


A  publication

wetlands

Sungei Buloh Wetland Reserve • Wetlands is sponsored by HSBC • [April 2002] • Vol. 9 No. 1 • MITA(P) No. 202/12/2090





"Sungei Buloh Nature Park today is the result of a fruitful partnership between NParks and dedicated members of our community. It is a partnership forged on the shared ideals of nature conservation for the enjoyment of our local community, and doing our bit for the health of our global environment."

Mr Mah Bow Tan, Minister for National Development, 10 Nov 2001

contents

Cover pix by Amphibios Creative
Fruit of our labour



- 3 **Did You Know?**
We are now known as Sungei Buloh Wetland Reserve.
- 4 **The Learning Place**
Where our young naturalists get up close and see nature at work.
- 6 **Feature**
A shelter at the end of one mangrove boardwalk stands out, and it is this very shelter that takes the precedence of enunciating a new take on art in the mangroves!
- 8 **Special Report**
Sustained bird studies at the reserve reveal more interesting data to be shared with the community.
- 12 **Volunteer Corner**
Edie Lim shares with us his volunteering experience.
- 13 **What Happened!**
Scientific Journal of the Year 2001: A year's worth of shorebird census
- 14 **What's Brewing?**
Nature Detective • Earth Day Celebration • HeronWatch • PrawnWatch • Teachers' Workshop
- 15 **Nature Journal**
A milestone in Sungei Buloh's chart.



Care-for-Nature
PROTECTING OUR LIVING RESOURCES

editorial A sense of community forged by a common goal to protect our natural heritage has garnered the support and contributions from all like-minded people. 10 Nov 2001 is the result of years of commitment from dedicated staff as well as friends of Sungei Buloh, namely volunteers, sponsor (HSBC), adopters (Woodlands and Commonwealth Secondary) and all nature lovers. Each member of this community has brought along his own unique experience and abilities, contributing to the development of the Park. These people have been instrumental in helping Sungei Buloh grow and bear fruit. A fruit which will be enjoyed by many generations to come. 🐞

linda goh

'Wetlands' is sponsored by HSBC under its Care-for-Nature programme.

HSBC's Care-for-Nature programme is dedicated to help conserve and protect our living resources in our natural environment and at the same time to generate awareness among the public to do likewise.

The sponsorship of 'Wetlands' is one such effort to help promote a better understanding and appreciation of wetland ecology such as Sungei Buloh and its importance to our natural landscape.

Chief Editor Linda Goh
Editor Jeanne Tan
Contributors Joseph Lai James Gan Chan Su Hooi
 Ramakrishnan R.K Linda Goh Jeanne Tan
Design Studio Yan Design Consultants
Printer Image Printers Pte Ltd
Photos Credits David Tan Wong Tuan Wah Ali Ibrahim
 Linda Goh James Gan Halilah Ahmad

HSBC 
The world's local bank

Please call 530 1845 if you wish to know more about HSBC's Care-for-Nature Programme. Or write to us at:
 HSBC, Public Affairs & Advertising, 21 Collyer Quay, HSBC Building, #14-01, Singapore 049320

a new beginning...



With the announcement from Minister for National Development, Mr Mah Bow Tan, on the gazettelement of Sungei Buloh, the reserve is given a new lease of life.

a new name | To better reflect Sungei Buloh's status as a nature reserve, we have decided to name it, Sungei Buloh Wetland Reserve.

a new branding | The mangrove tree is the most visible & permanent part of the mangrove landscape. It represents the health of the mangrove ecosystem. The heron in flight highlights the unique selling point of Sungei Buloh, the birds. It also represents Sungei Buloh's importance on the international conservation scene.

a new website address | Sungei Buloh's website will also be moved to a new domain at www.sbwr.org.sg. Look out for more interesting news and activities at this site.



young naturalists of sungei buloh

Comprising 130 hectares of beautiful mangroves, mudflats and ponds, Sungei Buloh Wetland Reserve is not only home to a myriad of plants and animals but is also a living classroom for our young naturalists to get up close and see nature at work.

Designed to draw budding young naturalists to experience the reserve, the Young Naturalists Programme is a journey of discovery into the wonders of nature. The challenge is for children to learn more about the wetlands and earn their passport stamps as well as badges. A total of 4 badges awaits the budding young naturalist who successfully completes the following set of activities :

1. Nature Ramble
2. Nature Activity & Write Stuff
3. Thematic Trail & Natural Artist
4. Special Mission



Visit www.sbwr.org.sg for more information



Category 1 : Nature Ramble

Go on the following guided tours and complete the word puzzles to earn your explorer stamps.

