0.0.1
Golden-Whiskered Barbet	<i>Megalaima chrysopogon</i>	0.0.1
Golden-Throated Barbet	<i>Megalaima franklinii</i>	0.0.1
Brown Barbet	<i>Calorhamphus fuliginosus</i>	0.0.2

#### CUCULIFORMES

##### ***Musophadidae***

White-Bellied Go-Away Bird	<i>Corythaixoides leucogaster</i>	1.1.0
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##### ***Cuculifidae***

Koel	<i>Eudynamis scolopacea</i>	3.3.0
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#### CORACIIFORMES

##### ***Bucerotidae***

Oriental Pied Hornbill	<i>Anthracoceros albirostris</i>	1.1.0
Black Hornbill	<i>Anthracoceros malayanus</i>	1.1.0
Wrinkled Hornbill	<i>Aceros corrugatus</i>	1.2.0
Wreathed Hornbill	<i>Aceros undulatus</i>	1.3.0
White-Crowned Hornbill	<i>Aceros comatus</i>	1.0.0
Bushy-Crested Hornbill	<i>Anorrhinus galeritus</i>	0.1.1
Greater Hornbill	<i>Buceros bicornis</i>	3.3.1
Rhinoceros Hornbill	<i>Buceros rhinoceros</i>	3.2.2
African Ground Hornbill	<i>Bucorvus leadbeateri</i>	1.1.0



M	F	UNKNOWN
8	8	0

## REPTILES

### CRYPTODIRA

#### **Chelidae**

Snake Neck Turtle	<i>Chelodina oblonga</i>	0.0.1
Matamata	<i>Chelus fimbriatus</i>	1.1.0

#### **Emydidae cryptodira**

River Terrapin/Tuntung	<i>Batagur baska</i>	3.5.0
Malayan Painted Terrapin	<i>Callagur borneoensis</i>	1.1.0
Malayan Box-Turtle	<i>Cuora amboinensis</i>	16.13.4
Asian Leaf Turtle	<i>Cyclemys dentata</i>	0.1.0
Big-Headed/Malaysian Giant Turtle	<i>Orlitia borneensis</i>	2.6.0
Giant Asian Pond Turtle	<i>Heosemys grandis</i>	7.10.0
Black Terrapin	<i>Siebenrockiella crassicollis</i>	0.2.2
Red-Eared Slider	<i>Trachemys scripta elegans</i>	8.35.32
Alligator Snapping Turtle	<i>Macrolemys temminckii</i>	0.0.1

#### **Testudinidae**

Aldabra Tortoise	<i>Geochelone gigantea</i>	3.1.0
Elongated Tortoise	<i>Indotestudo elongata</i>	2.2.0
Asian Brown Tortoise	<i>Manouria emys emys</i>	1.1.0
Black Asian Giant Tortoise	<i>Manouria emys phayrei</i>	1.0.0

#### **Trionychidae trionychinae**

Asiatic Softshelled Turtle	<i>Trionyx/Amyda cartilagineus</i>	2.1.4
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### CROCODYLIA

#### **Crocodylidae crocodylinae**

Estuarine Crocodile	<i>Crocodylus porosus</i>	1.9.0
Dwarf Crocodile	<i>Osteolaemus tetraspis</i>	2.3.7
False Gaviel	<i>Tomistoma schlegelii</i>	2.1.5
Spectacled Caimen	<i>Caiman crocodilus</i>	0.0.1

### SAURIA

#### **Gekkonidae**

Leopard Gecko	<i>Eublepharis macularius</i>	1.0.1
Giant Forest Gecko	<i>Gekko smithi</i>	1.0.0

#### **Iguanidae**

Green Iguana	<i>Iguana iguana</i>	5.2.3
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#### **Varanidae**

Malayan Water Monitor	<i>Varanus salvator</i>	1.2.1
Clouded Monitor	<i>Varanus bengalensis</i>	0.0.1
Rough-Necked Monitor	<i>Varanus rudicollis</i>	0.0.1

