

出國報告（出國類別：國際會議）

2012 都市森林公園永續發展國際會議 出國報告書

服務機關：行政院環境保護署

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派赴國家：馬來西亞

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壹、前言

「2012 都市森林公園永續發展」國際會議，已於 10 月 1 日至 10 月 6 日，在馬來西亞東部擁有豐富熱帶雨林和國家公園資源之沙勞越市一連舉行 6 天。共有來自巴西、土耳其、英國、丹麥、南非、馬來西亞等多國之學者專家、業界和政府等代表與會，並在大會上發表專題演說與海報展示，使與會人員了解各國對相關都市森林永續問題所做之努力與貢獻，並有更進一步的體會與認識。

本次會議背景是公園管理、永續發展之都市森林和公園，永續公園可謂是自給自足的資源管理，以及提供生態和社會經濟的功能，在世界不同地區內，不同城市有不同的公園管理經驗。本次會議對永續發展，將彼此提供合作機會和分享都市森林和公園開發和管理訊息，有效的溝通對保護自然和人類活動，是一項重要的工具，同時也能確保管理人員和使用者之間的責任共享。

依據世界各項研究報告指出，都市森林公園猶如一個都會區的肺，具有休閒、美觀、綠化和心靈舒壓、提升心理、社會健康和幸福感等功能，伴隨者都市人口快速增加以及都市居住環境越來越狹小擁擠，都市森林公園就成爲一個現代城市發展中不可忽視的指標性建設，毫無疑問的如何有效維護管理和永續經營都市森林公園，是一項非常重要的課題。

因此對於現在的都市森林、公園永續管理，如何建立一個多功能和永續經營之都市森林公園管理計畫則是必需的。本次會議將由各都市森林公園專業領域之學者專家、產業先進和政府代表，以更寬廣和深思熟慮的態度，提出他們常期對於都市森林公園管理研究之見解和政策說明。此次大會論壇也藉由各國對都市森林公園知識的推進和技術的發展，分享和散發相關多用途和都市森林和公園的永續管理計畫，進而達到相互交換信息及建立合作平台和保護都市森林公園之永續發展之目的。

本會議探討內容主題包括：

1. 都市森林和公園永續資源管理的生態功能。
2. 都市森林和公園的社會經濟面。
3. 綠色空間永續發展之規劃，設計和管理。
4. 支持環境教育之都市森林和公園。

會議目標為：

- 1.分享溝通永續發展訊息之最佳途徑，是經由都市森林和公園。
- 2.回顧都市森林和公園開發的進度和狀態。
- 3.交換信息，想法和了解都市森林和公園管理的永續發展。
- 4.建立來自不同國家參與者之間可能的合作平台。

馬來西亞藉由當地豐富的天然熱帶雨林條件，長期有系統的保護、開發、管理、規劃，最重要的是能結合教育與國際觀光理念，進而達到保護森林、永續經營之目的，同時也能兼顧當地經濟發展，確實頗有遠見，值得我們學習。

本大會會議除了有助於了解與會各國對該國都市森林公園議題之研究技術發展和政策執行動向外，未來亦可作為國內都市森林公園相關議題政策制定或執行之參考。



貳、議程

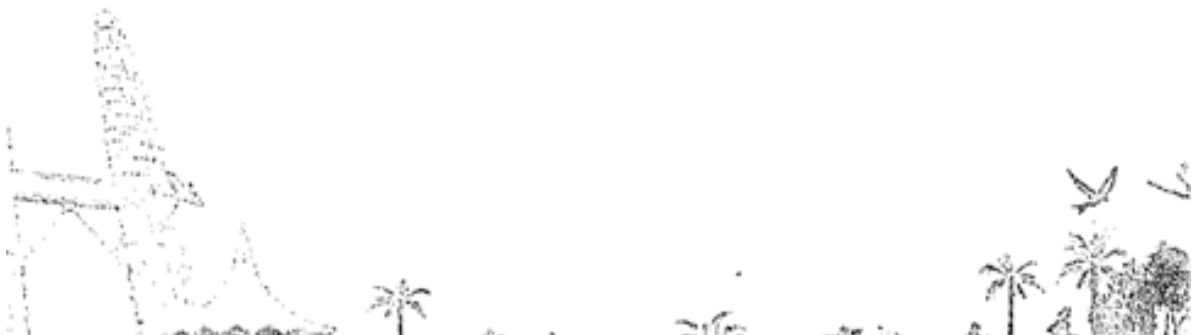
PROGRAMME

DAY 1 , TUESDAY, 2nd OCTOBER 2012 (Optional Pre-conference Tour)
Venue : Sematan and Gunung Gading National Park

- 8.00 am Assemble at Kuching Hilton Hotel lobby
- 8.30 am Depart from hotel to Kg. Pueh Longhouse, Sematan
- 10.30 am Activities at Kg. Pueh Longhouse, Sematan
- 12.30 pm Lunch at Kg. Pueh Longhouse
- 2.00 pm Depart to Gunung Gading National Park
- 2.20 pm Sight-seeing and picnic at Gunung Gading National Park
- 4.00 pm Depart to Hilton Hotel

DAY 2, WEDNESDAY, 3rd OCTOBER 2012
Venue: Kuching Hilton Hotel

- 8.00 am Registration of conference
- 9.30 am Opening Ceremony
 - Welcome Address by YBhg. Dato' Dr. Abd. Latif Mohmod**
Director General of Forest Research Institute Malaysia (FRIM)
 - Opening Address by Y. B. Dato Sri Douglas Uggah Embas**
Minister of Natural Resources and Environment Malaysia (NRE)
- 10.10 am Tea break



KEYNOTE SESSION

Chair: Dr Rita Manurong (Sarawak Biodiversity Centre)

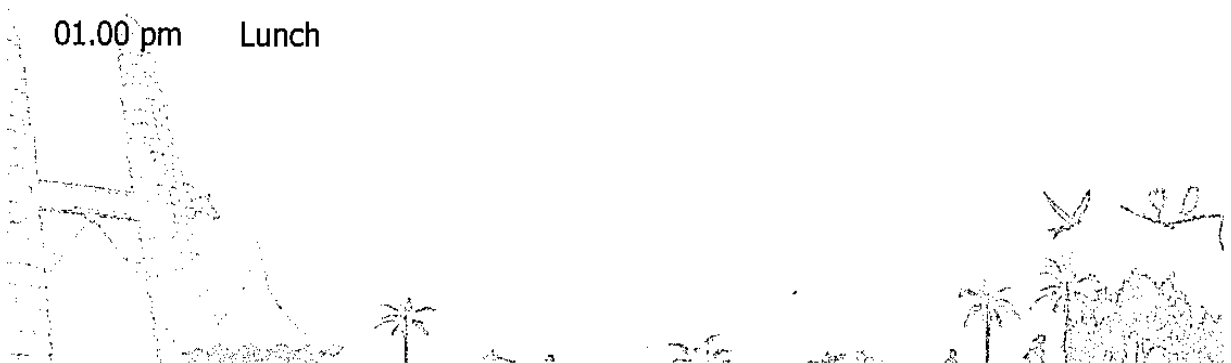
- 10.30 am **Keynote 1:** Community and Environment
YBhg. Datuk Haji Abang Abdul Wahap Haji Abang Julai,
Mayor, Commission of the City of Kuching North (DBKU)
- 11.00 am **Keynote 2:** The Decade of Education for Sustainable Development:
The Role of Urban Forest and Parks
Prof. CP Loubser,
University of South Africa (UNISA)