- **Mangrove Mania**
Every Sat (except Public Holidays)
Come discover the Park's unique flora and fauna as the guide leads you through the Mangrove Boardwalk.
- **BirdWatch**
Available in November
Birdwatch with guidance from experienced birdwatchers, learn to tell the difference between a plover and a sandpiper.

Category 2 : Nature Activities

Participate in the following activities and do the tasks assigned to earn your inventor stamps.

- **Nest Builders**
On Sat from 9.15am to 9.30am
Birds are like us in many ways. They build different kinds of "houses" which we call nests for their young. In the wild, they make use of natural resources around them, like grass, lallang, spider web, leaves, sticks etc, to make their nests. Learn how they build their nest and have a go at constructing one yourself.



on the learning journey...

- **Wetlands Craftsman**
On Sat from 9.15am to 9.30am
With the use of natural materials, create your own handy crafts.
- **Creature Feature**
On Sat from 9.15am to 9.30am
Featuring different creatures of the mangrove swamp, bring home one of your own handmade ones.

Category 3 : Thematic trail

Explore the wonders of the reserve and complete the trail to earn your discoverer stamps.

- **Signs of Support**
Daily
Explore the reserve and find out how you too can help care for our reserve.
- **Endless Summer**
Available from Sept to March
T.T is back to do his rounds! Be sure to arm yourself with the booklet "Endless Summer- the story of the seasoned traveller" and begin your adventure with him on his migratory route around route one. Find out from the booklet the mission to be achieved.
- **Nature Detective**
Daily
Wanted: Active kids with inquisitive minds. A challenge awaits you to be the next "Nature Detective". Learn more about the reserve and bring home with you a Nature Detective certificate.

Category 4 : Natural Artist

Submit a drawing or painting based on the theme for the month and earn your artist stamp.

- **Art Form**

Category 5 : Write Stuff

Submit write-ups on nature based on the theme for the month and earn your writer stamps.

- **Poem**
- **Essay**


Category 6 : Special Mission

Be a special agent and earn extra supporter stamps by participating in any of the special events we organise to support the Wetlands.

- **World Environment Day (5 Jun)**
- **World Wetland Day (2 Feb)**
- **Earth Day (22 April)**

Category 7 : Care-For-Nature

Participate in any Care-for-Nature events organised by HSBC at the reserve to earn your special Care-for-Nature stamps. (Accumulate at least 3 stamps and you will receive a special token from HSBC.)

The inhabitants of the Sungei Buloh Wetland Reserve await your visit at this living classroom. 



A shelter at the end of one mangrove boardwalk stands out, and it is this very shelter that takes the precedence of enunciating a new take on art in the mangroves!



a new take on art in the mangroves

by Jeanne Tan,
Senior Education Officer

Discovering nature alive

In July 2001, Ms Ruth Ng, art co-ordinator and teacher of Commonwealth Secondary School made an introductory visit to Sungei Buloh Wetland Reserve at the request of the Park to do an art project. She was inspired by the unique flora and fauna of the mangroves, conceptualised the idea and design and shared it with her school.

art in the mangroves...

Art was interwoven with nature as an interdisciplinary project. It tied in with the "Adopt-A-Park" scheme, where Commonwealth Secondary had adopted the mangrove boardwalk by the nature gallery. The theme for this project was "Discovering Nature Alive".



It is a very meaningful and interesting project.
- Teh Yan Ping, class 3'6



The whole combined effect of nature and art was very good.
- Xu Zhi Qiang, class 3'8

Nothing ventured, nothing gained...

The whole process of putting the concept into something tangible, like

that of a wooden tile with acrylic paint, was not easy. During their art classes, students painstakingly made sketches and drawings of the unique flora and fauna with the help of many visual materials of the mangroves as well as some direct studies. It was a long process that started off with research and drawings, planning the composition in colour, testing it out on samples, and finally painting it onto the wooden tiles with acrylic paint.

