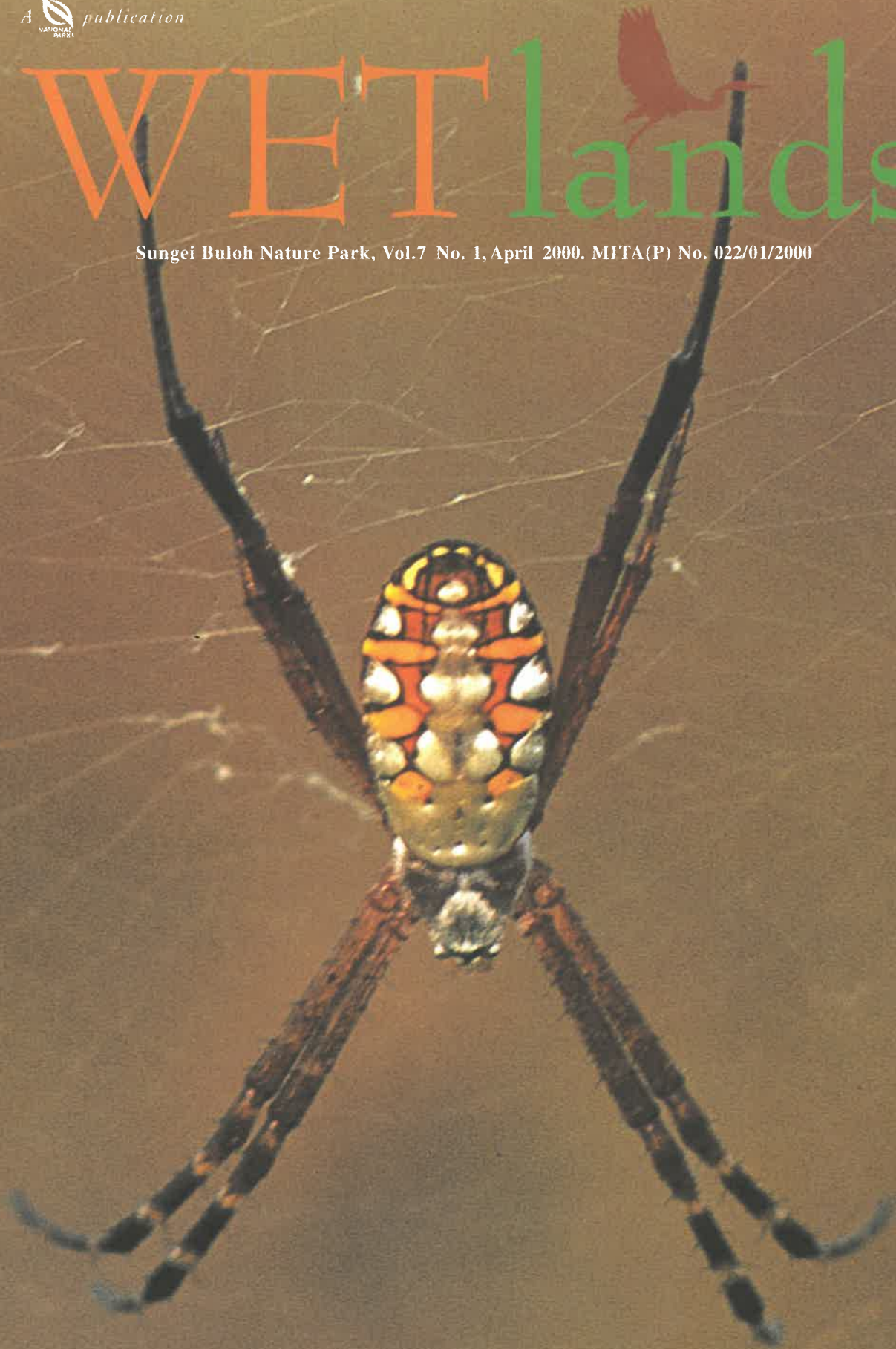


A  publication

# WETlands

Sungei Buloh Nature Park, Vol.7 No. 1, April 2000. MITA(P) No. 022/01/2000



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*"The time will come when diligent research over long periods will bring to light things which now lie hidden. A single lifetime, even though entirely devoted to the sky, would not be enough for the investigation of so vast a subject... And so this knowledge will be unfolded only through long successive ages. There will come a time when our descendants will be amazed that we did not know things that are so plain to them... Many discoveries are reserved for ages still to come, when memory of us effaced. Our universe is a sorry little affair unless it has something for every age to investigate... Nature does not reveal her mysteries once and for all."*

Seneca, Natural Questions  
Book 7, first century



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Picture of a St Andrew's Cross Spider  
(*Argiope sp.*)

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Sungei Buloh Nature Park

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## EDITORIAL

The intricate web of life embodies every plant and creature including us. If we even try to pluck one out, the whole web will be damaged. So intimately linked and intertwined are we, that it is important to continue to protect and care for our natural treasures.

These treasures are bountiful and priceless. They are also yours to uncover and to keep. The journey of discovery as Ralph Waldo Emerson puts it is to "Adopt the pace of nature. Its secret is patience". The mysteries will then be slowly revealed to us. 🕷️

*linda goh*



# Divine Diversity

by Linda Gob, Senior Education Officer

It is amazing to note that scientists seem to have a better idea of how many stars there are in the sky than the number of species on Earth. To date, they have identified about 1.75 million plants and animals. However, some scientists have claimed the actual species number to be 10 million while others estimate it to be 100 million!

Indeed, these are mind-boggling figures. So vast and varied are the lifeforms on earth that it would take many lifetimes if ever to make a head count of them. But as Edward O. Wilson, a Harvard biologist, once said, "We don't know how many there are, or what kind of things - new medicine or chemicals - they have to offer. It's like a library of unread books and we haven't even finished the first chapter."