SESSION 1

Ecological Functions and Sustainable Resource Management of Urban Forests and Parks

Chair: Mr. Oswald Braken Tisen (SFC)

- 11.30 am Eradication of An Invasive Palm Tree in An Urban Forest
(Sao Paulo City, Brazil)
Prof. Vania Regina Pivello
- 11.45 am Management and Inventory of Old Trees in Urban Forests of
Istanbul
Dr. Serhun Saglam
- 12.00 pm Bukit Lima Forest Park: The Small Urban Forest Park in the
Big City
Nickson Joseph Robi
- 12.15 pm Green Lung of Limbang: The Bukit Sembiling and Bukit Hitam
Nature Reserves
Tracy Chendan
- 12.30 pm Discussion and Q&A session
- 01.00 pm Lunch



SESSION 2

Socio-economic Aspects of Urban Forests and Park

Chair: Tuan Haji Mohamed Khaidir Bin Abang (DBKU)

- 02.30 pm Nene Park Trust
James McCulloch
- 02.45 pm Experience Characteristics of Users' Preferences towards Selected Malaysian Urban Parks
Dr. Nor Akmar Abdul Aziz
- 03.00 pm The Effect of Environmental Cues and Social Cues on Fear of Crime in Urban Parks: The Case of Kuala Lumpur, Malaysia
M. Sreetheran
- 03.15 pm Estimation of Willingness to Pay for Preserving Natural Environment: A Case Study of FRIM Forest Park, Kepong, Selangor
Huda Farhana Mohd Muslim
- 03.30 pm Discussion and Q&A session
- 04.00 pm Poster session
- 05.00 pm Refreshments

DAY 3, THURSDAY, 4th OCTOBER 2012

Venue: Hilton Hotel & Samajaya Nature Reserve

SESSION 3

Planning, Design and Management for Sustainable Green Space

Chair : Dr Ismail Harun (FRIM)

- 08.00 am Design Communication Impacts on Management Strategy for Sustainability of Urban Forest: An Experience from Urban Forest Development, Johor Bahru
Mohd Hisyam Rasidi
- 08.15 am The 'Green Lung' for Kuching City Dwellers
Nor Emel Farnida Jaddil
- 08.30 am Some Challenges in Urban Tree Management in Malaysia
Ahmad Azaruddin Mohd Noor

- 08.45 am Benefits of Networking
M. Sreetheran & James McCulloch
- 9.15 am International Federation of Parks and Recreation Administration (IFPRA) Certification Programme
Dr. Noor Azlin Yahya
- 9.45 am Discussion and Q&A session
- 10.00 am Tea break

SESSION 4

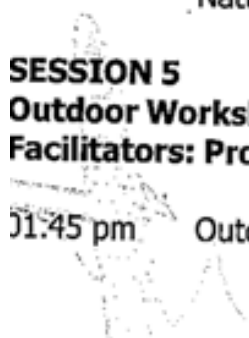
Urban Forests and Parks to Support Environmental Education **Chair: Mr. Ahmad Nazarudin Mohd Roseli (FRIM)**

- 10.30 am Free-choice Learning as a Tool to Carry the Sustainability Message in Urban Forests and Parks
Prof. JM Dreyer
- 10.45 am Urban Green Space for Nature Education from the Perspective of School Students
Nik Azyyati Abd Kadir
- 11.00 am Creating an Urban Forest Environment: Forest Tree Planting Programme in Schools
Sharmillah Saleh
- 11.15 am Discussion and Q&A session
- 11.30 am Free and easy
- 12.00 pm Lunch
- 01.00 pm Assemble at Kuching Hilton Hotel lobby and depart to Samajaya Nature Reserve

SESSION 5

Outdoor Workshop (at Samajaya Nature Reserve) **Facilitators: Prof. CP Loubser & Prof. JM Dreyer (UNISA)**

- 11.45 pm Outdoor workshop



04.00 pm Closing Ceremony

Conclusion and resolution by Dr Noor Azlin Yahya
Chairman of Urban Forestry Conference 2012

Closing Speech by YBhg. Datu Haji Ali Yusop
Managing Director/CEO of Sarawak Forestry Corporation (SFC)

04.40 pm Media conference/Photography session/ Visit to museum

05.00 pm Refreshments

06.00 pm Depart to hotel

DAY 4, FRIDAY, 5th OCTOBER 2012 (Optional Post-tour)

Venue: Bako National Park, Sarawak

07.00 am Registration of tour/ assemble at Hilton Hotel lobby

08.00 am Depart from hotel to Bako National Park

09.00 am Tour around Bako National Park

12.00 pm Lunch and continue tour at Bako National Park

05.00 pm Depart to hotel

DAY 5, SATURDAY, 6th OCTOBER 2012 (Optional Post-tour)

Venue: Serikin & Satok Market

07.30 am Assemble at Hilton Hotel lobby

08.00 am Depart from hotel to Serikin

09.00 am Tour around Serikin

01.00 pm Lunch (not provided by organiser)

03:00 pm Shopping at Satok Market

05.00 pm Depart to hotel and good bye!!!



參、會議內容

本次會議所在地位於東馬來西亞之沙勞越市，該城市地區擁有多座世界有名之國家森林公園及保護區，其熱帶雨林生態系相當豐富且多樣化，全世界最大的熱帶雨林雖是在亞馬遜熱帶雨林，但世界上唯一的原始雨林則是在馬來西亞，該地區之熱帶雨林早在 1 億 3 千萬年前之白堊紀時期就已經形成了。

馬來西亞大部分的沿海地區都是平原，中部則是布滿茂密熱帶雨林的高原，最高山峰是位於沙巴州的京那巴魯山。由於靠近赤道，氣候相當潮濕炎熱。終年炎熱多雨，每年降雨量超過 2000 毫米，在陽光充分，雨量多之下，造成樹木生長密集且長綠。其中常綠喬木最高大，根呈多板狀，為最高層樹相。此外藤本植物和氣生根等植物，品種也相當豐富。在擁有如此豐富天然的森林條件下，該城市確實是頗為適合來討論此國際議題「都市森林國際會議-森林和公園永續發展之訊息傳播」的地點。