Each student painted an average of four tiles in 10-15 hours, and some took up as much as 20 hours for the whole project. The students were self-motivated but also received a lot of motivation from their art teacher, and under careful instruction, they finally completed their paintings by the third week of September. They were given about 6 weeks to complete their art project, which they did, with excellence and pride.

The Young Muralists

The creative art pieces were done by three hundred and fifty students from secondary two and a handful of secondary three art elective students. Completing a project like this within a time limit was a true accomplishment for the students. Not only did it give them a sense of achievement, many of them were totally awed by the final output, which was mounted onto the shelter. They were proud of themselves and for their school,

and the ultimate satisfaction was seeing their artwork displayed in a place of nature like that of Sungei Buloh. It was a lot of hard work for the students and staff of Commonwealth Secondary school, but the results were worth it!

A Difference Made

The whole mural painting experience was a very satisfying and fulfilling experience for both staff and students of Commonwealth Secondary School. Ms Ruth Ng, the school's art co-ordinator and teacher said, "Visual art is a very personal experience. The students will grow to love art". Not only did the students grow to enjoy art, Sungei Buloh had ignited a new interest in them to explore all that nature had to offer!

Mural painting had been an experience like no other for these students. To some, it had not only been fun, but it helped them improve their art as well. This project made a positive contribution, not only to Sungei Buloh, but to each individual student and to the community. The students of Commonwealth Secondary felt honoured and privileged to be able to serve the community through their art in the murals. Their teacher, Ms Ng, was happiest to see her students "love nature, paint beautifully and really experience directly the visual art process from a research concept to realisation of the outcome", and finding satisfaction in "serving the community through something beautiful".

A motivational and interdisciplinary project, a creative way of serving the community and a whole visual art process was made possible through the faithful and conscientious commitment of the students and staff of CSS. And here it will be in Sungei Buloh for a long time to come, to be admired and enjoyed by all.



Grey-tailed Tattler

by James Hoo,
Senior Conservation Officer

bird ringing in sungei buloh wetland reserve in 2001

Bird ringing has been conducted in the Sungei Buloh Wetland Reserve since 1990. In 2001, a total of 1,007 birds from 71 species were ringed.

The ringing field work was conducted regularly at the fresh and brackish water ponds at the reserve both during the day and night throughout the course of the year. A summary of the numbers of birds ringed in 2001 is provided in Table 1. The most commonly ringed bird species were (numbers in brackets) : Javan Munia (124), Common Redshank (117), Mongolian Plover (95), Pacific Golden Plover (85) and Marsh Sandpiper (58). Compared to last year's ringing effort, the number of Javan Munia had increased by 55%.



Peaceful Dove

Some movements of birds were noted within the reserve. Notably, a Collared Scops Owl that was ringed at the western end of the park was netted in the Visitor Centre area at the eastern end.



Rufous Woodpecker

Other interesting birds ringed were the Asian Paradise Flycatcher, Forest Wagtail, Grey-tailed Tattler, Pallas' Warbler, Pintail Snipe, Ruddy Turnstone and Rufous Woodpecker.

This is attributed to the replanting of *Panicum maximum* whose seeds form the bulk of food for the Munias. A number of the replanted grasses was in the vicinity of the netting sites. The numbers of Marsh Sandpiper, Curlew Sandpiper, Common Sandpiper, Mongolian Plover, Pacific Golden Plover and Whimbrel ringed have increased. Generally the recapture numbers for these shorebird species have also increased over the previous year reflecting the increased ringing effort. The number of Common Redshanks ringed, however, has decreased dramatically from 263 to 117 although recapture numbers have remained steady. Significantly fewer Terek Sandpipers were also ringed. Ringing and shorebird census efforts over the next few years may help to establish if this is of concern.

One Ruddy Kingfisher, believed to be of the migrant race was netted in Dec. This is the second consecutive year that the species has occurred in the reserve since it was first recorded. Other interesting birds ringed were the Asian Paradise Flycatcher, Forest Wagtail, Grey-tailed Tattler, Pallas' Warbler, Pintail Snipe, Ruddy Turnstone and Rufous Woodpecker.