Taking stock of life			
Insects and myriapods	963 000	Plants	270 000
Fungi and lichens	100 000	Protozoans and algae	80 000
Chelicerates	75 000	Molluscs	70 000
Crustaceans	40 000	Nematode Worms	25 000
Fish	22 000	Flatworms	20 000
Annelid Worms	12 000	Reptiles and amphibians	10 500
Birds	10 000	Cnidarians	10 000
Sponges	10 000	Mammals	4 500

Source: National Geographic Magazine, Feb 1999

And the great tragedy - is that we're losing the species around us before we can even turn the next page. Too many are dying that don't need to die."

The truth is we inherited a vast but delicate natural heritage. Being linked together in this intricate web of life, which is very fragile in nature, warrants our respect and attention. We need to invest time in our heritage in order to preserve what we have but to do that we need to know and understand what is around us first.

I bid you to take time to explore the Sungei Buloh Nature Park and discover for yourself the wealth that surrounds you. So rich and fertile is the earth we inherit! And it is only through knowing what we have that we learn to appreciate what we have been given and only then do we know how to protect what's naturally ours and our children's.

The inhabitants of the Park await you.

*"All things are connected like blood which unites one family.*

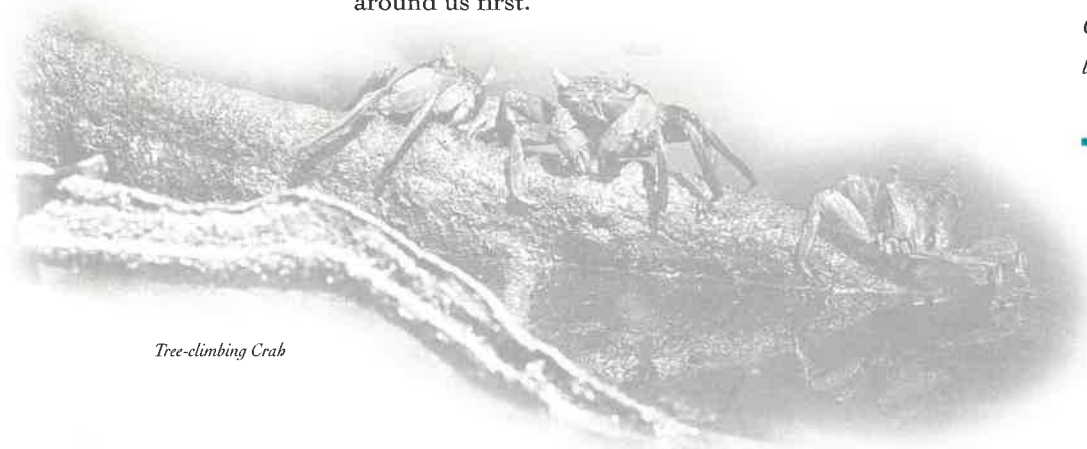
*Whatever befalls the Earth befalls the sons of the Earth.*

*Man did not weave the web of life,*

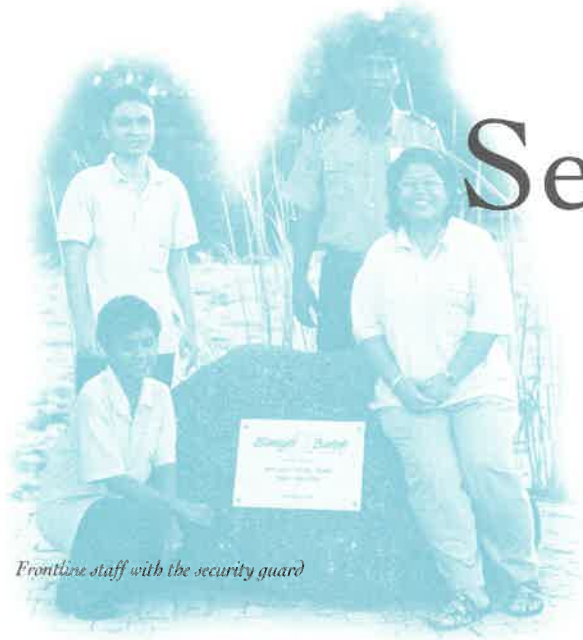
*He is merely a strand in it.*

*Whatever he does to the web, he does to himself."*

*Chief Seattle of the Suquamish and the Duwamish, 1855.*



Tree-climbing Crab



*Frontline staff with the security guard*

# Service with a Smile

*by rogayah sulong, executive assistant  
and shila kumari, ticketing supervisor*

“Sungei Buloh Nature Park. This is Shila. Can I help you?”

Chances are you will hear Shila saying this over the phone when you call our main line at 794 1401.

Sitting at the entrance of Sungei Buloh, with a smile on their faces, the ticketing staff see to the needs of the Park visitors.

From attending visitor inquiries to giving directions to lost drivers and tourists, we at the ticketing counter also keep a daily count of visitors to the Park. For first time visitors, we would take

extra effort to brief them on the Park attractions and their whereabouts. A 10-minute slide show that introduces the Park and its flora and fauna will be arranged for them before they enter the reserve proper.

Arranging for guided tours for schools and organised groups are also part of customer care and we are all trained to do these tours. The tour ensures that visitors leave with a better knowledge and understanding of the Park.

Apart from these, we also have a direct communication

line with field staff via the walkie-talkie system. This ensures that any visitor in need of help will be reached with promptness.