本次大會除了舉行專題研究報告外，亦實地安排參訪三馬丹(Sematan Kg.Pueh)長屋村，了解馬來西亞原始部落之文化特色；參觀加丁山(Gunung Gading)國家公園，加丁山在 1994 年中才對外開放，該區是世界最大萊佛士花的保護區，目前的重點依然是藉由當局採取一系列的措施，以保護該區的野生動植物；參觀巴哥國家公園之自然生態。1957 年被列為國家公園，占地 27 平方公里，該園區包含了廣泛的動植物種類，有 7 種生態地區，如沼澤森林、紅樹林、巴當樹林、巨大龍腦樹林、懸崖柔軟植物、小海灣、洞穴和海灘等。在此熱帶雨林裡，可見巨大喬木樹林到處高聳林立，景色相當壯觀；長常見野生動物則有長尾獼猴、銀葉猴、長鼻猴、松鼠、蜥蜴、蛇、豹斑貓、野豬、犀鳥等，本地區目前已經被有系統的保護、開發、管理並結合教育、觀光，使其成為一座國際有名之國家公園；另外還參觀當地 Samajaya 自然保護區及博物館等處。



國家/單位/ 報告人	土耳其/伊斯坦堡大學/Serhun Saglam
題 目	伊斯坦堡都市森林古樹的管理和保存
內 容 摘 要	<ol style="list-style-type: none"> 1. 本研究包含調查伊斯坦堡大都會市之 11 個都市森林的健康結果，這些都市森林是屬於歷史久遠，古老的且密集使用的地區。 2. 在這個研究的過程中，針對胸徑≥ 70 厘米的老樹木進行了風險測定，使用超音成像法來確定樹木的穩定性，樹莖（完好，腐爛或空心的）的結構，則是藉由通過測量感應器之間的聲波速度來判定。 3. 研究結果顯示，<i>Platanus acerifolia</i>，<i>Quercus robur</i>，<i>Fraxinus angustifolia</i>，<i>Tilia argentea</i>，<i>Pinus brutia</i> <i>Pinus pinea</i> 和 <i>Pistacia lentiscus</i>，樹木高度較高和數量多。 4. <i>Platanus acerifolia</i>，<i>Fraxinus angustifolia</i> 和 <i>Pinus pinea</i> 樹種表現出較高的穩定性，而 <i>Tilia argentea</i>，<i>Aesculus hippocastanum</i> 和 <i>Pistacia lentiscus</i> 樹種則是被認為較低穩定性。 5. 依據該研究結果，確定樹木翻倒的風險，是否需要造林、切割，修剪等建議，特別是要採取新種植的樹木品種選擇和種植技術行動的風險評估。 6. 這項研究可以應用到任何其他都市森林和都市化之行道樹上。


國家/單位/ 報告人	馬來西亞/沙勞越野生動物收容所/Nickson Joseph Robi
題 目	武吉利馬森林公園：大都會中的小都市森林公園
內 容 摘 要	<ol style="list-style-type: none"> 1. 位於心臟地帶的武吉利馬森林公園是詩巫城市唯一的都市森林公園，2011年7月23日該公園被宣布開放。 2. 1929年10月29日在憲報刊登為森林保護區，公園部分提供作為研究和教育、休閒活動的場地，經由野生動物的觀察和與相關健康的慢跑和森林漫步活動，以提升其價值。 3. 在公園裡進行的一項研究說明，詩巫城市民眾喜歡使用公園作為慢跑或漫步在大自然。有些人則是喜愛在公園舉辦康樂活動及欣賞大自然，公園也已成爲法人團體，俱樂部和協會組織辦活動一個普遍的地點。 4. 隨著越來越多的民眾對森林公園的需求，管理、保存和保護泥炭沼澤公園，已變得越來越具有挑戰性。 5. 在維持公園以供市民欣賞，以及在人類和生物多樣性之間的相互作用下，確保森林公園區可永續發展是未來下一代應該相互兼顧與平衡的。



國家/單位/ 報告人	丹麥/哥本哈根大學/ Konijnendijk, C.C 馬來西亞/馬來西亞森林研究所 FRIM/Screetheran, M
題 目	在環境和社會因素的影響下，馬來西亞吉隆坡，對都市公園犯罪的恐懼
內 容 摘 要	<ol style="list-style-type: none"> 1. 本研究是檢測綠色環境經驗的好處，包括情緒反應，從積極情緒的一部分，負面情緒也會從如城市公園的綠色環境中，誘發犯罪的恐懼。 2. 有越來越多的研究，專門研究在自然和半自然的環境中發生的犯罪的恐懼。對於犯罪的恐懼與在建構環境中工作相比，此方面身體的知識是有限的。 3. 戶外綠色環境的設置，對城市和城郊中是特別重要的，因為這是人們使用最頻繁的自然設置，人們認識到，對於犯罪的恐懼往往是最大的問題，而不是犯罪本身。 4. 人們的情緒反應，可能會是實現最重要戶外利益的主要障礙，其誘發環境因素，如隱蔽，社會影響，如存在或不存在對其他犯罪活動的恐懼等。 5. 藉由操作物理環境，例如通過環境設計（CPTED）的方法達到預防犯罪可減少對犯罪的恐懼。 6. 景觀設計師和管理人創造戶外綠色環境下，對於將犯罪恐懼感降到最低，可扮演一個重要角色作用。而在不同的綠色空間使用者，對犯罪的恐懼知識，更可全面性的了解。

國家/單位/ 報告人	馬來西亞/馬來西亞森林研究所 FRIM/ Mohd Parid,M
題 目	願意保護自然環境意願評估：雪蘭莪州，甲洞 FRIM 森林公園案例研究
內 容 摘 要	<p>1.雖然休閒森林公園、國家公園、海洋公園、野生動物保護區和保留區，是被建立來保護生物多樣性和提高生態旅遊，但各國保護區都受到了不同程度上的威脅，而最大的威脅則來自人類的侵占。</p> <p>2. 爲了維護這些資源，所採取適當的保護策略必須落實到位，這需要適當的環境評估。</p> <p>3. 以馬來西亞主校區林業科學研究院（FRIMMC）爲例，在一個娛樂網站收集人們願意支付（WTP）作爲保護環境之相關信息。</p> <p>4. 使用二分選的特別價值評估法（CVM），結果發現，娛樂用戶是願意保護森林公園。研究顯示，人們願意支付之費用在 RM17.13 和 RM27.38 之間，估計在 201 年度，合計平均可以貢獻 WTP500 萬令吉到 800 萬令吉之間。</p>

國家/單位/ 報告人	馬來西亞/馬來西亞 Teknologi 大學 /Mohd Sarofil Abu Bakar
題 目	設計交流對都市森林管理策略永續發展的影響：都市森林發展的經驗
內 容 摘 要	<ol style="list-style-type: none"> 1. 都市森林公園早已成爲我們生活環境的一部分，它提供了許多功能，如被動和主動休閒，環境效益和提供野生動物棲息地等。 2. 在城市和自然之間，功能性森林和公園，顯示一個可作爲永續發展和生態平衡之基本設計策略設置。從繁忙的城市生活空間，都市森林是一個室外的公共聚集與集合，以尋求庇護，它是城市社會的基本需要，因此必須給予同等重視。 3. 由於城市的快速發展和城鎮人口的增加，因此可能會導致對都市森林公園中爲所有類型之娛樂設施有更大的需求。 4. 至今永續與平衡的生態系統，可以是被保護的，只要從開始到收尾階段，藉由正確的設計理念和清晰的溝通，設計實施可永續發展的理念，以提升和保護大自然。 5. 管理和維護工作者必須堅持整個這個概念，所有專業人士和相關利益者在永續發展進程和實施上，必須持續扮演一個角色，想法重要的，而本文確定了都市森林可永續開發，管理和維護的相關問題。