### SERPENTES

#### **Boidae**

Green Anaconda	<i>Eunectes murinus</i>	0.0.1
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#### **Boidae erycinae**

Sand Boa	<i>Eryx tataricus</i>	0.0.0
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#### **Boidae pythoninae**

Short Tailed/Blood Python	<i>Python curtus</i>	0.0.3
Burmese/Rock Python	<i>Python molurus bivittatus</i>	3.3.2
Reticulated Python	<i>Python reticulatus</i>	1.2.7
Royal/Ball Python	<i>Python regius</i>	0.2.0

#### **Xenopeltidae**

Sunbeam Snake	<i>Xenopeltis unicolor</i>	1.1.1
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#### **Acrochoridae**

Elephant Trunk Snake	<i>Acrochordus javanicus</i>	0.0.1
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#### **Colubridae**

Oriental Whip Snake	<i>Ahaetulla prasina</i>	0.0.3
Yellow-Ringed Cat Snake	<i>Boiga dendrophilia</i>	0.0.7
Dog Toothed Cat Snake	<i>Boigia cynodon</i>	0.0.1
Paradise Tree Snake	<i>Chrysopelea paradisi</i>	0.0.0
Malayan Racer	<i>Elaphe flavolineata</i>	1.0.0
Cornsnake (Red Ratsnake)	<i>Elaphe guttata</i>	1.0.0
Radiated Ratsnake	<i>Elaphe radiata</i>	0.0.1
Black-Tailed Ratsnake	<i>Elaphe taeniura ridleyi</i>	0.1.0
Yellow-Bellied Water Snake	<i>Enhydryis plumbea</i>	0.0.1
Red-Tailed Ratsnake	<i>Gonyosoma oxycephalum</i>	0.0.1
Grey Kukri Snake	<i>Oligodon joysoni</i>	0.0.1
Brown Kukri Snake	<i>Oligodon purpurascens</i>	0.0.1

#### **Natricinidea**

Keeled-Rat Snake	<i>Ptyas carinatus</i>	0.3.0
White-Bellied Rat Snake	<i>Ptyas fuscus</i>	0.1.0

#### **Elapidae**

Malayan Krai	<i>Bungarus candidus</i>	1.0.1
Monocellate Cobra	<i>Naja kaouthia</i>	3.2.3
Central Asian/Afganistan Cobra	<i>Naja naja oxiana</i>	1.1.0
Common Spitting Cobra	<i>Naja sumatrana</i>	1.0.0
King Cobra	<i>Ophiophagus hannah</i>	3.1.2



#### **Viperidae crotalinae**

Malayan Pit Viper	<i>Calloselasma rhodostoma</i>	0.1.0
Shore Pit Viper	<i>Trimeresurus purpureomaculatus</i>	2.1.3
White-Lipped Pit Viper	<i>Trimeresurus albolabris albolabris</i>	1.2.0
Sumatran Pit Viper	<i>Trimeresurus sumatranus</i>	0.0.1
Hagen's/Indonesian Pit Viper	<i>Trimeresurus hageni</i>	0.0.1
Wagler's Pit Viper	<i>Tropidolaemus wagleri</i>	0.0.4

## FISH

#### **Osteoglossidae**

Arapaima/Pirarucu	<i>Arapaima gigas</i>	0.0.11
Silver Arowana	<i>Osteoglossum bicirrhosum</i>	0.0.4

#### **Notopteridae**

Common Knifefish/Belida	<i>Notopterus notopterus</i>	0.0.3
Spotted Knifefish/Belida	<i>Chitala lopis</i>	0.0.2