The mist netting effort has borne fruit with an increase of 134% in the recapture rate over the previous year despite netting fewer individual birds. There were 124 recaptures of birds from 31 species for birds that were ringed before 2001 as compared to 54 recaptures from 18 species in 2000. As was the case the previous year, the Common Redshank leads the list again with 21 recaptures, followed by the Brown-throated Sunbird with 14 recaptures and the Collared Kingfisher with 12 recaptures. One use for the data obtained from recaptured birds is

the enabling of longevity records and the active survival of bird species to be determined. These records are provided in Table 2. Of interest, a Marsh Sandpiper ringed on 31 Oct 90 and recaptured in the reserve on 23 Jan 01, an interval of just under 123 months, beat the previous record held by a Common Redshank by 2 months. However the record was wrested back by another Common Redshank later in the year. This individual was ringed in the Park on 30 Oct 90 and recaptured on 29 Nov 01. The interval of 133 months (11 years) is believed to be the longest recorded for the species. The oldest recapture of a non-migrant was a Collared Kingfisher ringed in Jul 94 and recaptured in Jun 01, an interval of almost 84 months (7 years). This is the same individual that held the previous record of 73 months (6 years) as was reported in the bird ringing report for 2000.



Juvenile Tiger Shrike

In summary, bird ringing in 2001 has, for example, continued to reveal surprises in bird movement, abundance and survival rates. Data collected are invaluable for the long term conservation management of the Park.



Large-tailed Nighthawk

One Black-capped Kingfisher exhibited high site fidelity. The individual that was reported mist netted at the same net after an absence of one season in the bird ringing report for 2000 returned (in the same net & even in the same section of net) on 10 & 23 Oct 01. It is possible that the reserve locality is its ultimate wintering site.

A Black Bittern was recaptured at the same wintering area 11 months after it was ringed at the freshwater ponds. Similarly, a Yellow Bittern was also recovered 14 months after it was first ringed. This is the first direct evidence that the reserve is a wintering area for these two species.

Some movements of birds were noted within the reserve. Notably, a Collared Scops Owl that was ringed at the western end of the park was netted in the Visitor Centre area at



measuring birds

the eastern end. Similar movements were also noted for a Stork-billed Kingfisher. Small birds were also known to move

throughout the reserve. Evidence of this was found in the movement of an Ashy Tailorbird ringed at the Visitor Centre and found two weeks later at the freshwater pond area about 1.5km away.

Shorebirds were colour-marked with yellow dye and their movements within the reserve and throughout Singapore were recorded based on ad hoc observations by the reserve's network of volunteers and friends. Some interesting sightings of colour-marked shorebirds around Singapore are listed in Table 3.

In summary, bird ringing in 2001 has, for example, continued to reveal surprises in bird movement, abundance and survival rates. Data collected are invaluable for the long term conservation management of the Park.

This article is possible because of the field studies supported by NParks. Thanks to fellow ringers Ramakrishnan, Linda Goh, Cheryl Chia, Benjamin Lee, Genevieve Chua, Charles Lim, Patricia Phua, Ali Ibrahim, Joseph Lai and Chan Su Hooi for contributing to the ringing work. Many others assisted with the ringing including staff, volunteers and friends especially, Kunasegaran and Halilah Ahmad. In addition I am grateful for the voluntary help from Nick Baker, Lua Wai Heng and Zeehan. Kenneth Kee, R. Subaraj, Richard Ollington and Alan Owyong gave expert advice and contributed some sighting and observation records.

Comments or feedback?

E-mail at sbwr@pacific.net.sg

Table 3

Sightings of colour-marked shorebirds external to Sungei Buloh Wetland Reserve In 2001

Whimbrel:	One was seen in a group of 35 Whimbrels and a mixed flock of shorebirds at Sg Khatib Bongsu ponds on 3 Nov 2001 at 11:30am at high tide.
Curllew Sandpiper:	One was seen feeding and also in flight at Tanah Merah Marshes on 8 Dec at 6:20pm during low tide. This is believed to be the first report of colour dyed birds at the site.
Marsh Sandpiper:	One was seen at Sg Khatib Bongsu ponds on 26 Jan 2001 at 9:00am at high tide.
Mongolian Plover:	Two were seen at Kranji dam mudflats on 14 Jan 2001 at 12:00pm on a rising tide.

