



OUR CONSERVATION STORY

Lower Peirce Reservoir

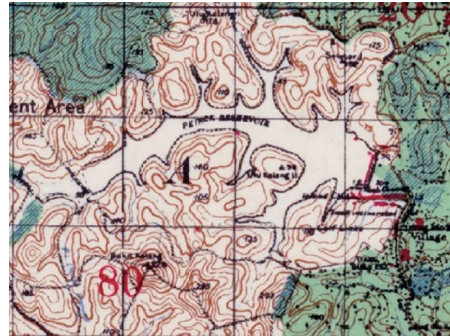
by Nature Society Singapore

Pre-modernisation

In the 19th century, it was known as Kallang Reservoir, which was surrounded by agricultural land. It was renamed Lower Peirce Reservoir after the creation of Upper Peirce Reservoir in the 1940s. At the point of publishing the Environmental Impact Assessment in 1991, the forest was already 82 years old, making it a mature secondary forest. The forest sits within the Central Catchment Nature Reserve which was gazetted in 1951.



Kallang Reservoir in the 1911 map of Singapore (Source: <https://libmaps.nus.edu.sg/>)



Peirce Reservoir in the 1943 map of Singapore (Source: <https://libmaps.nus.edu.sg/>)



Lower Peirce Reservoir in the 1993 map of Singapore (Source: <https://libmaps.nus.edu.sg/>)

Announcement of the Golf Course

On 28 April 1991, it was announced that the Public Utilities Board (PUB) might be planning for an 18-hole golf course at the north of Lower Peirce Reservoir.



The Straits Times, 28 April 1991 (Source: NewspaperSG)

Stakeholder Engagements

On 29 May 1991, the fourth meeting for the Nature Reserves Committee was held. In it was representatives from National Parks Board (NParks), Public Utilities Board (PUB), National University of Singapore (NUS) and Malayan Nature Society Singapore Branch (MNSSB). The proposed golf course at Lower Peirce Reservoir became a topic for discussion and a discussion on consultation took place.

MINUTES OF THE FOURTH MEETING OF THE NATURE RESERVES COMMITTEE
HELD ON 29/5/91 AT 3.00 PM AT THE BOTANIC GARDENS' LIBRARY
CONFERENCE ROOM.

Present : Mr Richard Edward Hale (Chairman)
Dr Leong Chee Chiew (NPARKS)
Mr Ong Ho Sim (PUB)
Mr Joseph Koh Kok Hong
Dr Leong Hon Keong (PPD)
Assoc Prof Wee Yeow Chin (NUS)
Dr Ho Hua Chew (MNS)

In Attendance : Mr Robert Teo (Secretary)

Absent : Dr Tan Wee Kiat
(With Apologies) Ms Joyce Foo Tok Shiew
Mr Rajathurai Subharaj
LTC Wee Kia Pak
Mr Charles Letts
Mr Tay Eng Pin

ACTION BY

Confirmation of minutes of last meeting.

1 The minutes of the last meeting were amended as requested by PUB (please see attached letter).

Proposed survey of the Nature Reserves.

2 Dr Leong reported that PS(F)(B) had approved \$500,000 for the geophysical survey of the Nature Reserves. Concurrence for A/P Avijit Gupta of the Department of Geography, NUS, to begin geophysical sampling has been sought from both MINDEF and PUB. Mr Ong said that PUB had no objections but requested that no charges be fired during the sampling and that A/P Gupta liaise with PUB for samples which are already available to save cost, time and effort.

Proposed golf course at Lower Peirce Reservoir.

3 Mr Ong agreed to the terms of reference and parameters set out in NPARKS' minute to PUB. The Committee concurred to engage Mr Wong Yew Kwan and Mr D.H. Murphy as consultants for PUB's survey of the proposed golf course area. Mr Ong suggested engaging the Singapore Zoological Gardens as a third consultant. After discussion, it was felt that Mrs Yang or Dr Peter Ng of the NUS should also be considered as they have carried out recent studies in the Nature Reserves thereby making them more appropriate than the Singapore Zoological Gardens. Dr

PUB

Stakeholder Engagements

A letter was sent by Dr Wee Yeow Chin, then Chairman of Malayan Nature Society, Singapore Branch, to Mr S. Dhanabalan, then-Minister for National Development. The letter highlighted the land of concern being part of the Nature Reserve, and also expressed concerns of fragmenting the forest, reducing foraging range and gene pool. It also expressed concerns on possibly affecting water quality and the nearby Nee Soon freshwater swamp.