“We are very happy to be working in this environment. We will continue to do our best to serve our visitors,” echoed the frontline staff who are determined to serve our Park visitors well. 🌿

“To smile, to provide accurate information and guidance to the visitors is our motto. Rogayah”



*Shila congratulating the 4th receiver of the Park's millennium goody pack*

# Field Ornithology Training

by James Gan, senior maintenance officer



**T**he twin otter aircraft roared through the air. It swept high over the Baram river to the plateau where people with long earlobes live. Six bird ringers in 2 groups of 3 each from Sungei Buloh recently went to Sarawak to a pristine sub-montane jungle infested with leeches, sandflies and sweat bees. An intensive week of bird ringing training awaited them.

The Little Spiderhunter struggled in the net. Su Hooi lifted it off expertly and brought it to the field camp for biometric processing. White-crowned Forktail, Brown Fulvetta, White-bellied Yuhina, Green Broadbill - all these wonderful native

birds and more were caught, studied, ringed and released. Linda, Ramakrishnan and Adeline also managed to ring the exclusive Siberian Blue Robin.

These jewels of the jungle were difficult to spot and were caught with great effort. We had to set up nets in jungle terrain, climb ridges and ford rivers to collect our quarry through regular inspection of the nets at intervals of 45 minutes from 6am to 6pm, walking distances of more than 15km daily. Tough? Yes, but rewarding.

Not a day passed without an interesting bird. If it was not the Scarlet Sunbird, it was the Long-billed Spiderhunter. Each

net check was a sweet suspense. Once, Halilah retrieved a bird which proved to be a mature male Mugimaki Flycatcher - a species so rare that one can spend 20 years netting birds in Sarawak and not trap it once.

The week flew by quickly and we left the mystical plateau of the Kelabits, having seen and handled the jewelled denizens of the jungle. The programme achieved its objectives well with us acquiring advanced skills in bird banding. Such first hand experience and training from an experienced British Trust for Ornithology (BTO) trainer is very beneficial for bird banding studies in the Sungei Buloh Nature Park. 



Field Work





**Pong Yen Ting unveils the mystery that surrounds the web of the**

# St Andrew's Cross Spider

**A** cryptic name, a cryptic creature. First glance at the common name of this araneid spider of the genus *Argiope*, one may think "Why St Andrew's Cross? This is so because this particular spider likes to contort their 20mm (males: 5mm) frame to resemble a cross. It does not care for the gangly eight-legged look that most spiders sport. Rather, it prefers to pair its legs so that it appears to be aligned to the four distinguished arms of the cross of St Andrew's.

The St Andrew's soft spot for all things 'X' is further seen in the stabilimentum that takes pride of place at the centre of the 38-50 mm long orb web of the mature

female. The mangrove specimen (*Argiope mangal*) usually spins two of these silken zig-zag bands named stabilimentum while the inland counterparts like the *Argiope versicolor*, will spin four bands to form the shape of a cross. This extraordinary phenomenon of the 'X' has drawn a good amount of speculation as to its significance.

For many years, it was thought that the function of the zig-zag bands was to strengthen the web or to conceal the spider which often sits, head downward, at the centre of the stabilimentum. Some scientists in the States established that the purpose of stabilimentum is to advertise the presence

of the web to birds. The birds will know to avoid the webs if they do not want to risk being entangled in the sticky silk. The spiders thus get to preserve their webs, which they will eat when worn out as it is a precious source of protein supply for silk production.

However, recent research has uncovered a new explanation. The silk which makes up most of the web is a poor reflector of ultraviolet light except the stabilimentum which reflects it very efficiently. In the same way flowers reflect ultraviolet light to attract pollinating insects, the stabilimentum is believed to attract insects

to the web, by mimicking a flower.

We do not know for sure the reason for the zig-zag bands. Perhaps it just appeals to this little spider's aesthetic sense?

Speaking of aesthetic, many will certainly appreciate the pretty webs of the juvenile St Andrew's Cross Spider. These light brown youngsters weave an exquisite disc of lace in the middle of their abodes. As they mature, they add a cross to the disc. When they finally attain adulthood, they only make the cross, or half a cross, in the case of the *Argiope mangal*.

The orb web of the St Andrew's Cross Spider may be good-looking but

more importantly, it plays a major role in the spider's eventual survival. Firstly, with only a relatively small outlay of material, it forms a flexible, strong structure spanning a large area - the ideal trap for flying insects. When an insect hits the web, the spider runs out, shrouds it in fine silk and bites it to death. Then, digestive juices are injected into the wrapped prey and the contents sucked out when the digestive process is complete (in a day or so). The careful geometrical arrangement of the capture threads and the spokes allows the spider to move around the web on the thread without getting trapped.

The web is also a defensive tool for the spider. If disturbed, it can flip from one side of the web to the other with lightning swiftness, thus keeping the web between itself and the would-be attacker. Alternatively, it may shake the web vigorously until it becomes an indistinct blur. Apparently, the St Andrew's Cross Spider is not just literally cross in its physical appearance but can be rather cross in temperament too! 🕷️



# Life in the

## Smooth Otter

*Lutrogale perspicillata*

The Smooth Otter uses its strong claws to catch fish, its most preferred food. It also feeds on crustaceans and molluscs.



## Mangrove Horseshoe Crab

*Carcinoscorpius rotundicauda*

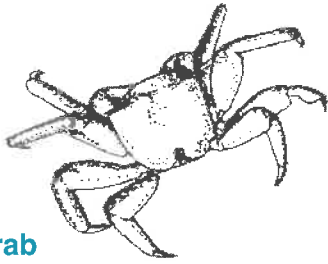
Feeds by scavenging for food like animal and vegetable matter, using its first pair of legs. It also eats small shellfish by forcing the shells open.