Other Interesting facts

Heaviest Bird Ringed: **A Whimbrel** weighing in at 546g

Lightest Bird Ringed : **A Scarlet-backed Flowerpecker** which weighed in at a minuscule 4g

References

- McClure, H.E. 1998. Migration and Survival of the Birds of Asia. White Lotus Co., Ltd, Bangkok
- Medway, Lord & Wells, D.R. 1976. The Birds of the Malay Peninsula, Vol 5. Penerbit Universiti Malaya, Kuala Lumpur
- Wells, D. R. 1999. The Birds of the Thai-Malay Peninsula, Vol 1. Academic Press, San Diego
- Wetlands Vol 8, No. 1, Bird Ringing in Sungei Buloh Nature Park in 2000, Pp 7-10, Publication of SBNP, National Parks Board, Singapore

Table 1

Summary of individual birds ringed (recaptures or recoveries for birds ringed before 2001 in brackets) at Sungei Buloh Wetland Reserve from Jan to Dec 2001

S/N	Species	Ringed 2000	Recapture pre-2000	Ringed 2001	Recapture pre-2001	S/N	Species	Ringed 2000	Recapture pre-2000	Ringed 2001	Recapture pre-2001
1	Abbott's Babbler	2		2	1	46	Laced Woodpecker	4		3	2
2	Arctic Warbler	3		2		47	Large-tailed Nightjar	1		4	1
3	Ashy Tailorbird	20	1	18	2	48	Lesser Coucal	1		1	
4	Asian Brown Flycatcher	2		0		49	Little Bronze Cuckoo	1		1	
5	Asian Dowitcher	1		0		50	Little Heron	9		6	4
6	Asian Glossy Starling	53	1	18		51	Magpie Robin	12	1	7	3
7	Asian Paradise Flycatcher	0		1		52	Marsh Sandpiper	25		58	5
8	Baya Weaver	60		22	3	53	Mongolian Plover	61	2	95	4
9	Black Bittern	5		3	1	54	Olive-backed Sunbird	1		16	1
10	Black-browed Reed Warbler	1		0		55	Olive-winged Bulbul	7		9	4
11	Black-capped Kingfisher	6		3	1	56	Oriental Reed Warbler	2		2	
12	Black-naped Oriole	5		2		57	Oriental Scops Owl	1		0	
13	Black-tailed Godwit	1		0		58	Pacific Golden Plover	27	1	85	2
14	Blue Magpie	1		0		59	Pacific Swallow	7		3	
15	Blue-tailed Bee-eater	3		1		60	Pallas' Warbler	0		2	
16	Blue-throated Bee-eater	6		2		61	Peaceful Dove	6		6	
17	Brown Shrike	4		7		62	Pied Fantail	10	1	9	2
18	Brown-throated Sunbird	73	4	47	14	63	Pied Triller	1		1	
19	Chestnut Munia	2		0		64	Pintail Snipe	0	1		
20	Chestnut-winged Cuckoo	4		2		65	Pink-necked Pigeon	8		3	
21	Cinnamon Bittern	5		0		66	Red-legged Crake	1		0	
22	Cinnamon-headed Pigeon	1		0		67	Ruddy Kingfisher	1		1	
23	Collared Kingfisher	43	8	48	12	68	Ruddy Turnstone	0		1	
24	Collared Scops Owl	5	1	5	2	69	Rufous Woodpecker	0		2	
25	Common Flameback	1	1	2		70	Rufous-tailed Tailorbird	15		10	3
26	Common Greenshank	0		2		71	Rusty-breasted Cuckoo	1		0	
27	Common Iora	6		5	1	72	Scaly-breasted Munia	45		49	
28	Common Kingfisher	15		13		73	Scarlet-backed Flowerpecker	1		2	
29	Common Koel	2		1		74	Siberian Blue Robin	3		0	
30	Common Redshank	263	24	117	21	75	Slaty-breasted Rail	1		0	
31	Common Sandpiper	9	1	17	3	76	Spotted Dove	3		1	
32	Common Tailorbird	15		14	1	77	Stork-billed Kingfisher	9		6	4
33	Copper-throated Sunbird	0		1		78	Terek Sandpiper	16	1	2	
34	Crow-billed Drongo	1		0		79	Tiger Shrike	16		8	
35	Curlew Sandpiper	26		34		80	Watercock	1		0	
36	Dark-necked Tailorbird	3		1		81	Whimbrel	13		27	
37	Drongo Cuckoo	1		0		82	White-breasted Waterhen	5	1	11	1
38	Eurasian Curlew	1		0		83	White-browed Crake	1		2	
39	Forest Wagtail	0		1		84	White-chested Babbler	0	1	0	
40	Greater Sand Plover	1		0		85	White-headed Munia	0		1	
41	Green-winged Pigeon	13	1	3	6	86	White-throated Kingfisher	10		10	1
42	Grey-tailed Tattler	0		1		87	Yellow Bittern	17		10	3
43	Indian Cuckoo	0		1		88	Yellow-bellied Prinia	3	1	3	2
44	Japanese Sparrowhawk	2		1		89	Yellow-rumped Flycatcher	5		2	
45	Javan Munia	80		124	3	90	Yellow-vented Bulbul	60	3	22	11
							Total	1156	54	1007	124