MALAYAN NATURE SOCIETY
(Singapore Branch)

c/o Department of Botany,
National University of Singapore,
Lower Kent Ridge Road,
Singapore 0511.

772-2284
Tel: 7756666 ext: 2495

Date: 31 July 1991

31 July 1991

Mr S Dhanabalan
Minister
Ministry of National Development
7 Maxwell Road, 5th Storey
National Development Building Annex B
Singapore 0105

Dear Mr Dhanabalan,
We have been recently informed by the Public Utilities Board that two new golf courses are being planned in the Central Water Catchment area. One of these is an 18 hole course to be located to the south side of the access road from Old Upper Thompson Road to the Upper Peirce Reservoir Park. As this area is already gazetted as a nature reserve and is being managed as a National Park we are most concerned on the likely impact it will have on the forests and wildlife in the area and on the water quality of the reservoir.

As shown on the attached plan the golf course area extends to an area of approximately 123.8 hectares. Since the existing forested areas in this part of the reserve have already been diminished by the formation of two reservoirs and the provision of four other golf courses which amount to a total of 379 + 1200ha only 42% of the total 2714 hectares of the total reserve area remains.

We understand an environmental impact assessment is being proposed for this golf course development and we trust the following factors will be taken into account in this study.

- (a) The affected area is strategically located in the centre of the catchment and if developed as a golf course will effectively divide the entire catchment into two pockets due to the location of the existing Upper and Lower Peirce Reservoirs. This division will reduce the local migration routes for forest wildlife and adversely influence the long term aim of the secondary forest maturing to a primary status. In addition the removal of forest will reduce the population of wildlife in the catchment as a whole for the following reasons.
- (i) The animals displaced by the new golf course will not be able to find a new permanent home as adjoining areas are already ecologically full. In other words the present animal population in the subject area will be lost. These reductions will lessen the chance of regeneration due to an elimination in the gene pool and severely curtail the existing foraging range of many animal species.

- (ii) The design of golf course is one of monoculture comprising predominately short grass, isolated trees and a lack of connecting shrub vegetation. Forest species presently occupying this area will not be able to survive in this new environment.
- Golf courses also incorporate many aggressive exotic plant species and are subjected to insecticides and weed killer controls which could adversely affect the adjoining mature forests and water quality. The latter requirement is of utmost importance in the water catchment.
- (iii) The extensive disturbances caused during the formation of the course will be destructive both to the majority of existing trees and to ground level vegetation.
- (iv) The excavation and levelling works are highly likely to cause considerable disruption and alterations to the existing natural drainage and water collection arrangements resulting in possible short term siltation problems and longer term erosion effects. New drainage arrangements in this area could also have an adverse longer term effect on the freshwater marsh to the north side of the road due to the increased run off from natural streams being connected to new drainage laid under and through the golf course area. Water quality may again suffer from these influences.
- (v) The value of the existing forest in purifying water which eventually drains into the reservoirs will be diminished necessitating increased treatment costs.
- (b) Due to the close proximity of the Nee Soon freshwater forest and vulnerability of animal species known to exist there which include a number of endemics to Singapore such a development could be catastrophic to their continued survival. As mentioned in the Master Plan many of the animals and freshwater life found in this area are not known to exist anywhere else in Singapore. In order to safeguard their survival a buffer zone is required to this area which includes the forest occupying the proposed golf course area.
- (c) The Central catchment is the only remaining forest area in Singapore that can accommodate many species of animals due to its larger size relative to other areas. This forest has already been reduced over the years with reservoirs, golf courses and military areas as well as the zoo. Its present size is no longer able to support the larger mammals and forest birds such as the hornbills, trogons and broadbills, and many species of barbets, woodpeckers and bulbuls. Over the last 40 years at least 41 species of birds mainly dependent on the forest have become extinct and the numbers left are reaching dangerously low numbers. Several species of animals are also known to have become extinct in this period and the status of many others is suspected to be reduced down to endangered levels.