## Tree-climbing Crab

*Episesarma sp.*

This burrowing crab is mainly herbivorous although it feeds on a wide variety of plant and animal matter, like most crabs. It can be seen sitting either on a tree trunk, a leaf or a structure during high tide, hence its name.



## Flower Crab

*Portunus pelagicus*

This fully aquatic crab is carnivorous, feeding on fish and other animals.



## Mudskipper

Depending on the species, mudskippers eat either animal or plant matter. The Giant Mudskipper (*Periophthalmodon schlosseri*) and Dusky-gilled Mudskipper (*Periophthalmus novemradiatus*) are carnivorous, feeding on small crabs, worms, insects, snails and even smaller mudskippers. The Blue-spotted Mudskipper (*Boleophthalmus boddarti*) is herbivorous, feeding on microscopic organisms, blue-green algae and fungal matter on the mud surface.

## Clam

*Marcia marmorata*

It lives buried just underneath the mud surface. Like most shellfish, it is a filter feeder.



## Marine Prawns

*Penaeus sp. and Metapenaeus sp.*

Mangroves are important as nurseries to complete the life cycle as the prawns lay their eggs in the mangroves.



**Mangroves** refer to the wetlands that can be found in sheltered coasts and estuaries.

## Peanut Worm

*Phascolosoma arcuatum*

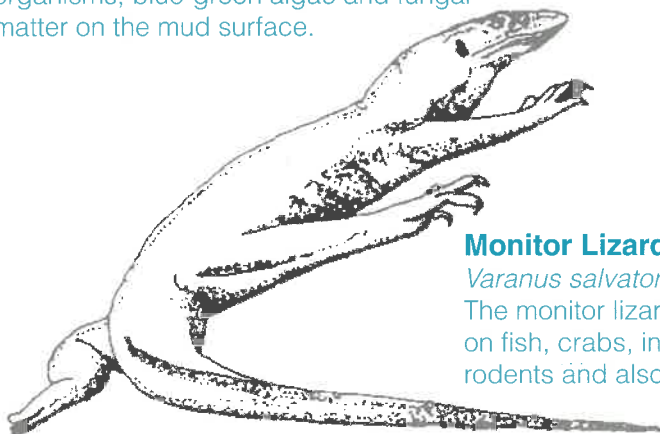
It feeds on microscopic organisms in the mud by extending its proboscis-like structure from its deeply buried body.



## Monitor Lizard

*Varanus salvator*

The monitor lizard is carnivorous, feeding on fish, crabs, insects, birds, amphibians, rodents and also other smaller reptiles.



## Mangrove Ribbon Worm

*Pantinionemertes sp.*

It lives in Mud Lobster mounds in the bark of rotten wood or tree trunks.



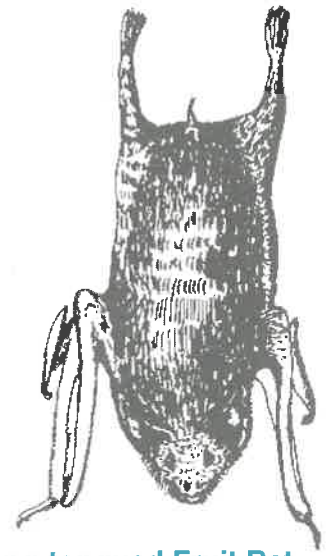
# Mangroves

text and drawing by  
balilab abmad, education officer



## Sonneratia sp.

This large tree can grow up to 20 metres tall. The pretty flowers have numerous stamens and tiny petals. The oval or pearl like fruits are edible to man when ripe.



## Common Long-tongued Fruit Bat

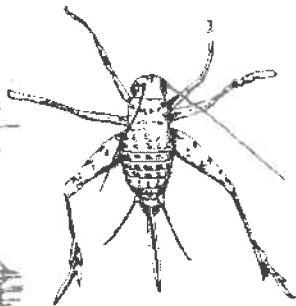
*Macroglossus minimus*

A common bat in mangrove areas, it feeds on nectar and pollen especially from the *Sonneratia sp.* Pollen is collected on the bat's head and shoulders as it reaches into the flowers with its long brush-like tongue. This pollen is then transferred to the next flower it visits. This bat also consumes nectar from other flowers like the banana and jambu.

## Dark-necked Tailorbird

*Orthotomus atrogularis*

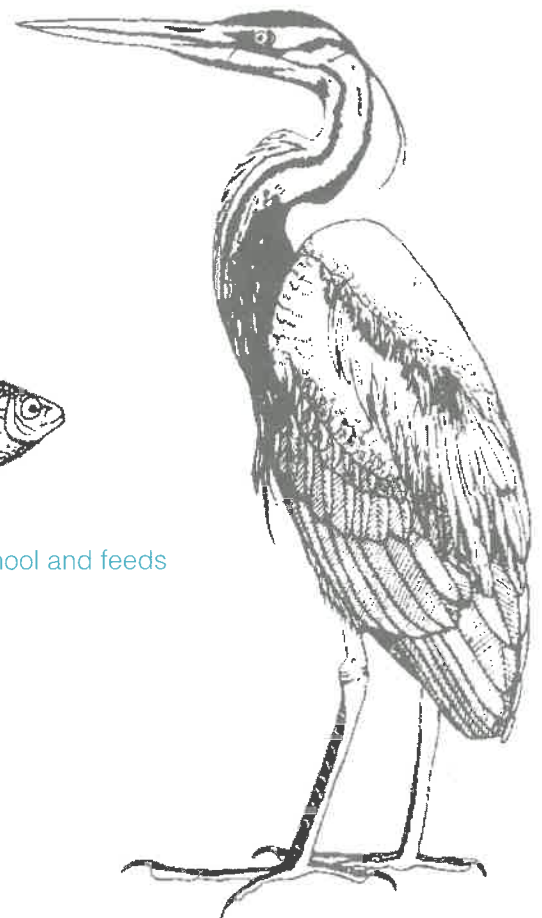
Using spider silk and fine grass, this bird sews the leaves together for its nest, hence its name. Tailorbirds feed on a wide variety of insects and worms.