國家/單位/ 報告人	馬來西亞/沙勞越古晉森林公司/Nor Emel Farnida Jaddil
題 目	古晉市民的綠肺
內 容 摘 要	<p>1.1950 年 Sama Jaya 自然保護區，或是前身為 Stutong 森林公園，是沙勞越一個最古老的保護區。</p> <p>2. 2000 年 3 月 23 日，Sama Jaya 自然保護區再度被列為自然保護區，其面積約 38 公頃，主要包括 Kerangas 森林、內陸的紅樹林和次生林，為沙勞越州政府所擁有。</p> <p>3. 對古晉市民和家庭與城市野生動物而言，Sama Jaya 自然保護區猶如是寶貴的「綠肺」，沙勞越森林部門將其歸劃為古晉城市居民的一個多用途的城市森林。</p> <p>4. 它主要目標是藉由先進性教育、戶外休閒、旅遊和綠島保護，以促進古晉都市森林的多種做法，這是在古晉城市核心區域的外圍中，少數仍然維持原封不動的森林領域。</p> <div style="text-align: center;">   </div>

國家/單位/ 報告人	馬來西亞/馬來西亞森林研究所 FRIM/Ahmad Azaruddin,M.N
題 目	馬來西亞都市綠化管理的一些挑戰
內 容 摘 要	<p>1. 努力開發，保存和保護城市綠地是幫助改善城市環境的開始，同時在全國也才能有健康、綠色、可永續發展的城市。然而，這些努力只能在市區特別的樹木天然資源，有較完善的管理及成效。</p> <p>2. 對有系統化管理天然資源之都市森林和公園，應該成為管理機構優先考慮與負責的。</p> <p>3. 在城市地區植物資源的管理上，對施工期間樹木的風險評估及保護樹木方面，是非常重要且需要加以解決。</p> <p>4. 雖然市區的樹木被認為是一個重要的生活資產，但是他們也可以成爲一種責任，如果他們沒有適當的管理和維護。</p> <p>5. 一個有效的系統整合樹庫存和樹圖庫，將有助於改善城市綠化管理。</p> <p>6. 若僅有本身有最先進國家的技術並不能確保一定成功。因此，主管人員和專業人士參與都市綠化管理的角色和責任，如同植樹師正變得越來越重要。</p> 

國家/單位/ 報告人	丹麥/哥本哈根大學/M. Sreetheran 馬來西亞/馬來西亞森林研究所/James Mc Culloch
題 目	網路的好處
內 容 摘 要	<ol style="list-style-type: none"> 1. 國際森林研究組織聯盟(IUFRO)是一個唯一為森林科學合作的全球網路組織，包括 110 國家，700 會員組織，15000 位科學家參與。 2. 我們的使命是促進協調和國際合作，涵蓋整個森林和樹木之相關研究領域的科學研究，包括森林福祉和依賴他們的人。 3. 國際森林研究組織聯盟，是開放給所有的個人和組織，並致力於森林和森林產品及相關學科研究。它是一個非營利性，非政府組織和非歧視性的組織，有著悠久的傳統可追溯至 1892 年。 4. 國際森林研究組織聯盟的網絡活動，包括產生，交流和傳播科學知識，獲取相關信息的提供，以及協助科學家和研究機構，以加強他們的研究能力，進而達到它的目標。 5. 我們的願景是基於科學來永續管理世界森林資源，經濟，環境和社會效益。它有利於利用科學來促進制定與森林相關的一些政策。 6. 國際森林研究組織聯盟有 9 個部門 其中第 6 部門是涉及森林和林業與社會各方面的事務，特別是都市森林。 7. 其目的為：發展都市林業成為科學家注意的領域;提高全球都市森林試驗研究之間的網路; 促進為都市森林業問題，更多的學科研究；提高都市森林科學和實踐之間的信息和經驗交流。


國家/單位/ 報告人	馬來西亞/馬來西亞森林研究所 FRIM/ Noor Azlin, Y
題 目	公園及康樂設施之國際聯合管理認證計劃
內 容 摘 要	<p>1. 國際聯合公園及康樂設施管理協會正針對國際公園及康樂設施管理成員之教育，經驗和文化的多樣性，提出新會員的類別。</p> <p>2. 擬議的主題計劃包括國際聯合公園及康樂設施管理協會會員，在各自的領域上是否取得了顯著的貢獻，並鼓勵其進一步的進修。</p> <p>3. 同意在國際聯合公園及康樂設施管理協會內，推薦兩個額外的專業類別：</p> <ul style="list-style-type: none"> ● 公園專業認證（CPP），有一某特定的要求 ● 國際公園專業認證（CIPP），更嚴格的要求 <p>4. 在國際聯合公園及康樂設施管理協會認可的狀態下，那些被接受為 CPP 的會員，可以進一步提前參與 CIPP 的研究或其他活動。這可能是國際聯合公園及康樂設施管理協會以外，其他大學或專業機構舉辦的研討會、教育計畫、會議等，該認證計畫將提交至 UFC2012 年與會者審議。</p>

國家/單位/ 報告人	南非/南非大學/ Johann Dreyer
題 目	以自由選擇學習作為都市森林公園永續發展信息之工具
內 容 摘 要	<p>1. 在許多方面，對使用者進行教育，可以確保城市森林或公園之永續發展，環境教育課程、簡報或演示使用指南和小冊子，只是其中的一部分。</p> <p>2. 本文的重點將是被稱為自由選擇學習，如何、怎麼利用可攜帶性的永續性消息。在都市森林和公園的適用性與利用性上，針對不同的民眾和方式，屆時將說明自由選擇的學習是什麼，自由選擇學習的級別和類型的概述。</p> <p>3. 研究案例顯示，正在使用不同的方式，成功地應用於如水族館、植物園、動物園、公園和自然區域。</p> <p>4. 這是討論可以作為一個額外工具去做，而不是作為一個環境課程或任何其他許多方面的替代方案，也就是對人們感受度和永續發展的做法和行為，進行了解並在這方面作出一些建議。</p> <div data-bbox="576 1391 1249 1839" data-label="Image"> <p>The image shows a presentation slide with a dark background and light-colored text. The title 'FREE-CHOICE LEARNING' is at the top. Below it are two bullet points describing the concept of free-choice learning.</p> </div>