Due to the above we are of the opinion that unless the last remaining secondary forests in this area are left undisturbed and totally protected future extinctions of resident species will occur at an ever accelerating rate.

This forest has been maturing for more than 80 years and its proposed removal would be a regrettable loss which Singapore can afford due to the limited extent of forest cover remaining.

We will be pleased to discuss this matter with you in more detail if required and confirm that a more detailed survey is being conducted in the area of the proposed golf course by our members at the present time.

Yours sincerely,



Chairman of Malayan Nature Society, Singapore Branch
DR WEE YEOW CHIN
Department of Botany
National University of Singapore
Lower Kent Ridge Road
Singapore 0511

2

Letter from Dr Wee Yeow Chin to Mr S. Dhanabalan, then-Minister for National Development, dated 31 July 1991 (Source: Nature Society Singapore)

On 8 January 1992, MNSSB received a reply from MND stating that the decision to build a golf course will be determined after the results from the environmental impact studies, commissioned by PUB, is ready.



MINISTER FOR NATIONAL DEVELOPMENT
SINGAPORE

TEL: 3226200
CFP: 671190
FAX: 5346576

ND 265/22-36 Vol 4

8 January 1992

Dr Wee Yeow Chin
Chairman, Malayan Nature Society
c/o Department of Botany
National University of Singapore
Lower Kent Ridge Road
Singapore 0511

Dear Dr Wee

PROPOSED GOLF COURSE IN NATURE RESERVE

I refer to your letter of 31 July 91.

2 I agree that the central catchment area is an important natural asset to our environment. However, for a small country like Singapore, we should try to make full use of the catchment area for appropriate activities without disturbing too much the eco-system there. The National Parks Board has commissioned a study of the physical and biological features of the Nature Reserves to enable the formulation of a land use Master Plan. Appropriate uses will be incorporated into the Master Plan which will demarcate areas that can be put to alternative compatible uses.

3 The PUB is also carrying out an Environmental Impact Study (EIS) to assess the effects of its proposed golf course on the forest. The terms of reference for the EIS are at Annex 1. The study will address the points raised in your letter. I have deferred consideration of the proposed golf course until the results of the EIS are known around September 1992.

4 On your concern that insecticides used in golf courses could destroy the mature forests and degrade the water quality in the catchment area, PUB has explained that the chemicals used in the 4 existing golf courses in the catchment area are those approved specifically for the purpose by the Ministry of the Environment and the Ministry of Health. The chemicals are biodegradable.

Yours sincerely

S DHANABALAN
MINISTER FOR NATIONAL DEVELOPMENT

ENC

Letter from Mr S. Dhanabalan to Dr Wee Yeow Chin, dated 8 January 1992 (Source: Nature Society Singapore)

Nature Society (Singapore) (NSS)¹ also announced the plans to conduct a separate environmental impact studies to determine how the forest and surrounding catchment would be affected by the development of the golf course. It was reiterated that “we are not against building golf courses, but the nature reserves represent the last remaining tract of our natural heritage, which is home to hundreds of plant and animal species.”

HOME

ST 21/3/92

Environment studies on 'catchment' golf course

Govt and nature body looking separately at impact on Lower Peirce

The Straits Times, 21 March 1992 (Source: NewspaperSG)

¹ On xxx 1991, the society split from Malayan Nature Society to form Nature Society (Singapore)

A Petition by 17,000

A petition was started by NSS members, out of impatience waiting for a decision. Apart from publishing the launch of the petition through the quarterly Nature News, volunteers also went around parks, libraries and malls to collect signatures.

Nature News Page 6

nature's master of cryptic colouration - as she perfectly merged into the dead leaves that surrounded the nest.

Care was taken not to allow people too close to the bird, but some photographers in their eagerness to get a "close-up", were soon reaching the point where their cameras became more important than the welfare of the bird. Even though it looked as if it had its eye closed, the bird was very much aware of all those eager faces peering at it, and must have been stressed.