## Mangrove Cricket

*Apteronemobius asahinai*

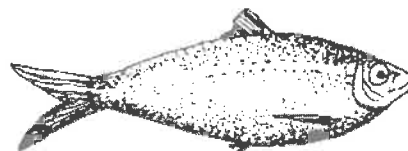
It feeds on green algae during low tide.



## Purple Heron

*Ardea purpurea*

The Purple Heron, one of the largest birds in Singapore, is often seen standing motionless at the water edge waiting for its prey like fishes, aquatic animals, small reptiles and even insects.



## Tamban

*Sardinella sp.*

This fish travels in a school and feeds on zooplankton.



## Whimbrel

*Numenius phaeopus*

This winter migrant feeds by probing into the mud in search of worms and other mudflats organisms.



found under  
logs.

es  
plant community  
uddy shores of  
river estuaries.

# Shorebird Population Monitoring in Sungei Buloh Nature Park (1992 to 1998)

by *adeline chia, scientific officer*

**T**he monitoring of shorebird population in Sungei Buloh has been carried out since 1992. It is important to keep track of the population in order to detect any change and periods of migration. The season for wader census starts when the migratory shorebirds arrive on the mudflats in the Park from September to April every year. A total of 29 species, mainly belonging to the families of Scolopacidae (Sandpipers and others) and Charadriidae

(Plovers) have been recorded in the Park since 1992.

Staff involved in this exercise position themselves in hides and on vantage points during high tide. Using telescopes and binoculars, the numbers of the roosting birds are counted. Species that visit the Park in large numbers over the past 7 years were used for the analysis of population in comparison to the international flyway population, namely the Pacific Golden Plover, Lesser Sand Plover,

Curlew Sandpiper, Whimbrel, Greenshank, Marsh Sandpiper and Redshank. Coupled with our wader-ringing programme and a series of data analysis, interesting light has been shed on the waders' roosting and feeding site. The 6-year mean of mid-winter (Jan) count, BMI (Body Mass Index), monthly counts and other parameters were used to analyse the turnover rate, immigration and emigration periods as well as other findings.

## Findings

Comparison of the population in Sungei Buloh Nature Park with the total E/SE Asian population from 1994 to 1996 showed that most species do not exceed the 1% flyway population. When compared with Singapore, however, the Park supports 11 to 77.5% of the population of each species in Singapore. With the exception of the Pacific Golden Plover (11%), all other species visiting the Park represent more than 25% of the population in Singapore (Table 1).

Table 1: Comparison of Wader Population Count in Sungei Buloh with National Population Count Data from 1990 to 1996. (Sources: Rose and Scott 1994; Asian Wetland Bureau; Lopez and Mundkur (eds.) 1997; Perennou et al 1994)

Species	Avg. no. in S'pore ('94 to '96)	% of the no. that occurs in Park	Avg. no. in S'pore ('90 to '92)	% of the no. that occurs in Park
Pacific Golden Plover	1907.3	10.9	1283.3	16.2
Lesser Sand Plover	387.0	31.3	120.0	10.1
Whimbrel	260.7	47.3	122.7	10.0
Redshank	734.0	22.8	482.3	34.6
Marsh Sandpiper	827.7	32.3	757.3	35.3
Greenshank	327.3	81.7	240.7	55.8
Curlew Sandpiper	148.0	65.1	444.3	21.7



In order to determine the migration timing for shorebirds visiting Sungei Buloh, birds captured during ringing sessions were dyed. Observations from 1997 to 1998 showed that no more dyed birds were found in the Park after mid-March of 1998 (ringing of birds started in Oct 1997). In general, BMI increases when the birds refuel to further immigrate or when flying back north. This was evident at certain periods in October to December in which peaks

and drops in BMI were detected.

Information without action is redundant. Hence, using the information obtained, the Park has adhered to a carefully thought-out regime which allows the preservation of the mudflats that is fundamental for the wintering visitors. Ponds are kept low during high tides to allow the shorebirds to roost. Testing of water bodies are also conducted regularly to

ensure that the quality of the habitat for the inhabitants and migrants is not compromised.

With development threatening the survival of mudflats and mangroves all over the world, the role of Sungei Buloh as a wetland nature park is evident. We play our part in conserving a delicate ecosystem that is vital for the survival of not only the shorebirds, but that of the mangrove community within it.

## Ongoing Research Activities

RESEARCHER	RESEARCH INSTITUTE	RESEARCH TOPICS AND ACTIVITY	DURATION
Rashid SMA PhD student	NTU, School of Science Division of Biology	Ecology of the Malayan Water Monitor lizard	1/98 - 2000
Oh Hwee Yen Masters student	NUS, Department of Geography	Pollen collection and sampling of study site	9/98 - 2000
Tan Wee Kee Masters student	NUS, Department of Biological Sciences	Tissue culture and micropropagation of tropical mangrove plant species	8/99 -2000
A.D.Tony Wright Exploratory Entomologist	Australian Biological Control Laboratory	Detection of biological agents for control of <i>Lygodium microphyllum</i>	2/00 -2001

### GREEN TIP

For those of you who have a garden, why not liven it up by placing a bird table? A simple raised wooden structure with a platform for putting food and a roof against rain will suffice nicely. Fruits such as papaya and banana and various seeds or even mealworms will attract birds such as Bulbuls, Orioles and Starlings. These are easily bought from stores and should be changed daily. Who knows, you might find more than birds on your bird table! Squirrels might just pay you a visit, adding to the variety of life that is found right in your front or back yard! Watch all these actions from the comfort of your home!