國家/單位/ 報告人	馬來西亞/馬來西亞森林研究所 FRIM/ Azyyzi,A.K 馬來西亞/Shah Alam 市議會/ Noor Hazliza, H
題 目	以在校學生的角度看都市綠地之先進性教育
內 容 摘 要	<p>1. 都市綠色空間，為都市居住提供自然教育環境的機會，經由先進性教育灌輸環保意識，相鄰高度發達的地區，如住宅區和教育機構的綠色空間，可以造福於社會。</p> <p>2. 在都市綠地開放空間和自然資源，提供了戶外設置及包含合適性的生活標本同時也支持基礎的學習過程。</p> <p>3. 提供自然教育的藝術並不僅局限於手，例如單獨種植樹木和堆肥，是可以通過整合學校，與環境和自然的主題一同活動實踐。</p> <p>4. 從 47 名小學生參加第 8 次會議 Shah Alam 市議會的宣傳計劃，為主要的常青綠色先鋒學校，約 83%的學生有興趣與非學校的主體性學習會議上，進行如植樹和自然觀察的研究。</p> <p>5. 研究還顯示，77%的人表示有興趣，在都市公園進行學校科目的學習課程，本文提供在自然教育和其他社會方面的一些意見上，學生對都市綠地利用的想法與看法。</p> 

Problem in implementation

- Schools in urban area are lacking of planting space.
- Time constraint for teachers to juggle between school curricular and conducting co-curricular activities with students.
- School system is exam orientated.
- Lack of initiative from some teachers to boost up students' interest in learning about nature and its relationship with humans.



PROJEK PENANAMAN POKOK HUTAN DI SEKOLAH SELURUH MALAYSIA

Relationship of Tree Populations and Earth Declining Quality

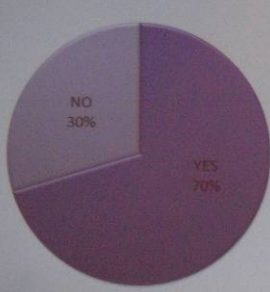
Students were taught and exposed to:

- ❖ Global warming issue
- ❖ Climate change topic
- ❖ Carbon footprint concern
- ❖ Implications of declining tree population
- ❖ Guidelines to nurse and monitor the tree growth of the trees planted
- ❖ Precaution and steps to avoid/overcome pest attack
- ❖ Initiative to overcome the problem



PROJEK PENANAMAN POKOK HUTAN DI SEKOLAH SELURUH MALAYSIA

Get opportunity to do revision on school subjects during the programme



Topic related:

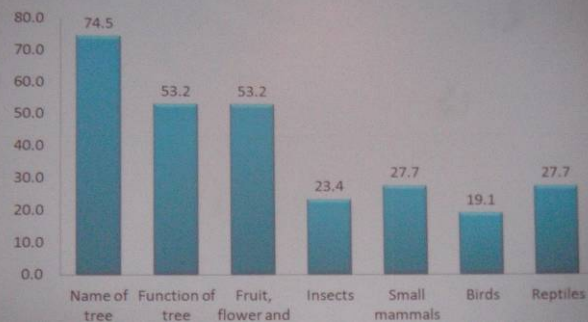
- Seed dispersal
- Plant protection
- Tropical forest
- Composting
- Respiration process
- Leaves shapes
- Poisonous plant

Methodology

- A preliminary study was conducted on 47 students who participated in the 8th session of Shah Alam Municipal Council awareness programme for primary school, the *Perintis Hijau* (Green Pioneer).
- The study was specifically focused on their perceptions towards function of urban green spaces in supporting nature learning.



What have they learned in previous visits to other urban parks



肆、心得與建議

1. 爲因應各項溫室氣體、全球暖化議題國際化以及了解國際社會脈動，本署應積極參與國際各項環保會議，除了擴展視野，吸取國際相關經驗並可作爲國內未來相關政策議題的擬訂與執行的參考。
2. 都市結構中都市森林與公園被認爲是最重要的一部分，在國內主要都會區都已有設立指標性都市森林與公園，如台北市大安森林公園、新北市四號公園、台中都會公園、嘉義中山公園、台南市億載公園、高雄都會公園等。除了大型都市森林與公園外，建議亦可推廣至社區公園化和學校公園化，前者包括農村鄉鎮，後者則結合學校提供一個環境教育場所並利用週會請當地環保局人員，或相關環保團體組織作環保教育專題演講、相互問答、遊戲互動中等方式，教育學生有關種植樹木增進碳匯，降低全球暖化之效應。有系統的從教育向下紮根，效果會更明顯有效。
3. 在許多情況下，由於都市公園設計並不符合當地居民的需求，造成都市森林公園使用率很低或是荒廢沒有使用。如同本會議所強調的，有效的溝通對保護自然和人類活動，是一項重要的工具，同時也能確管理人員和使用者之間的責任共享。因此景觀建築設計師和公園規劃者等，事先應與當地里長、市民代表及市民充分溝通，作一系列問卷調查，了解大部分居民所想要的公園型態與功能。而公園的設計一定要滿足居民的需要和要求，讓市民視公園猶如其家之花園般的呵護與愛護，自然能達到都會森林與社區公園之永續管理。
4. 透過此次國際會議，探討都市森林與公園森林和公園永續發展之訊息傳播，依據國內實際相關權責單位，應多加強與觀光局、林務局和地方政府等單位之間的協調。誠如環境保護問題是不分中央與地方的，需要大家多方面一起共同努力的，而事先有效整合各部會之意見，會是更加有效落實解決都市森林與公園永續發展議題。

**SESSION 1:
Ecological Functions and Sustainable
Resource Management of
Urban Forests and Parks**

**ERADICATION OF AN INVASIVE PALM TREE IN AN URBAN
FOREST OF SÃO PAULO CITY, BRAZIL**

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São Paulo is the biggest and most developed city in Brazil, where few remnant fragments of the original mega-diverse Atlantic rainforest persist. One of these fragments is the Forest Reserve of the University of São Paulo (FR-USP). However, the biodiversity and ecological processes in FR-USP were highly threatened by an Australian palm tree, *Archontophoenix cunninghamiana*, which was brought to the university gardens 60 years ago, and became invasive. In São Paulo this species produces red round fruits all over the year, which are very attractive to generalist birds, that disperse it efficiently. Periodical surveys of the arboreal community in the forest fragment pointed to a fast decrease in the abundance of some native species, and also the total exclusion of others. A management plan started at the FR-USP one year ago, where individuals of the invasive species are being replaced by natives. A careful survey was carried out to select the species to be planted, as well as the management methods to be applied. Species that can supply fruits to the birds were prioritized. Additional environmental legislation was created for that specific case. We have now an appreciation of the first results coming from the management applied and an evaluation of other steps that should be included at the local level and in the FR-USP surroundings.