From here, it was down the fence track and back to where we came from. The end to what for some was a second preview of the Sungai Buloh Project and for others, their first insight into the sights and sounds and other wildlife interests of what the reserve has to offer to visitors in future.

Thanks to those who helped to make this trip a success.

Jonathan Smith

SPECIAL PROJECTS

PROPOSED CONSTRUCTION OF A GOLF COURSE AT LOWER PEIRCE

Members may have read in the local press that the Public Utilities Board (PUB) is planning to clear 130 ha of nearly 100 year old forest at Lower Peirce Reservoir to build an 18 hole golf course. This forested area is part of a larger central water catchment for four reservoirs: MacRitchie, Lower Peirce, Upper Peirce and Seletar. The catchment forest, managed by the National Parks Board as a nature reserve and by the PUB as a water catchment, is protected under the National Parks Act. The area has been rated five-star in our 'Master Plan for the Conservation of Nature in Singapore'.

The clearing of the 130 ha forest will involve chopping down thousands of old trees and the destruction of more than 100 species of plants, a number of which can be considered rare, if not endangered. This local deforestation will also contribute to the destruction of the associated animal life, most of which will not be able to find alternative homes in the adjoining forest. Such animals include small mammals, birds, amphibians, reptiles and thousands of species of insects. What this means is that the many native flora and fauna will be replaced with more aggressive, introduced plants and animals.

The removal of the forest will also result in a proportionate diminishing of the filtering and ion-exchange effect of the surround forest. This will mean a decrease (however slight) in the water quality of the reservoir and thus, in all probability, an increase in the water treatment costs to bring the quality of the water up to the original standard. Again, the siting of a golf course within the catchment area will mean excessive pollution to our domestic water supply. This is because a well managed golf course needs regular applications of fertilisers, weedicides, insecticides, fungicides, etc. These toxic chemicals will eventually leach into the surrounding water - the water of the Lower Peirce Reservoir.

The Nature Society (Singapore) is not against building courses. What we are strongly against is the clearing of nearly 100 year old forest "protected" under the National Parks Act for such purposes. These forests were set aside as nature reserves and should continue to remain so for the enjoyment of present and future generations of Singaporeans.

With this issue of your "Nature News" the Society is initiating a signature campaign. We urge members to make use of the enclosed form to collect as many signatures as possible from friends and colleagues. Make copies of the form if necessary. Through this campaign we hope to urge the Public Utilities Board and

Nature News Page 7

the relevant authorities to re-examine this proposal and re-locate the proposed golf course to a non-forested area.

Guide to a "Greener" Lifestyle

We are planning a directory of guidelines of how to lead a "green" life. This will eventually be published and distributed to the public in an effort to encourage people to lead a "greener" lifestyle. The directory would be divided into a number of categories, covering what to do and not to do:

- a) at home,
- b) when out shopping,
- c) when visiting our parks open spaces,
- d) in the office,
- e) during field trips,
- f) when travelling overseas,
- g) etc.

We need feedbacks from members. We would appreciate receiving ideas on how we can lead a greener life for the different categories. Members can phone or fax in their ideas (Phone/Fax: 253-2179) or pass them to any Committee members.

Wee Yow Chin

Jalan Hijau Jumble Sale and Green Fingers Crafts Exhibition

Jalan Hijau is planning a one-day Jumble Sale to coincide with the World Environment Day on June 6. It will be held at the Cairnhill Community Centre. The Ministry of the Environment will be co-organising this event.

Jalan Hijau hopes to instill an appreciation of second-hand items through the collection and sale of "treasures": household goods, clothing, nursery equipment, toys, books, records and such.

All this is in line with its policy of recycling, reusing, and reducing. Each time we purchase a new product, we are digging deeper into the

earth's limited resources of fossil fuel, minerals, plant life and animal by-products. By giving "oldies" a second breath of life, we are actually saving the earth.

Now is the chance to clear your household of things that are considered still functional or ornamental but left aside because you don't have the heart to throw them away. Jalan Hijau will accept giveaways that are clean and in working conditions. The team members will consider larger items like furniture and furnishings so long as they are serviceable and easy to transport.