*Adeline*



# Inundation of the Park

**T**he “freak floods” that happened on the 22 & 23 December 1999 will always be remembered in the last lap of the year 1999 before the new millennium trooped in.


On 22nd December, there was a huge overcast and gutsy wind that swept across Sungei Buloh Besar. The sea was at its darkest and most restless.

Over our walkie-talkies, news that the wooden planks over the sluice gate were carted away by the rising tide was received. Rangers and workers immediately sprang into action with the necessary tools to hold down the sluice planks. It felt great to be a part of the contingency team for such emergency cases. Besides, it was sheer wonder to witness real life drama (not reel-life Hollywood produced for movies) of this natural phenomenon that occurs only once in 60 years.

The tide rose to 3.68m at its highest. Seawater forcibly pushed through

the sluice gates like an enraged tempest unleashing its fury. Even the bunds along the trails were not spared. They were battered incessantly by the overpowering seawater, turning the ponds into beautiful landscapes of ‘mini waterfalls’ which could be viewed from the hides. Wading along the trails without shoes was like undergoing a massage therapy where one puts his feet into a luxurious spa pool. However, the current was strong and I had to inch my way about.

The whole scenerio ended within two hours. The aftermath? The destruction of the Aquatic and Dipping ponds. The freshwater had become blackish. Some non-salt resistant flora withered and died. The erosion at route 1 and 2 was most visible.

A series of cleaning and repair works has been carried out to ensure that the Park will be back to normal exuding its charm to visitors.   
Park Ranger, Patricia Phua

**O**n the morning of 23 December 1999, while carrying out my usual duties in the Park, I experienced an uneasy calm around me. My mind was very much perturbed by the sighting of a few monitor lizards, clinging onto tree branches, looking down at their usual sun bathing spots. Ants hurried out from their underground nests, seemingly seeking refuge at higher places. The entrances of mud lobsters’ mounds which were usually left open were blocked tightly with newly-formed lumps of wet mud. The tell-tale signs from the residents indicated that something was forthcoming. But what could it be?

The water level inched up as the highest tide approached. It crept higher with each minute and soon, water flowed over at the sluice gates

*I was out in the field for a wader census and identification training programme when I first sighted the rising tide that rushed to cover the bunds and into the ponds. Soon the ponds were flushed and flooded leaving the waders nowhere to roost and feed. And yet the tide kept on rising and raging. The management was immediately informed of the situation and the rangers were deployed to ensure the safety of the visitors in the Park.*  
Park Ranger, Charles Lim

onto the bund. For those who witnessed the scenario, it would be one that is hard to forget. Some planks at the sluice gates were washed off and alert staff sprang into action.

Battling against the strong current, staff inched their way through knee-high water to monitor the situation and to ensure the safety of visitors.

The inundation lasted a few hours and continued for the next few days. The high waters finally subsided on 27 December 1999, leaving behind memories for the many who witnessed and were humbled by the powers of Mother Nature.   
Park Ranger, Stephen Chue

*Things happened very quickly. The ponds were soon flooded to the same level as the sea. It only subsided after 1.5 hrs time. The gravel on the visitor’s routes was washed off leaving potholes. Debris was strewn over the bunds. Workers were assigned immediately to do a thorough coastal cleaning to rid the debris. And major route repairs were on the way. Soon the Park will be back to its normal shape.*  
Park Ranger,  
Sherina Saimoon



# Millennium Mementos

by *halilab ahmad*,  
education officer

**S**ince December 1999, Sungei Buloh Nature Park has been giving away a millennium goody pack to every 2000th visitor to the Park in celebration of the year 2000. This millennium celebration will continue till the end of 2000. Lucky visitors have been bringing home a set of specially designed and framed cloth badges, "Big Picture" depicting the various plants and wildlife of the Park and other souvenirs such as complimentary tickets, fridge magnets, a mystery gift and publications of the Park.

Don't be surprised if you are stopped and congratulated as you enter the Park. Wouldn't it be nice to be presented with a gift pack to mark the turn of a century? Do come and join us in our celebration of the new millennium. You might just be our lucky visitor. The count is still on! 🦋



*The 1st 2000th visitor to Sungei Buloh*

## Adopting The Trail For The Coloured Wings

by *chan su hooi*,  
education officer

**W**oodlands Secondary School officially adopted Sungei Buloh Nature Park's Butterfly Trail on the 1 November 1999. It is a milestone for the adoption programme at the Park as the first school to adopt Sungei Buloh Nature Park.

Through the Adopt-A-Park scheme, we hope to build appreciation and respect for Mother Nature by letting these students care for the Butterfly Trail. The teachers and students have happily taken up the challenge to make the trail a success. To prepare them, there were training sessions for the teachers and talks for the students before they commence their work at the Park.

Pruning, weeding, pest clearance, fertilising, watering, planting are part and parcel of the student activities at the Park. Armed with cutters, 'changkols', spades, wheelbarrows, shovels, gloves and trolleys, varieties of butterfly plants were planted on both sides of the butterfly trail. The myriads of colour; touches

of pink, white, orange, yellow, purple, green and red liven up the trail and provide food for our winged friends.

The students will slowly pick up the knowledge on the butterfly and its ecology and develop a sense of ownership towards their piece of 'coloured' haven of nature. 🦋

*Weeding the plot*



*Hard at work*



# Calendar of compiled by chan su booi, education officer Events

## Ecology Trail

On-going

Have you been missing out on having a better understanding of ecology?