MANAGEMENT AND INVENTORY OF OLD TREES IN URBAN FORESTS OF ISTANBUL

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This study contains health inventory results of 11 urban forests of Istanbul metropolitan Municipality. These urban forests are historical, old and intensively used areas. In the process of this studies, the risk of tipping over of old trees (dbh \geq 70cm) were determined. The stability of trees was determined by using acoustic tomography method. The structure of tree stems (intact, decayed or hollow) was determined by measuring the velocity of sound waves between sensors. First results showed that *Platanusacerifolia*, *Quercusrobur*, *Fraxinusangustifolia*, *Tiliaargentea*, *Pinusbrutia*, *Pinuspinea* and *Pistacialentiscus* where higher in terms of size and number. *Platanusacerifolia*, *Fraxinusangustifolia* and *Pinuspinea* species showed higher stability compared to *Tiliaargentea*, *Aesculushippocastanum* and *Pistacialentiscus* species which are considered low in stability. As a result of the study, tipping over risk of the trees was determined. Required silvicultural suggestions (cutting, pruning, etc.) and especially actions to be taken (species selection and planting technique) for new plantings was determined for trees under the risk. This study can be applied to any other urban forest and street trees of urbanized cities.

Keywords: Urban forest, health inventory, tipping risk, acoustictomography, Istanbul

BUKIT LIMA FOREST PARK: THE SMALL URBAN FOREST PARK IN THE BIG CITY

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Bukit Lima Forest Park is the only urban forest park located in the heart of the Sibul city. The park was declared open by YB Datuk Wong Soon Koh, the Minister for Infrastructure, Development and Communications on 23 July 2011. Gazetted on 29 October 1929 as Forest Reserve, the park offers a venue for research and education, recreational activity, nature's appreciation through wildlife observations and health-related activity; jogging and forest walk. A study conducted in the park shows that public from Sibul has been using the park for jogging or nature walk. Others mentioned that they used the park for recreational activities and to appreciate nature. The park has also become a popular venue for corporate bodies, clubs and associations to organize activities such as treasure hunt and joggerthon for their organization. With the increasing public awareness on the need to conserve and protect this peat swamp forest park, managing the park has becoming more challenging. While maintaining the park for the public to appreciate, the interactions between the human and biodiversity should be equally balanced in ensuring the park's sustainability for future generation.

Keywords: Urban forest park, public awareness, biodiversity, sustainability

GREEN LUNG OF LIMBANG: THE BUKIT SEMBILING AND BUKIT HITAM NATURE RESERVES

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Sarawak's Nature Reserves are similar to national parks but smaller in size. Nature reserves are constituted for the conservation of flora and fauna including its aesthetic values. Being in its conserved state thus makes it ideal for educational, research and recreational activities. Sarawak currently has five nature reserves under the jurisdiction of Sarawak Forestry Corporation. Three of them are located in Kuching Division and the other two are located in Limbang Division. The two nature reserves in Limbang are Bukit Sembiling Nature Reserve and Bukit Hitam Nature Reserve. Both were gazetted in 22nd June 2000 and located just next to Limbang town surrounded by local residents. With a total area of 208 hectares, both nature reserves are covered with rich stands of Mixed Dipterocarp Forest. Good accessibility by road and availability of other basic facilities makes them popular recreation and leisure spots for both domestic and foreign visitors. Visitors can enjoy the beauty of natural environment by walking through the board walk connecting Tasik Mas recreational area to the hilltop of Bukit Sembiling. Bukit Hitam Recreational area that was developed by Limbang Municipal Council has recently been opened to public and become a very popular leisure spot especially during weekend. This recreational area is partly situated within Bukit Hitam Nature Reserve. In its effort to conserve the area, Sarawak Forestry also organize and conduct educational programs for both school students and local communities residing adjacent to the nature reserves. This is done mainly to instill awareness on the importance of conserving nature reserves and environment as a whole.

Keywords: nature reserves, popular spots, educational programs, awareness Limbang, Sarawak

GREEN LUNG OF LIMBANG: THE BUKIT SEMBILING AND BUKIT HITAM NATURE RESERVES

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Sarawak's Nature Reserves are similar to national parks but smaller in size. Nature reserves are constituted for the conservation of flora and fauna including its aesthetic values. Being in its conserved state thus makes it ideal for educational, research and recreational activities. Sarawak currently has five nature reserves under the jurisdiction of Sarawak Forestry Corporation. Three of them are located in Kuching Division and the other two are located in Limbang Division. The two nature reserves in Limbang are Bukit Sembiling Nature Reserve and Bukit Hitam Nature Reserve. Both were gazetted in 22nd June 2000 and located just next to Limbang town surrounded by local residents. With a total area of 208 hectares, both nature reserves are covered with rich stands of Mixed Dipterocarp Forest. Good accessibility by road and availability of other basic facilities makes them popular recreation and leisure spots for both domestic and foreign visitors. Visitors can enjoy the beauty of natural environment by walking through the board walk connecting Tasik Mas recreational area to the hilltop of Bukit Sembiling. Bukit Hitam Recreational area that was developed by Limbang Municipal Council has recently been opened to public and become a very popular leisure spot especially during weekend. This recreational area is partly situated within Bukit Hitam Nature Reserve. In its effort to conserve the area, Sarawak Forestry also organize and conduct educational programs for both school students and local communities residing adjacent to the nature reserves. This is done mainly to instill awareness on the importance of conserving nature reserves and environment as a whole.

Keywords: nature reserves, popular spots, educational programs, awareness, Limbang, Sarawak

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Keywords: nature reserves, popular spots, educational programs, awareness, Limbang, Sarawak

Session 1: Presentation 4

As parks departments continue to face major cuts to their budgets, interest is growing in other ways of providing these services. In particular, there is a focus on alternatives, such as the park trust model, that provide a long term and secure future outside of the unpredictable arena of Local Government political control, but retain a high degree of stakeholder involvement. Nene Park Trust is an independent self financing charitable trust that manages Nene Park, which stretches for 10km along the valley of the River Nene in City of Peterborough, 120km north of London. The Trust was established in 1988 with a 999 year lease on the Park and a charitable aim of *'improving the quality of life for Peterborough residents and visitors through providing quality and accessible open spaces'*. Nene Park Trust was the first park trust created in the UK, and was conceived from a strong desire to ensure that the park would be managed, on a long term basis, by a secure and financially stable organisation solely dedicated to this task. Today, the Trust spends over £1.6m a year on managing and maintaining Nene Park. This is entirely self funded through rental income from commercial and park properties, concessions and investments, and is therefore at no cost to the taxpayer. Over the past twenty years, a small number of other park trusts have formed in the UK, most notably at Milton Keynes, but this still remains a model that is yet to have wider adoption. However, the last decade has seen a much wider understanding and appreciation of the importance of green space to health, the economy and communities. This has helped achieve a significant improvement in the condition and management of many green spaces. If this is to be sustained, more radical thinking will be required in terms of the financing and governance of green space to ensure their long term sustainability. The park trust model has the potential to deliver this, and this paper will provide an overview of park trusts in the UK, how to establish such a model, and will highlight the work taking part in Nene Park as an example of what can be achieved.