Start sorting your possessions and reserve things for the Jumble Sale in a cardboard box marked 'Jalan Hijau'. Call the Society's office to arrange for collection. The final day for pick-up is Sunday, 24 May 92.

Another attraction of the Sale is a Green Fingers Exhibition. As part of raising consciousness for the environment, Jalan Hijau is inviting a group of talented people who will come up with ideas and creations that are environmentally friendly. Exhibits to be displayed are table settings, vegetable arrangements, garden and party decorations, gift wraps, food packaging, etc.

The funds raised will be for Jalan Hijau's efforts to educate the public and provide information on ways to follow a "greener" lifestyle and care for the earth. The group's major project for this year is the Green Directory of businesses and services that are considered environmentally friendly. The directory will list names and addresses that people can turn to for disposal of materials or to obtain green products and services which help to protect the environment.

You can save the earth by doing one little thing at a time. Participate in the Jalan Hijau Jumble Sale!!!

Cynthia Wee-Hoer

Nature News, April - June 1992 (Source: Nature Society Singapore)

Proposed Construction of a Golf Course at Lower Peirce
7 Avonmore Lane #11-112 Singapore 1194

The Public Utilities Board is planning to clear 130ha of nearly 100 years old forests at Lower Peirce Reservoir to develop an 18 hole golf course.

While the Nature Society (Singapore) is not against the development of golf courses, we are strongly against the clearing of forests "protected" under the National Parks Act for such purposes. These forests were set aside as nature reserves and should continue to remain so for the enjoyment of present and future generations of Singaporeans.

We, the undersigned, strongly urge the Public Utilities Board and the relevant authorities to re-examine this proposal and ensure that the proposed golf course is re-located to a non-forested area.

Name	IC/Passport No	Profession	Signature
1. SIMON CHEN		LEGAL CONSULTANT	SC
2. Desmond Koh		SYSTEM ANALYST	KL
3. Angela		HOUSEWIFE	GA
4. Shirley Gung		STO	WG
5. Angeline Ng		Sale Co-ordinator	AN
6. Jessie Loo		Admin Clerk	SL
7. Smancla Loo		Sales Co-ordinator	SL
8. Hu JASMINE		Marketing Exec.	JH
9. HONG HELEENK		Legal Assistant	HL
10. Poo Soo Jen		STUDENT	PS
11. GAY HUI BEE		STUDENT	GB
12. RICHARD HO		CLERK	RH
13. ANTHONY LEE		Lawyer	AL
14. CONNOR TAN		"	CT
15. Lee Kim Shin		"	KS
16. CHINE WANG		"	CW
17. Chin Yee Hing		"	CH

Signature of Contributor

Petition signed by 17,000 members of public, dated 1992 (Source: Nature Society Singapore)²

² Identification numbers are blanked out for PDPA reasons.

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Cynthia Wee-Hoer

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We, the undersigned, strongly urge the Public Utilities Board and the relevant authorities to re-examine this proposal and ensure that the proposed golf course is re-located to a non-forested area.

Name	IC/Passport No	Profession	Signature
1. SIMON NISDAH		LEGAL CONSULTANT	[Signature]
2. DESHOND KELL		SYSTEM MANAGER	[Signature]
3. [Redacted]		HUSBAND	[Signature]
4. Shirley Gomp		STO	[Signature]
5. Angelina Ng		Sale Co-ordinator	[Signature]
6. Jessie Loo		Admin Clerk	[Signature]
7. Amanda Loo		Sales Co-ordinator	[Signature]
8. Hu JPSHINE		Marketing Exec.	[Signature]
9. HONG HENG LEONG		Legal Assistant	[Signature]
10. Foo Soo Jial		STUDENT	[Signature]
11. GAY HU BEE		STUDENT	[Signature]
12. RICHARD HO		CLERK	[Signature]
13. [Redacted]		Lawyer	[Signature]
14. [Redacted]		"	[Signature]
15. Lee Kim Shin		"	[Signature]
16. [Redacted]		"	[Signature]
17. [Redacted]		"	[Signature]

Petition signed by 17,000 members of public, dated 1992 (Source: Nature Society Singapore)²

² Identification numbers are blanked out for PDPA reasons.