#### **Bagridae**

Baung Belang	<i>Mystus nigriceps</i>	0.0.3
Redtailed Catfish	<i>Mystus micracanthus</i>	0.0.4
Asian Redtail Catfish/Baung	<i>Hemibagrus nemurus</i>	0.0.4
Bumblebee Catfish	<i>Leiocassis poecilopterus</i>	0.0.2
Striped Dwarf Catfish	<i>Mystus vittatus</i>	0.0.1
Black Lancer	<i>Bagrichthys sp.</i>	0.0.4
Marble Lancer	<i>Bagrichthys sp.</i>	0.0.3

#### **Clariidae**

African Catfish	<i>Clarias gariepinus</i>	0.0.3
Forest Walking Catfish/Keli Kati	<i>Clarias teijsmani</i>	0.0.1

#### **Channidae**

Black Water Snakehead	<i>Channa bankanensis</i>	0.0.1
Flower Snakehead/Jaloi	<i>Channa maruloides</i>	0.0.1
Dwarf Snakehead/Bakap	<i>Channa gachua</i>	0.0.1

#### **Pangasiidae**

Shortbarbel Pangasius/Patin	<i>Pangasius micronemus</i>	
Yellowtail Catfish/Patin	<i>Pangasius pangasius</i>	0.0.3
Albino Patin	<i>Pangasius sutchi</i>	0.0.1

#### **Siluridae**

Tapah	<i>Wallago sp.</i>	0.0.8
Glass Catfish	<i>Kryptopterus bicirrhus</i>	0.0.12

#### **Loricariidae**

Suckermouth Catfish	<i>Hypostomus plecostomus</i>	0.0.28
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#### **Cobitidae**

Lesser Loach	<i>Lepidocephalus thermalis</i>	0.0.4
Pakistani Loach	<i>Botia lohachata</i>	0.0.2
Tiger Botia	<i>Botia dario</i>	0.0.1
Botia sp.	<i>Botia hymenophysa</i>	0.0.5

#### **Osphronemidae**

Golden Giant Gourami	<i>Osphronemus goramy</i>	0.0.4
Sabah Giant Gourami	<i>Osphronemus goramy</i>	0.0.1

M	F	UNKNOWN
8	8	0

### **Cyprinidae**

Goldfish	<i>Carassius auratus</i>	0.0.11
Swordtail	<i>Xiphophorus helleri</i>	0.0.3
Sailfin Molly	<i>Poecilia velifera</i>	0.0.1
Krai Emas/Krai Kunyit	<i>Hypsibarbus pierrei</i>	0.0.4
Gold Finned Barb/Pipi Merah	<i>Puntius orphoides</i>	0.0.1
Javanese Barb/Lampan Jawa	<i>Puntius gonionotus</i>	0.0.18
Six-Banded Barb	<i>Puntius hexazona</i>	0.0.2
Tinfoil Barb/Lampam Sungai	<i>Barbonymus schwanefeldii</i>	0.0.1
Two spot Barb/Tebal Sisik	<i>Puntius binotatus</i>	0.0.3
Striped Barb	<i>Puntius lineatus</i>	0.0.16
Tiger Barb/Pelampong Jaring	<i>Puntius tetrazona</i>	0.0.4
T-Barb/Bagoh	<i>Puntius laterestriga</i>	0.0.1
Melon Barb	<i>Puntius fasciata</i>	0.0.20
Golden Barb	<i>Barbus sachsii</i>	0.0.1
Cherry Barb	<i>Copoeta titteya</i>	0.0.3
Ikan Daun	<i>Neolissochilus soroides</i>	0.0.1
Kelabau	<i>Osteochilus melanopleurus</i>	0.0.1
Ikan Rong	<i>Osteochilus microcephalus</i>	0.0.2
Sebarau	<i>Hampala macrolepidota</i>	0.0.2
Bala Shark	<i>Balantiocheilus melanopterus</i>	0.0.2
Indian River Barb/Chemperas	<i>Cyclocheilichthys sp.</i>	0.0.17
Siamese Algae Eater/Selimang	<i>Crossocheilus siamensis</i>	0.0.25
Sultan Fish/ Jelawat	<i>Leptobarbus hoevenii</i>	0.0.4
Malaysian Mahseer/Kelah	<i>Tor tambroides</i>	0.0.4
Jullien's Barb/Temoleh	<i>Probarbus jullieni</i>	0.0.3
Rohu	<i>Labeo rohita</i>	0.0.4
Koi/Japanese Carp	<i>Cyprinus carpio</i>	0.0.38
Harlequin Rasbora	<i>Trigonostigma heteromorpha</i>	0.0.14
Eindhoven's/Blue Line Rasbora	<i>Rasbora einthovenii</i>	0.0.2
Black Stripe Rasbora	<i>Rasbora gracilis</i>	0.0.3
Scissor Tail Rasbora	<i>Rasbora trilineata</i>	0.0.2
Elegant Rasbora	<i>Rasbora elegans</i>	0.0.3
Red Line/Glowlight Rasbora	<i>Rasbora pauciperforata</i>	0.0.5
Two Spot Rasbora	<i>Rasbora sumatrana</i>	0.0.8
White Cloud Minnow	<i>Tanichthys albonubes.</i>	0.0.1