Corrections to Bird Ringing in SBNP in 2000 Report: The total number of birds ringed in 2000 should be 1156 and not 1154. 43 (not 42) Collared Kingfishers were ringed in 2000 with 8 (not 7) recaptures (ringed before 2000). Total recaptures for birds ringed in 2000 is 54 and not 53

Table 2Longevity Records (Selected species)
At least 6 months for resident birds or 1 season for migrants

Species	Date Ringed	Date Recaptured	Interval (mths)
Abbott's Babbler	18 Apr 00	11 Sep 01	17
Baya Weaver	19 Apr 00	22 May 01	13
Black Bittern	19 Dec 00	21 Nov 01	11
Black-capped Kingfisher	22 Mar 00	22 Nov 01	20
Brown-throated Sunbird	17 Apr 96	22 May 01	61
Collared Kingfisher	29 Jul 94	20 Jun 01	83
Common Iora	7 Sep 99	23 May 01	20
Common Redshank	30 Oct 90	29 Nov 01	133
Common Sandpiper	18 Dec 97	13 Mar 01	39
Common Tailorbird	24 Feb 99	24 May 01	27
Green-winged Pigeon	11 Aug 95	12 Sep 01	73
Javan Munia	27 Jun 97	19 Apr 01	46
Large-tailed Nightjar	4 May 00	23 May 01	12
Little Heron	17 Nov 94	18 Sep 01	82
Magpie Robin	3 Jul 96	2 Oct 01	64
Marsh Sandpiper	31 Oct 90	23 Jan 01	123
Olive-backed Sunbird	7 May 96	9 May 01	60
Olive-winged Bulbul	21 Jul 00	24 May 01	10
Pied Fantail	3 Jun 97	22 Aug 01	49
Rufous-tailed Tailorbird	10 Apr 97	18 Apr 01	48
Stork-billed Kingfisher	25 Aug 00	22 Nov 01	15
White-throated Kingfisher	21 Nov 00	11 Sep 01	10
Yellow Bittern	22 Mar 00	24 May 01	14
Yellow-bellied Prinia	7 Mar 96	31 Jul 01	65



the journey of a volunteer guide

I was just surfing the Internet when I came upon the Sungei Buloh Website. After my virtual visit, I thought, why not send a nice note to those wonderful blokes to thank them for their informative website? Since I was going to email them, why not find out a little more about their volunteer programme too? The email was promptly despatched and I thought nothing further about my correspondence.

It was the year 1996. I had a frustrating and stressful morning in the office. As a marketing and salesperson, I had the privilege of "skiving" every now and again to de-stress. So I decided that Sungei Buloh would be a good relaxing venue. The afternoon spent there was rather enjoyable... until my pager went beep beep. Well, this was a nice place and my intuition told me that this would not be my last visit.

"Ladies & Gentlemen, Boys & Girls, my name is Edie and I am your guide ..." In the year 2000, I became a Volunteer Guide with Sungei Buloh.

Guiding is fun, but it can sometimes be a challenge. Visitors to the reserve come from various backgrounds and they include locals and foreigners. The foreigners - Japanese, Americans, Europeans etc. - are usually attentive and easy to please, as they come for a specific purpose. The challenge comes with locals of various age groups. The younger ones are extremely active and have very short attention spans. I try to inspire them by getting them to spot moving objects. What about our "highly-urbanised folks who don't seem to have time to appreciate nature"? (This phrase is a quote from one of my urbanised visitors.) I usually bring up Singapore's favourite past time, i.e. eating, to catch their attention. Attap chee, gula melaka, noni juice, chut chut or mangrove mud creepers, chilly-crabs and many more - they are all found in mangroves. The response is always positive.