Apart from physically collecting signatures from members of public, various communities also sent their signatures via snail mail. Appreciation and encouragement were also received through these letters.

Ms Christine Goh
51 Chee Hoon Avenue
Singapore 1129
20 June 1992

Dr Ho Hua Chew
Conservation Committee
The Nature Society (Singapore)

Dear Dr Ho,

PROPOSED CONSTRUCTION OF GOLF COURSE AT LOWER PIERCE

I enclose 41 signatures supporting the appeal to the relevant authorities to relocate the proposed golf course.

Personally, I find it quite amazing that it is PUB - of all government bodies - that is planning to clear part of our water catchment area despite the negative effects on our rainfall and possible pollution of our water supply. Equally amazing is the National Parks Board's lack of protest to the destruction of almost 10% of our "protected" central water catchment area for something as non-essential as a golf course in land-scarce Singapore.

Being a public course, there is no need for it to be a championship course. The golf course could be more cheaply built on alternative sites like Marina South or Marina East. Furthermore, there will be a public 9 hole course at Seletar next year. To clear 130 ha of nearly 100 year old forests just so that the public can enjoy an 18 hole course trivialises the importance of our natural heritage!

Sincerely,


Christine Goh



THE LAW SOCIETY OF SINGAPORE

1 Colombo Court #08-29/30 Singapore 0617
Tel: 3383165 Fax: 3397358

Our Ref: LS/4/92/MISC/C/pc Your Ref:

26 June 1992


The Nature Society (Singapore)
7 Asimont Lane #B1-01
Asimont Garden (off Barker Road)
Singapore 1130

Dear Sirs

PROPOSED CONSTRUCTION OF A GOLF COURSE AT LOWER PEIRCE

I refer to the above matter and enclose herewith the signed Petition, for your necessary attention.

Yours faithfully


YASHO DHORA SINGAM (MS)
EXECUTIVE DIRECTOR

Enc.



May 30, 1992

via Fax & Mail

Mr Robert S. Gibraltar
Managing Director
Backer Spielvogel Bates (S) Pte Ltd
100 Beach Road #30-06, Shaw Towers
Singapore 0718

Dear Robert

BSB - Community Activities

Please find attached the signed petition to Public Utilities Board and the relevant authorities to re-examine the proposal to clear 130ha of nearly 100 years old forests at Lower Peirce Reservoir for the development of an 18 hole golf course.

We are glad to contribute and do our bit for the Care-for-Nature Program. We hope that you are successful with your petition.

Regards,


Lee Cheok Yew
Chief Executive Officer

Enclosure.

Apart from physically collecting signatures from members of public, various communities also sent their signatures via snail mail. Appreciation and encouragement were also received through these letters.

Earth Shield
Raffles Junior College
53, Mount Sinai Rd,
Singapore 1027.
21 May 1992.

President
The Nature Society (Singapore)
7, Asimont Lane, #B1-01,
Asimont Garden,
Singapore 1130.

Dear Sir/Madam,

RE: Proposed Construction of a Golf Course at Lower Pierce

The members of Earth Shield, the environmental awareness club of Raffles Junior College, have collected a total of approximately 350 signatures in support of the re-examination of the proposed construction of a golf course at Lower Pierce.

Though the Public Utilities Board has already completed preliminary works on the proposed site, we hope that these signatures would provide negative feedback for the "environmentally unfriendly" proposal, and thus relocate the golf course to a non-forested area.

Thank you.

Yours Faithfully,
Chen Dianzheng
Chen Dianzheng
President
Earth Shield



BEDOK TOWN MILITARY BAND

c/o BEDOK TOWN SECONDARY SCHOOL
232, BEDOK NORTH ST. 3 SINGAPORE 1646. TEL: 4451163

To: NATURE SOCIETY (7 ASIMONT LANE # 01-04 S. 1130).
FAX: 253 2179
From: LAWRENCE TAN
FAX: 455 7745 tel: T20 8624

Dear Sir/Mdm.