Session 2: Presentation 1

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EXPERIENCE CHARACTERISTICS OF USERS' PREFERENCES TOWARDS SELECTED MALAYSIAN PARKS

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Major Malaysian cities such as Kuala Lumpur and Kuching have been experiencing rapid development. Although data on the use of green spaces and resulting benefits are still lacking, the importance of green spaces as contributors to a better quality of a resident's life has increasingly been recognized. This paper presents results from a comparative study on the use of green spaces and visitor preferences for five selected parks located in Kuala Lumpur and Kuching. The questionnaire was distributed on-site using self-administered and interview methods. A total of 1273 respondents participated in the study. Part of the survey focused on type of experience opportunities relevant to respondents based on 'eight experiences values' (rich in species; serene; prospect (open field); festive; culture-historical; space; wild and refuge). The illustration and short descriptive sentences were given to help make respondents understand the points. Results showed that most of the users want 'serene' experiences (55.8%) and 'culture-historical' experiences (17.5%) in the park. 'Wild' experiences (15.9%) seemed not to be classified as very important experiences to respondents. The difference in socio-demography also resulted in varieties of opportunity experiences preferred. In other aspects, this research confirmed the results of other studies with regards to positive impacts between use of green space and (self-assessed) health, although results were less convincing than those found in European studies. However, the study did point at the importance of green spaces for promoting human health and wellbeing, a finding important to decision makers and green space managers.

Keywords: Kuching, Kuala Lumpur, urban green space, cultural preference, urban forest.

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Keywords: Kuching, Kuala Lumpur, urban green space, cultural preference, urban forest.

Session 2: Presentation 2

THE EFFECT OF ENVIRONMENTAL CUES & SOCIAL CUES ON FEAR OF CRIME IN URBAN PARKS – THE CASE OF KUALA LUMPUR, MALAYSIA

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Research has examined the benefits associated with green environment experiences, including emotional responses. Apart from positive emotions, negative emotions such as fear of crime can also be evoked by green environments such as urban parks. A growing number of studies have specifically examined fear of crime occurring in natural and semi-natural environments, although the body of knowledge is limited compared to work on fear of crime in built environments. Green outdoor environments in urban and peri-urban settings are of particular importance, as these are among the most frequently used natural settings. It is recognised that fear of crime is often a bigger problem than the crime itself. People's emotional response may act as a barrier to attaining important outdoor benefits. Fear of crime can be evoked by environmental cues such as concealment, and social cues such as the presence or absence of compatible others. Fear of crime can be reduced by manipulating the physical environment, for example following the Crime Prevention through Environmental Design (CPTED) approach. Landscape designers and managers have an important role to play also in creating green outdoor settings where feelings of fear of crime are minimised. More comprehensive knowledge of fear of crime among different green space users will be required.

Keywords: personal safety, Crime Prevention through Environmental Design (CPTED), criminology, environmental psychology

ESTIMATION OF WILLINGNESS TO PAY FOR PRESERVING NATURAL ENVIRONMENTS: A CASE STUDY OF FRIM FOREST PARK, KEPONG, SELANGOR

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Although recreational forest parks, national parks, marine parks and wildlife sanctuaries and reserves are established to conserve biodiversity and enhance ecotourism, some of the country's protected areas are under threat although at a varying degree. The biggest threat arises from human encroachment. To safeguard these resources, appropriate conservation strategy must be put in place. This requires proper valuation of the environment. Taking Forest Research Institute Malaysia Main Campus (FRIMMC) as a case, information on people's willingness to pay (WTP) to preserve the environment as a recreational site was gathered. Using the dichotomous-choice contingent-valuation method (CVM), it was found that the recreation users are willing to preserve the forest park. The study showed that the average WTP ranged between RM17.13 and RM27.38 that could contribute between RM5 million and RM8 million in aggregate for the year 2011.

Key words: contingent valuation, forest park, willingness to pay

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SESSION 3: Planning, Design and Management for Sustainable Green Space

DESIGN COMMUNICATION IMPACTS ON MANAGEMENT STRATEGY FOR SUSTAINABILITY OF URBAN FOREST: AN EXPERIENCE FROM URBAN FOREST DEVELOPMENT, JOHOR BAHRU, MALAYSIA

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Urban forest and parks have long become a main component of our living environment that serves many functions such as for passive and active recreation, environmental benefits and for providing wildlife habitat. Functional forests and parks indicate a sustainable and an ecological balance between the urban and the natural setting which forms the basis of the design strategy. An urban forest is an outdoor space where public could congregate and gather in order to seek refuge from busy city life. It is a basic need of the urban society and thus must be given an equal priority. Rapid urban development and an increase of urban population is therefore likely to lead a greater demands for urban forest and parks for all types of recreational facilities. In the present day, sustainable and balanced ecological systems can only be preserved through clear communication of design concept right from the beginning till the finishing stage. The design enforces the idea of a sustainable development in order to appreciate and preserve nature. The design, management and maintenance must adhere to this concept throughout. All professionals and stakeholders must play a continuous role in communicating the idea for essential sustainable development process and implementation. This paper identifies a number of issues relating to communicating an idea for sustainable development, management and maintenance of urban forest.

Keywords: urban forest, urban ecology, sustainable development, design communication

THE 'GREEN LUNG' FOR KUCHING CITY DWELLERS

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Being one of the oldest protected areas in Sarawak Sama Jaya Nature Reserve or formerly known as Stutong Forest Park was constituted in 1950. Sama Jaya Nature Reserve was gazetted as a Nature Reserve status on 23 March 2000. The size is approximately 38 hectares and is wholly owned by State Government of Sarawak. It consists mostly of Kerangas forest, inland mangrove and secondary forest. This Nature Reserve is a valuable "green lung" for Kuching city dwellers and home for the urban wildlife. Sama Jaya today is actually the continuation of Sarawak Forest Department's first multi-purpose urban forest project for the Kuching City's dwellers. Its primary objectives are to promote multiple usage of forest through nature education, outdoor recreation, tourism and conservation of a "green island" for Kuching City. This is one of the few areas of forest still left intact in the periphery of Kuching City urban core.

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Session 3: Presentation 2

SOME CHALLENGES IN URBAN TREE MANAGEMENT IN MALAYSIA

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Efforts to develop, conserve and preserve urban green spaces are being initiated to help ameliorate the urban environment in order to have healthy, green and sustainable cities in the country. However, these efforts can only be fruitful with sound management of natural resources in the urban areas especially trees. Having a systematic management of natural resources should become a priority for agencies responsible for parks and urban forest management. In managing plant resources in urban areas, tree risk assessment and tree preservation during construction are important aspects need to be addressed. Though urban trees are considered an important living asset, they too can become a liability if they are not properly managed and maintained. An efficient system that integrates tree inventory and tree mapping will aid in the improvement of urban tree management. Having state-of-the-art technology alone will not ensure success. Thus, the roles and responsibilities of competent personnel and professionals involved in urban tree management such as arborists are becoming more significant.