Although guiding is the most common activity contributed by the volunteers, some of them also assist in other areas like photography, website maintenance, assisting the staff in simple chores like ushering and manning booths on special occasions. Volunteers are also involved in many other events in the reserve.

Every year, Sungei Buloh participates in important world and local events like the International Coastal Cleanup, Earth Day, Nature Day, Clean & Green Week, just to name a few.

Every so often, when I have time on my hands, I head for Sungei Buloh. My favourite location is Platform 1 that overlooks Johore Bahru. Here, when the tide is low, the water is clear and one might just catch a glimpse of Horseshoe Crabs mating.

Finally, you might be wondering why I bother to volunteer. Well, I enjoy the "work" and the biggest satisfaction is when my guests tell me how much they enjoyed themselves and how their attitudes towards nature have been enhanced. I have also reaped some benefits including making new friends and of course I get to visit the reserve for free! It is also heartening to know that we volunteers have in our own little way contributed to Sungei Buloh being gazetted as a Nature Reserve last year.

To those of you who are reading this article and are still contemplating whether or not to visit Sungei Buloh, I urge you to make the effort. I promise you that you will never regret that decision. Who knows, you might end up enjoying yourself in the reserve as a Volunteer Guide! 🌿

by James Gan, Senior
Conservation Officer &
Ramakrishnan R.K., Assistant
Park Officer



shorebird monitoring in sungei buloh wetland reserve in 2001



When is the best time to see flocks of migratory shorebirds at Sungei Buloh Wetland Reserve? One approach to find out is to count the shorebirds at the reserve during the course of a year.

In 2001, shorebirds were counted regularly throughout the year during census sessions with telescopes and binoculars. The species and their corresponding numbers were recorded and are shown in Table 1.

During a typical session, trained staff go to the reserve's ponds on a randomly scheduled day within the month. They may conduct as many as 4 sessions on separate days within the month. All census sessions are conducted during daylight hours usually within a 2-hour period around the maximum tide for the day.

The census for 2001 revealed, not unexpectedly, that your best chance of seeing large flocks of shorebirds (above 1,000) is between September and April during high tide. In May, June and July, only a few species of

shorebirds in very small numbers (usually and often much less than 30 for each species) can still be found, comprising mainly of Common Redshank and Whimbrel.

The Sungei Buloh area is a good place to view shorebirds. Preliminary observations suggest that the area is favoured by perhaps at least half the Singapore population of Whimbrel, Common Redshank, Common Greenshank, Marsh Sandpiper, Pacific Golden Plover and Mongolian Plover on any given day in the year. More studies are required to substantiate these observations. However, one thing is certain: Visit the reserve around high tide between September and April and chances are you will be entertained by the flocks of shorebirds.

Table 1 Shorebirds Species Maximum Counts per session during Census for each month in 2001

Species ¹	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Common Greenshank	220	118	58	124	5	0	1	12	41	111	118	189
Common Redshank	115	44	7	116	17	7	32	154	305	190	221	152
Curlew Sandpiper	67	0	0	0	0	0	0	50	133	302	248	288
Marsh Sandpiper	376	372	129	223	3	0	0	3	84	314	134	486
Mongolian Plover	786	213	104	112	10	0	0	183	675	555	440	606
Pacific Golden Plover	348	450	327	1081	0	0	0	220	545	624	1022	940
Whimbrel	139	186	118	219	10	13	14	20	113	176	157	198
Other Information												
No. of Census Sessions Conducted	2	1	1	4	3	3	3	4	4	4	2	3
Max No. of Shorebirds counted per session ² (All species incl. the 7 species listed above)	1738	1391	755	1622	45	20	32	407	1787	1968	2213	2470

Notes: 1) Shorebirds counted are from the family Scolopaciidae; the 7 most abundant species have their maximum counts for the session in the month indicated in the table. 2) Figures indicate the highest maximum number of shorebirds for the session in the month.

calendar of events

Compiled by Chan Su Hooi,
Education Officer

Nature Detective

Daily

Wanted: Active kids with inquisitive minds. A challenge awaits you to be the next "Nature Detective". Learn more about the Park and bring home with you a Nature Detective certificate.

(Nature Hunt questions available at ticketing counter)

- Children get to do papier mache items out of used paper. This drives home the point of recycling.
- Children go on a "Treasure Hunt" to learn first-hand about Earth's natural resources from the mangroves.