SIGNATURE PETITION TO PRESERVE LOWER PEIRCE RES.

Please find 4 copies of signatures
boxed for your appeal.

My students and I love NATURE
and sincerely hope our voices can be
heard through your society.

Please persevere to protect NATURE.
We support your mission.

LAWRENCE TAN
BAND MASTER,
18th JUN 92.

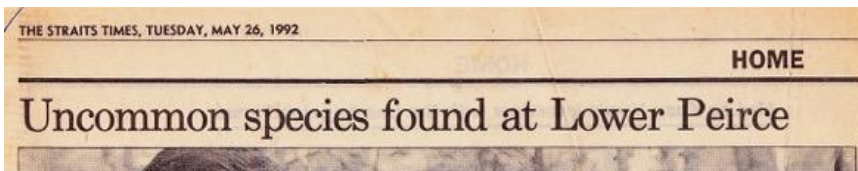
9. Hi Guys,
10. Hope this did not come too late to be put
11. to some good use. We don't know if you would
12. have wanted some, but here's a little feedback from us
13. canvassers. The majority of those approached had doubts
14. that a petition such as this would work but most signed
15. anyway because they believe in the cause. Ourselves, we
16. hope this works but are not sure also. Unfortunately as
17. you can see we succeeded in obtaining only a little
32. over 680 signatures, a mere fraction of the population here at
33. Anderson J.C. but this is because we believe in the personal
34. approach to the spread of the message and almost every signature here
35. is obtained such slow but qualitative. Acknowledgements are in order
36. here and it is time to name the people who helped to make this
37. possible. They are: Judy, Joyce, Wendy, David, Eugene, Mani and Xiangiang.
38. Students and good friends. P.E. teachers: Mr Ho Kwaiyong, Mr Koh Theng Lin and Mr Yong
39. Cheng Hock. Our Principal Mrs Mok has her permission to canvass, our teachers support and
40. those outside the college Mrs Love Kim Suan, Mrs Mary Lowe and Mrs Poon Wong.
Yours faithfully,
The Pioneer Batch, Green Grounds A.J.C.

Environmental Impact Studies by PUB and NSS

As NSS was surveying the area, uncommon species such as the banded wolf snake (thought to be extinct), one of the three remaining pairs of Grey-Headed Fish Eagle, Nibong Palm and Black Lily and 100-year old trees were recorded. It was reiterated again that “NSS’ stand is not against building golf courses but against building one in Singapore’s last remaining natural heritage.” It was also reported in The Straits Times on 10 May 1992 that while the survey for biodiversity was going on, a petition was also started.



The Straits Times, 10 May 1992 (Source: NewspaperSG)



The Straits Times, 26 May 1992 (Source: NewspaperSG)

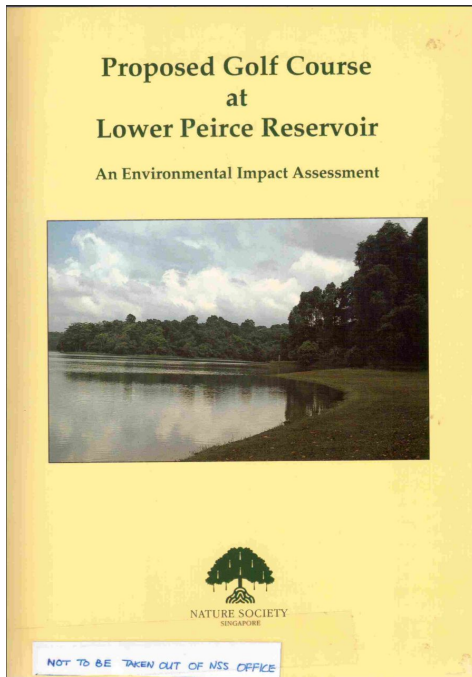


The Straits Times, 26 May 1992 (Source: NewspaperSG)

On 7 June 1992, it was reported in The Straits Times that Mr S. Dhanabalan said that “if it shows great ecological damage will be done, then we will not approve it.” At the same time, he also “urged nature-lovers to be selective in the causes they fought for.”