Let "A Window to the Big Picture" lead you through some basic concepts of Ecology. Be amazed by the wonders of nature as you venture from station to station along Route One to discover the fascinating facts of Life.



## Nature Talks

Don't miss the opportunity to learn and share knowledge on nature related topics with the experts. Come join us on a Saturday afternoon between 3-4 pm for the talk cum slide presentation. Do look out for more details in the "What's On" column in the Straits Times or on our website at <http://www.sbnp.org.sg>

## Talks

April, May & July 2000

We bring the flora and fauna of the Park to schools with slide talks by our Education Unit. Through this, we hope to impart a sense of appreciation in nature in the students.

## Free Guided Tours

Every Saturday

Free guided tours every Saturday at 9am, 10am, 3pm & 4pm (except for public holidays).

The mysteries of the Park await the keen eyes for details. Join us in discovering the unique flora and fauna of the wetland. Encounter things that you might not have seen before!

Guiding service may be replaced with other interesting programs that coincide with guiding time slots.

## Millennium Souvenir for every 2000th visitor

1 Dec '99 to 31 Dec 2000

Goodies! Yes, countdown to the millennium celebration. We are giving out souvenirs to every 2000th visitor to the Park from Dec '99 to Dec 2000.

Be surprised by the goodies that we have specially prepared for you. Bring home with you the joy of the celebration. We take this opportunity to thank you for your support in nature conservation!

## Natural Wonders of Sungei Buloh: Nest Builders

Every last Saturday of the Month at 9.15am

Keen to join us for a fun time at the Nature Cove? This is a rare chance to find out more about the birds of Sungei Buloh and what they use to make their nests.

## Nature Photography Exhibition

May 2000 in Sungei Buloh Nature Park

June 2000 in Pulau Ubin

July 2000 in Bukit Timah Nature Reserve

Want to have a date with us to capture the natural beauty of our nature areas? Travel with us from places as we showcase the best of our nature areas. Details will be published on our website.

## Teachers' Workshop

30 & 31 May '2000

A half-day workshop conducted for school teachers to familiarise themselves with the Park and help them plan more fruitful field trips to the Park.



## National Geographic Channel Show Time

National Geographic Channel has now travelled to Sungei Buloh Nature Park to share with you the magnificent shots that they have captured in videography.

Spend the afternoon with us to witness the beauty of our Mother Nature. Keep tuning to our website for details.

For more details check our website at [www.sbnp.org](http://www.sbnp.org)



# Journal of a Nature Warden: Yellow-bellied Prinia

*(Prinia flaviventris)* by Ramakrishnan R.K., Senior Ranger

Once part of the agricultural farmland, Sungei Buloh Nature Park is transformed into a beautiful and mystical area. Melodious singing of birds and calling of insects can be heard from time to time. At the freshwater area, birds visiting and residing there include the Crake, Watercock, Bittern, Kingfisher, Heron and Egret who favour the water edges. Other birds that thrive on the abundant source of fruits, insects & grass seeds are the Munia, Baya Weaver, Bulbul, Shrike, Bee-eater, Sunbird, Cuckoo, Dove and the often difficult to spot Yellow-bellied Prinia (*Prinia flaviventris*).

This small resident warbler stays within the long grass, hops from one grass stalk to another and frequently stands at the end of the tall stalks looking around or singing. It is also found at the back mangrove, roadside scrub and agricultural farmland. Usually heard singing with a distinctive and sudden "chip cheerere-up", it also gives out a low "waa" call that sounds like a kitten calling!

The characteristics of this bird are not easily observed because of its low flying habit. It was observed that the adults feed and move

alone but during incubation and feeding of the young both parents remain together. The Prinia's nest is built by weaving grass around few tall grass stalks to form a dome shaped nest with a side entrance. Predation of the eggs and nestlings by snakes and changeable lizards, heavy rains which cause the grass stalk supporting the nest to collapse do take a toll on the bird's breeding success.

**Description of bird:**  
Upper parts: olive, slaty grey head, sometimes with a whitish brow in front of eye.

Under parts: cream breast grading into bright yellow abdomen and under tail coverts; narrow long tail fringed with black and white. Distinguished from Tailorbird by its grey head.

**No. of eggs laid:**  
2 to 3 reddish coloured eggs

**Diet:**  
Consists of insects.

**Size of bird:**  
12 to 14cm

Do keep a sharp lookout for this small warbler on your next visit to Sungei Buloh. 🐦

## Map to the Park



**Opening Hours**  
7.30am to 7.00pm on weekdays  
7.00am to 7.00pm on weekends

Sungei Buloh Nature Park  
301 Neo Tiew Crescent  
Singapore 718925  
Tel: 794 1401  
Fax: 793 7271

**Admission**  
\$1.00 per adult  
\$0.50 per child/student/senior citizen

**E-mail:**  
sbnp@pacific.net.sg

**Audio-visual Show**  
Mondays to Saturdays  
9.00am, 11.00am, 1.00pm, 3.00pm, 5.00pm.  
Sundays and Public Holidays  
Hourly from 9.00am to 5.00pm

**Website:**  
<http://www.sbnp.org>

**Getting There**  
Mondays to Saturdays:  
Board service TIBS 925 from Kranji MRT Station.

Alight at Kranji Reservoir carpark for a 15 min walk to the Park.

Sundays and Public Holidays:  
TIBS 925 will stop at the Park entrance.