### **Belontiidae**

Javan Combtail/Tebakang	<i>Belontia hasselti</i>	0.0.2
Croaking Gourami/Karim	<i>Trichopsis vittatus</i>	0.0.2
Two-Spot Gourami	<i>Trichogaster trichopterus</i>	0.0.2
Blue Gourami	<i>Trichogaster trichopterus</i>	0.0.15
Golden Gourami	<i>Trichogaster trichopterus</i>	0.0.4
Pearl Gourami	<i>Trichogaster leerii</i>	0.0.3
Chocolate Gourami/Biji Durian	<i>Sphaerichthys acrostoma</i>	0.0.4
Licorice Gourami/Karim	<i>Parosphromenus filamentosus</i>	0.0.2
Siamese Fighting Fish/Pelaga	<i>Betta splendens</i>	0.4.0
Slim Betta	<i>Betta bellica</i>	0.2.0
Betta Livida	<i>Betta livida</i>	0.0.2
Dwarf Gourami	<i>Colisa lalia</i>	0.0.3

### **Characidae**

Silver Dollar	<i>Metynnis schreitmulleri</i>	0.0.1
Pacu	<i>Colossoma macropomum</i>	0.0.16
Big Scale Astyanx	<i>Astyanax sp.</i>	0.0.9
Faded Black Tetra	<i>Gymnocorymbus socolofi</i>	0.0.8
Black Neon Tetra	<i>Hypheosobrycon herbertaxelrodi</i>	0.0.37
Serpae Tetra	<i>Hypheosobrycon serpae</i>	0.0.11
Rosy Tetra	<i>Hypheosobrycon rosaceus</i>	0.0.1
Glowlight Tetra	<i>Hemigrammus erythronus</i>	0.0.9
Cardinal Tetra	<i>Paracheirodon axelrodi</i>	0.0.17
Blind Cave Fish	<i>Astyanax mexicanus</i>	0.0.4
Rummy Nose Tetra	<i>Hemigrammus rhodostomus</i>	0.0.45
Black Phantom	<i>Megalampodus megalopterus</i>	0.0.4
Glass Bloodfin Tetra	<i>Aphyocharax anisitsi</i>	0.0.10

### **Alestiidae**

Congo Tetra	<i>Phenacogrammus interruptus</i>	0.0.13
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### **Cichlidae**