Key word: tree inventory, tree assessment, tree preservation, arborist

BENEFITS OF NETWORKING

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International Union of Forest Research Organizations (IUFRO)

IUFRO is “the” global network for forest science cooperation. It unites more than 15,000 scientists in almost 700 Member Organizations in over 110 countries, who cooperate in IUFRO on a voluntary basis. Our mission is to promote the coordination of and the international cooperation in scientific studies embracing the whole field of research related to forests and trees for the well-being of forests and the people that depend on them. IUFRO is open to all individuals and organizations dedicated to forest and forest products research and related disciplines. It is a non-profit, non-governmental and non-discriminatory organization with a long tradition dating back to 1892. IUFRO attains its objectives by networking activities including the generation, exchange and dissemination of scientific knowledge, the provision of access to relevant information, and the assistance to scientists and institutions to strengthen their research capacities. Our vision is of science-based sustainable management of the world’s forest resources for economic, environmental and social benefits. IUFRO is the only world-wide international organization devoted to forest research and related sciences. It contributes to the promotion of the use of science in the formulation of forest-related policies. There are nine divisions in IUFRO and Division 6 of IUFRO deals with Social Aspects of Forests and Forestry. Specific to Urban Forestry, IUFRO Unit 6.07.00 has the aims to:

- Develop urban forestry as an area of scientific attention.
- Improve networking between urban forestry researchers worldwide.
- Promote multi-disciplinary research into urban forestry issues.
- Improve the exchange of information and experiences between urban forestry science and practice.

Information about IUFRO can be obtained at <http://www.iufro.org/>

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International Federation of Park and Recreation Administration (IFPRA)

IFPRA is the unique international organization that represents parks, recreation, amenity, cultural, leisure and related services. Over fifty nations are represented within IFPRA. The Federation has no political affiliations. The beginnings of IFPRA emerged at the first International Congress on Public Administration in London in 1957. During an open meeting at this congress, at which there were delegates from 134 countries, the International Federation of Park Administration was created. At the General Assembly meeting of this new organization in Bern in 1969, the 'R' (Recreation) was added to the title and the International Federation of Park and Recreation Administration was created. The addition of 'Recreation' acknowledged the coming together of park and recreation professionals during the years between 1957 and 1969. IFPRA represents every aspect of parks, recreation, amenity, open spaces, countryside and culture.

The federation's main aims and objectives include the:

- Advancement of parks, recreation, cultural and leisure services through representation and the dissemination of information
- Adoption of internationally acceptable training and qualification standards,
- Promotion of relevant research
- Establishment of national recreation and park associations
- Promotion of the conservation ethic and the reduction of pollution
- Encouragement of efficient use of resources
- Organization of international congresses and meetings
- Publication of a magazine,
- The international exchange of students and professionals
- Establishment of regional sectors where appropriate
- Development of an international network of individuals and organisations concerned with the objectives of the federation

Information about IFPRA can be obtained at <http://ifpra.org/index.htm>

INTERNATIONAL FEDERATION OF PARKS ADMINISTRATION (IFPRA) CERTIFICATION PROGRAMME

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International Federation of Park and Recreation Administration (IFPRA) is proposing new membership categories due to the diversity of education, experience and culture within IFPRA members. The proposed scheme should recognise those who have made significant contributions to their field and encourage them to pursue further studies for an IFPRA qualification. It was agreed therefore to recommend two additional professional categories within IFPRA:

- “Certified Parks Professional” (CPP) with a particular set of requirements and
- “Certified International Parks Professional” (CIPP) with a more stringent set of requirements

Those who are accepted as CPP can in time advance to the status of CIPP by further studies or other activity which has IFPRA recognition. These may be educational programmes, conferences, seminars or workshops organized by universities or professional organizations other than IFPRA. The certification programme will be presented for feedbacks of UFC 2012 participants.

Further information can be requested from christy.boylan@gmail.com.

INTERNATIONAL FEDERATION OF PARKS ADMINISTRATION (IFPRA) CERTIFICATION PROGRAMME

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SESSION 4: Urban Forests and Parks to Support Environmental Education

FREE-CHOICE LEARNING AS A TOOL TO CARRY THE SUSTAINABILITY MESSAGE IN URBAN FORESTS AND PARKS

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The education of users of urban forests or parks to ensure sustainability can be undertaken in many ways. Environmental education courses or lectures, briefings or presentations by guides and the use of pamphlets are just some of these. In this paper the focus will be on what is known as free-choice learning and how this can be utilised to carry the sustainability message. There will be an overview of what free-choice learning is, the levels and types of free-choice learning, the suitability of it for different audiences and ways in which it can be utilised in urban forests and parks. Examples will be shown of different ways it is being used and different contexts where it is successfully applied such as aquariums, botanical gardens, zoos, parks and natural areas. It is discussed not as an alternative for environmental courses or any other of the many ways in which people are sensitised and made aware of sustainable practices and behaviour, but as an additional tool to accomplish this. A few recommendations in this regard will be made.

URBAN GREEN SPACE FOR NATURE EDUCATION FROM THE PERSPECTIVE OF SCHOOL STUDENTS

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Urban green spaces offer nature education opportunities on environment for city dwellers. Green spaces that are adjacent highly developed areas such as residential areas and educational institutions can benefit the community in terms of instilling environmental awareness through nature education. Open spaces and natural resources in urban green spaces provide both outdoor setting and contains life specimen suitable to support nature based learning process. The art of delivering nature education are not limited to hands-on activities such as planting tree and composting alone but also can be practice through integrating school subject that may be related to environment and nature. From the study conducted on 47 primary school students who participated in the 8th session of Shah Alam Municipal Council awareness programme for primary school, the *Perintis Hijau* (Green Pioneer), about 83% of students are interested to participate in non-school subject learning session such as tree planting and nature observation. The study also showed that 77% of them indicated interest to have school subject learning sessions at urban parks. This paper shares the student's opinion on utilization of urban green spaces for nature education and some of other social aspect.

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CREATING AN URBAN FOREST ENVIRONMENT: FOREST TREE PLANTING PROGRAMME IN SCHOOLS

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As a greening effort, tree planting activities are very popular in Malaysia. Apart from the obvious aesthetic benefits, trees in our environment are functional in improving air quality, protecting water, saving energy, and providing socio-economic benefits. As concern about dwindling green spaces is on the rise, information on mitigating measures should be extended to the public. For school students, hands-on activities would help to provide better understanding on tree's functions. Thus, tree planting activities can be used to encourage the creation of an urban forest to ameliorate the environment. For example, tree planting can be a method of explaining the effects of climate change and serve as a mitigating measure. This paper focused on a project aimed to make people aware of their own capacity to improve the environment by planting native forest tree species at schools. Fifteen schools were involved in this project where in the beginning teachers and students were exposed to tree benefits and how to care for them. Schools were planted with forest trees species such as *Shorea sp.*, *Dryobalanops sp.*, *Syzygium sp.*, *Hopea sp.*, and *Dipterocarpus sp.* Suitable landscape designs were planned accordingly to suit the areas available in the schools' compound. Trees and other vegetation that have been planted are anticipated to serve as man-made urban forests. Students would see the importance of having plants in the environment as the effects of lost natural resources would eventually lead back to human. The urban forests are expected to be gazetted as education zones for students to experience a more natural environment especially in an urban neighborhood and to provide opportunities to those with limited access to the natural forests.

Key words: environmental education, schools, urban forestry, forest tree, tree planting