The activities are 'free-and-easy', and children can start them anytime during the day.

Free Guided Tours

Every Sat (except public holiday) at 9am, 10am, 3pm and 4pm

You'll never know how much the mangroves can offer you. Each visit to the mangroves is different. Come and discover more! Guiding service may be replaced with other interesting programmes that coincide with guiding time slots.

HeronWatch 2002

25 May and 22 June 2002, 3pm to 5pm

They are known as one of the largest birds in Singapore. They can be seen busy building nests, feeding the young and roosting on the canopy of mangrove trees. Join us on a guided tour and learn more about these birds.



damselfly mating

Nest Builders

On Sat from 9.15am to 9.30am

Birds are like us in many ways. They build different kinds of houses which we call nests for their young. In the wild, they make use of natural resources like grass, lallang, spider web, leaves, sticks, etc. around them to make their nests. Learn how they build their nest and have a go at it yourself.

Prawnwatch 2002

1 June and 15 June 2002, 9am

Never seen how prawns are harvested? Then come and join us! There will be a guide to bring you to the Prawn Pond where you will witness the traditional way of prawn harvesting.

Earth Day Celebration

20 April to 27 April 2002

Keen to spend your Saturday with us celebrating Earth Day? Don't miss out on the 'in thing' now, being 'Earth-friendly': reduce, re-use, recycle!

Programme for the day:

- An exhibition on Earth's natural resources from the mangroves.

Teachers' Workshop

May 2002

How to conduct an interesting and fruitful field trip at Sungei Buloh? This half-day workshop will provide teachers with the know-how to make use of the reserve as a living classroom.



text and illustration
by Joseph Lai,
Conservation Officer

the day a hornbill flew over

Nick Baker, our volunteer, and I were talking outside the brilliant white marquee, when all of a sudden a hornbill came flying overhead. It disappeared as fast as it came. But if not for the unmistakable "horn", we would not have been sure. What a wonderful start to a fine day, we thought, and none more important in the 9-year history of Sungei Buloh.

10 November 2001 will be remembered as the auspicious day on which Sungei Buloh was announced to be gazetted as a Nature Reserve. We applauded loud and hard. Some even had tears in their eyes when Mr. Mah Bow Tan, Minister for National Development, announced the good news. For many, this has been a long love affair. They had literally grown up with Sungei Buloh. Becoming volunteers was second nature to them.

They came to help without hesitation. Most of them took leave of absence from work and school to be guides on that day. Another fine example of dedication came from our former staff, Adeline and Colleen. Both came back on the eve of the event to volunteer help. We worked into the early hours of the morning together and got little sleep camping over at Sungei Buloh. Such was the dedication. The extra mile taken by these people and many others. For me, 10 November 2001 was memorable because of these humble and unassuming people. Here was a place of their hearts, and their hearts were in the right place.

10 Nov 2001 was likened to the homecoming of a big extended family. We wanted to be there for kinship, to go back to our point of origin. Nick and I will never forget the day a hornbill flew over. It came like a sign of hope from the sky. For Sungei Buloh, that hope became a reality on that day. We can now proudly call ourselves Sungei Buloh Wetland Reserve!

walking routes



reserve information

Opening Hours
Mondays to Saturdays
7.30am to 7.00pm

E-mail:
sbwr@pacific.net.sg

Sundays & Public Holidays
7.00am to 7.00pm

Website:
http://www.sbwr.org.sg

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

Visitor Centre Facilities

- Theatre
- Cafeteria
- Nature Gallery
- Information
- Toilet
- Butterfly Trail

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

Park Facilities

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

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.

Sungei Buloh
Wetland Reserve
301 Neo Tiew Crescent
Singapore 718925
Tel: 6794 1401
Fax: 6793 7271



approach routes for motorists



USA

Football



UK

Football



AUSTRALIA

Football

Never underestimate the importance of local knowledge.

To truly understand a country and its culture, you have to be part of it.

That's why, at HSBC, all our offices around the world are staffed by local people. In fact you'll find we've got local people in more countries than any other bank.

It's their insight that allows us to recognise financial opportunities invisible to outsiders.

But those opportunities don't just benefit our local customers.

Innovations and ideas are shared throughout the HSBC network, so that everyone who banks with us can benefit.

Think of it as local knowledge that just happens to span the globe.

HSBC 
The world's local bank