Green Severum	<i>Heros efasciatus</i>	0.0.1
Golden Severum	<i>Heros efasciatus</i>	0.0.1
Midas Cichlid	<i>Amphilophus citrinellus</i>	0.0.182
Jewel Cichlid	<i>Hemichromis bimaculatus</i>	0.0.5
Manguenese	<i>Parachromis manguenese</i>	0.0.2
Oscar	<i>Astronotus ocellatus</i>	0.0.1
Discus	<i>Symphysodon aequifasciatus</i>	0.0.10
Angelfish	<i>Pterophyllum scalare</i>	0.0.11
Zebra Tilapia	<i>Tilapia sp.</i>	0.0.235
Tilapia	<i>Oreochromis mossambicus</i>	0.0.118
Tiger Tilapia	<i>Tilapia mariae</i>	0.0.2
Tropheus Cichlid	<i>Tropheus sp.</i>	0.0.5

### **Panodontidae**

Butterfly Fish	<i>Pantodon buchholzi</i>	0.0.2
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### **Catostomidae**

Chinese Sailfin Sucker	<i>Myxocyprinus asiaticus</i>	0.0.1
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### **Lobotidae**

Siamese Tigerfish	<i>Datnioides microlepis</i>	0.0.0
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### **Polypterus**

Marbled Birchir	<i>Polypterus bichir</i>	0.0.4
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### **Melanotaeniidae**

Boesman's Rainbowfish	<i>Melanotaenia boesmani</i>	0.0.3
Red Rainbow Fish	<i>Glossolepis incisus</i>	0.0.6
Macculloch's Rainbow Fish	<i>Melanotaenia maccullochi</i>	0.0.5

### **Apterodontidae**

Black Ghost Knife Fish	<i>Apteronotus albifrons</i>	0.0.1
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### **Pimelodidae**

Redtailed Catfish	<i>Phractocephalus hemeliopterus</i>	0.0.3
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### **Loricariidae**

Midget Sucker Cat Fish	<i>Otocinclus affinis</i>	0.0.9
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### **Centrarchidae**

Sun Fish	<i>Lepomis sp.</i>	0.0.0
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### **Monodactylidae**

African Moony	<i>Monodactylus sebae</i>	0.0.3
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### **Sisoridae**

Wrinkled Bellied Cat Fish/ Depu	<i>Glyptothorax major</i>	0.0.1
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### **Acanthuroidei**

Horse-faced Loach/Ikan Pasir	<i>Acanthopsis choirorhynchus</i>	0.0.13
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### **Gobiidae**

Dusky Gilled Mudskipper	<i>Periophthalmus novemradiatus</i>	0.0.0
Blue Spotted Mudskipper	<i>Boleophthalmus boddarti</i>	0.0.0

## **INVERTEBRATES**

### **Crustaceans**

Malyan Forest Prawn	<i>Macrobrachium malayanum</i>	0.0.5
Fresh Water Rainbow Crab		0.0.5
Fiddler Crab	<i>Uca sp.</i>	0.0.11
Sesarmine Crab	<i>Family Grapsidae</i>	
Semaphore Crab	<i>Ilyoplax sp.</i>	0.0.15
Tree-Climbing Crab	<i>Episesarma sp.</i>	0.0.1

### **Mollusca**

Slug	<i>Family Onchidiidae</i>	0.0.2
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### **Arachnids**

Baboon Spider	<i>Family Theraphosidae</i>	0.0.1
Cobalt Blue Spider	<i>Haploelma lividum</i>	0.0.0

Your Council wishes to place on record its appreciation and thanks to the President, YBhg Dato' Ismail Hutson and to all the Vice-Presidents for their support, guidance and encouragement.

Your Council also takes this opportunity to record its appreciation and thanks to the following individuals, firms and organizations for their support and assistance.

The Federal Government

The Selangor State Government

Y.B. Minister of Natural Resources and Environment and Officers of his Ministry

Y.B. Minister of Agriculture and Officers of his Ministry

Y.B. Minister of Information and Officers of his Ministry

Y.A.B. Menteri Besar Selangor Darul Ehsan and Officers of the Selangor State Government

Y.Bhg. Datuk Bandar and Officers of the Dewan Bandaraya Kuala Lumpur

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