### Visitor Centre Facilities

- Theatre
- Cafeteria
- Nature Gallery
- Nature Cove
- Toilet

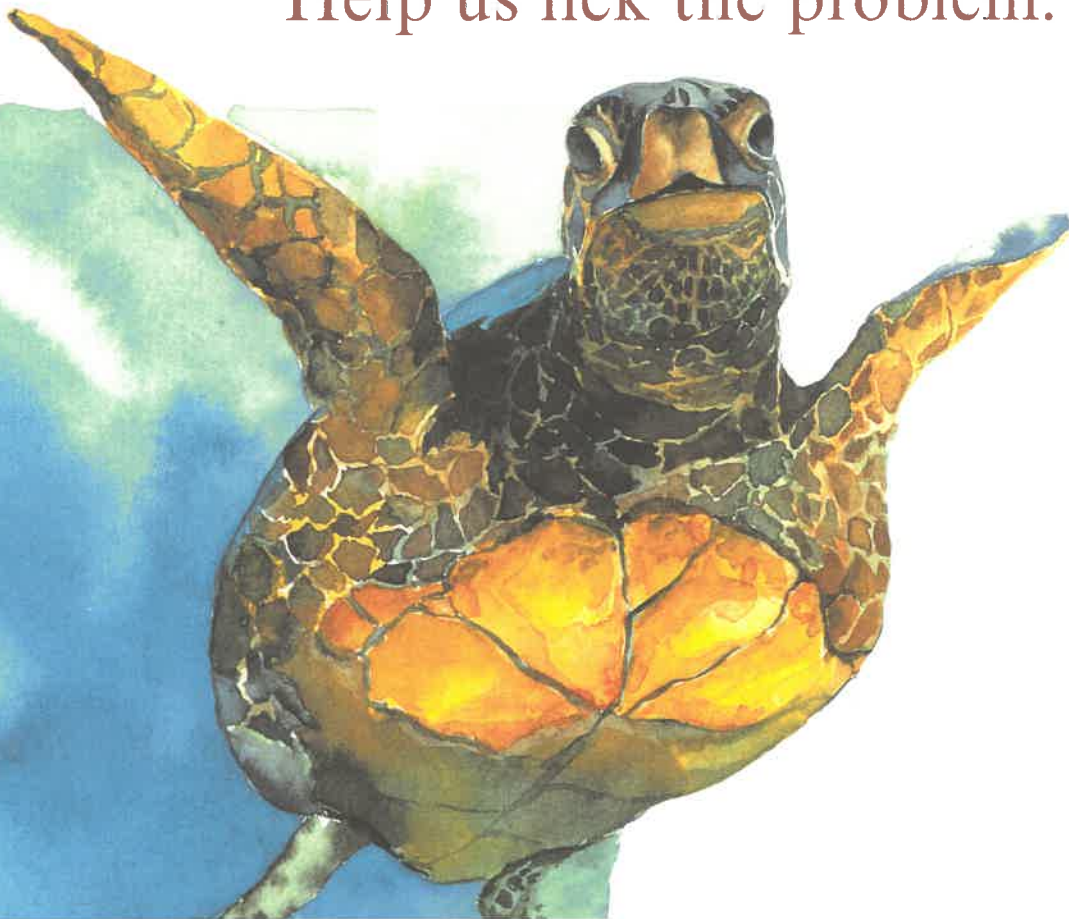
### Park Facilities

- Boardwalk
- Route 1
- Route 2
- Route 3
- Bird Observation Hide
- Tower Hide
- Screen
- Outdoor Classroom
- Platform
- Shelter
- Binoculars
- Emergency Walkie-talkie

## Map of the Park



## They're disappearing fast. Help us lick the problem.



The Green Turtle is a magnificent creature. In the sea, it swims gracefully. And every once in a while, it will lumber up the beach to lay its precious eggs. It is a sight to behold.

Unfortunately the Green Turtle is being threatened, hunted towards extinction for its meat, its beautiful shell and its eggs. Many amphibian and reptile species are similarly endangered today because they are losing their natural habitats.

In an effort to help protect our environment and the many creatures that inhabit it, we launched the Care-for-Nature programme in 1989 to promote public awareness and action in caring for our living planet. Since then, we've helped save a beautiful coral reef from destruction – moving it piece by piece with the help of hundreds of volunteers – from the reef due for reclamation to a safe haven in Sentosa.

And to sow the seeds for a greener future, we've started a programme to involve our youths in re-introducing a variety of indigenous trees into our urban landscape. We're also continuing our efforts to help promote the Sungei Buloh Nature Park, Singapore's only wetland park as a living classroom to our school children; providing them with a learning experience and an appreciation of our environment far richer than what any text book can offer.

These are just a few of our more salient projects to help protect and preserve the environment, its wildlife and our natural heritage. You too can help

the environmental cause by supporting our latest endeavour – the sale of the 1999 Care-for-Nature Collectors' Stamp Series on amphibians and reptiles.

Every dollar and cent we receive from each Collector's Cover and Limited Edition Stamp Print Collection you buy will be donated to the Care-for-Nature Trust Fund; contributing to the financial resources needed to fund ongoing conservation projects as well as new ones in the pipeline.

With your support, our endangered wildlife may stand a better chance. Because if we can all just help to look after their habitat, nature's wildlife can look after themselves. So buy any one of the Care-for-Nature Collectors' Covers or Limited Edition Stamp Print Collection, and help lick the problem.

### The Amphibian and Reptile Series

For as little as \$9.90, you can make a difference.

Care-for-Nature Collectors' Cover (\$9.90)

Special 4-in-1 print edition (\$68)

Set of 4 Limited Stamp Print Collection (\$338 with frames), (\$198 without frames)

From 13 October, the Care-for-Nature Collector's Covers are available at all HSBC branches and Post Offices. The Limited Edition Stamp Print Collection are also available at HSBC branches, Public Affairs and Advertising (HSBC Building #14-01, Tel: 530 5100) and Singapore Post (Killiney Road, Tel: 734 7899).

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