The Straits Times, 7 June 1992 (Source: NewspaperSG)



Proposed Golf Course at Lower Peirce Reservoir, An Environmental Impact Assessment (Source: Nature Society Singapore)

Editor and coordinator:
Wee Yeow Chin

With contributions from:
Subaraj Rajathurai)
Ho Hua Chew)
Lim Kim Keang) Survey of vertebrate fauna
Lim Kim Seng)
Joseph K H Koh, spiders
Steven Neo Say Hian, butterflies
Peter K L Ng, crustaceans and fishes
Kelvin P K Lim, amphibians and reptiles
Subaraj Rajathurai & Lim Kim Seng, birds
Subaraj Rajathurai, mammals
Y C Wee, H T W Tan & I M Turner, plants
Yang Chang Man & Lua Hui Kheng, bugs, beetles and molluscs

And assistance from:
Clive Briffett, EIA methodology and reporting
Richard Hale, editorial
Lye Lin Heng, legal
Ilsa Sharp, editorial
Sutari bin Supari, art work

Many others also helped in the compilation of this report: in going through the drafts and offering constructive criticism, in providing technical assistance, in field work etc. Thanks are also due to those who showed support (active as well as passive) for the cause. Last but not least, we thank our patron Prof Tommy Koh for the foreword.

As one of the most extensive study done by NSS, the contributions from volunteers were extensive (Source: Nature Society Singapore)

Proposed Golf Course at Lower Peirce Reservoir, An Environmental Impact Assessment

In July 1992, the EIA was published. It was recorded that about 40,000 trees across 82 species would be lost to the golf course. Many trees are over 80 years old and losing this forest would result in a loss of 6% of mature forest in Singapore.

According to the EIA, 163 species of plants and 485 species of animals, with at least 44 species were listed as endangered, were recorded. Endangered species included the Forest Halfbeak, Forest Walking Catfish, Forest Betta, Leaf Fish, Little Green Pigeon, Black-headed Bulbul, Blue-eared Kingfisher, White-rumped Sharma, Red-crowned Barbet, Grey-headed Fish Eagle, Black-eyed Litter Frog, Masked Rough-sided Frog, Dog-toothed Cat Snake, Jasper's Cat Snake, Banded Wolf Snake, Malayan Flat-shelled Terrapin, Spiny Hill Terrapin, Flying Lemur, Malayan Pangolin, Lesser Mousedeer, Banded Leaf-Monkey and others.

Since the forest also served as a buffer to protect Nee Soon freshwater swamp forest, loss of this habitat was also expected to affect the the swamp forest, which today we know is an extremely fragile habitat.

The EIA also challenged the need to de-gazette part of the Nature Reserve for a golf course and highlighted the threat to loss of water purification function that was performed by the forest, thus affecting water quality of the water in the catchment.

It also further highlighted that the loss of this habitat would further threaten the holding capacity of the Central Catchment Nature Reserve which was neither large nor mature enough and then, it was already unable to support a full ecosystem and larger mammals. Further destruction would result in an accelerated extinction rate.

It was cautioned the potential chemical pollution that could be caused by the use of fertilisers and insecticides to maintain the golf course, thereby resulting in higher cost of water treatment.

Outcome

On 3 August 1992, The Straits Times reported that Mr S. Dhanabalan said that “his Chief Planner was unlikely to approve the golf course if studies showed that it would cause extensive damage to the nature reserve.” The then-Deputy Prime Minister Mr Lee Hsien Loong, who was also the Minister for Trade and Industry, in charge of PUB, acknowledged that “there were alternative sites for golf courses” and that “there is no urgency”, when asked when the PUB would submit a proposal to the authorities.



Lower Peirce Reservoir Today

Today, Lower Peirce Reservoir remains as a forest. A 900 metre wooden boardwalk was also built along the reservoir into the forest. It is also now home to the critically endangered Raffles-banded Langur, which has less than 60 individuals present in Singapore.



Lower Peirce Reservoir in the 2010 map of Singapore (Source: <https://libmaps.nus.edu.sg/>)