

# 香港休憩/文娛草地之管理 一些觀察及提議

## Managing Amenity Lawn in Hong Kong Observations & Suggestions

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# 草地地圖

## Lawn Map



# 休憩/文娛草地

## Amenity Lawn

The term **amenity lawns** is used here in the sense of “large” turf areas which provide recreational, functional, or aesthetic value, e.g. those large grass lawns in public parks.\*

這裡使用的術語**休憩/文娛草地**是指那些可以提供娛樂, 功能或美觀等價值的草地,主要是那些在公眾公園的大型草地.\*

\* 部分取材於 D E Aldous, *et al.*

\* Partly taken from words by D E Aldous, *et al.*

# 這項研究包括的休憩草地

## Amenity Lawns Covered in this Study

### Hong Kong

- Central Lawn, Victoria Park
- Tamar Park
- Sun Yat Sen Memorial Park
- Aldrich Bay Park, Sai Wan Ho
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### Kowloon

- Jorden Valley
- +++

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### New Territories

- Tai Po Waterfront Garden
- +++

### 香港區

- 維多利亞公園中央草地
- 漆馬公園
- 中山紀念公園
- 愛秩序灣公園
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### 九龍區

- 佐敦谷公園
- +++

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### 新界區

- 大埔海濱公園
- +++

# 維多利亞公園中央草地

Central Lawn, Victoria Park, April 2015



# 維多利亞公園中央草地

## Central Lawn, Victoria Park, April 2015

- Large open area open to public.
- The lawn is built on flat land.
- Medium-sized tree were planted in the right side. Bare ground noted under the trees and neighbouring area.
- No built-in irrigation system.
- Perhaps the worse looking lawn in Hong Kong for now.
- 大型向公眾開放的草地。
- 草坪建在平坦地面。
- 草坪的右方種有一些中型的樹。樹下及鄰近地方全是裸露土地。
- 並無預裝的噴灌系統。
- 也許現在是全港最難看的草坪。

# 維多利亞公園中央草地

## Central Lawn, Victoria Park, April 2015

- Built on reclaimed land some 40 years ago.
- Turfgrass species: A mixture of literally everything including some di-cot weeds: Some Bahiagrass, Carpetgrass **noted but the green appearance was from various sedges (*Cyperus* spp).**
- Turf Coverage: ca. 40% with bare wide bare stripes in the center and also in the right-hand side.
- Rootzone: Fabricated soil of unknown depth
- Drainage: None. Water ponding always noted. When dry the surface became dusty.
- Trace of cultural work performed but only superficial and nonprofessional.
- 大約 40 年前建在填海土地上。
- 草坪草種：可以說包括所有的東西，一些百喜草, 零星大葉草及其他雜草, 但泥面呈現出綠色外觀多是由各種莎草 (*Cyperus* spp) 做成。
- 草皮覆蓋範圍大約為 40%. 在草地的中央及右方有一寬闊的裸露地區。
- 根系層(泥土層) : 混合土; 深度不明
- 排水系統: 沒有。土面常注意到積水。乾燥時的表面變得塵土飛揚。
- 只注意到小量, 膚淺的和不專業的護養工作。

# 維多利亞公園中央草地

Central Lawn, Victoria Park, April 2015



# 維多利亞公園中央草地

Central Lawn, Victoria Park, April 2015



# 維多利亞公園中央草地

Central Lawn, Victoria Park, April 2015



# 維多利亞公園中央草地

Central Lawn, Victoria Park, April 2015



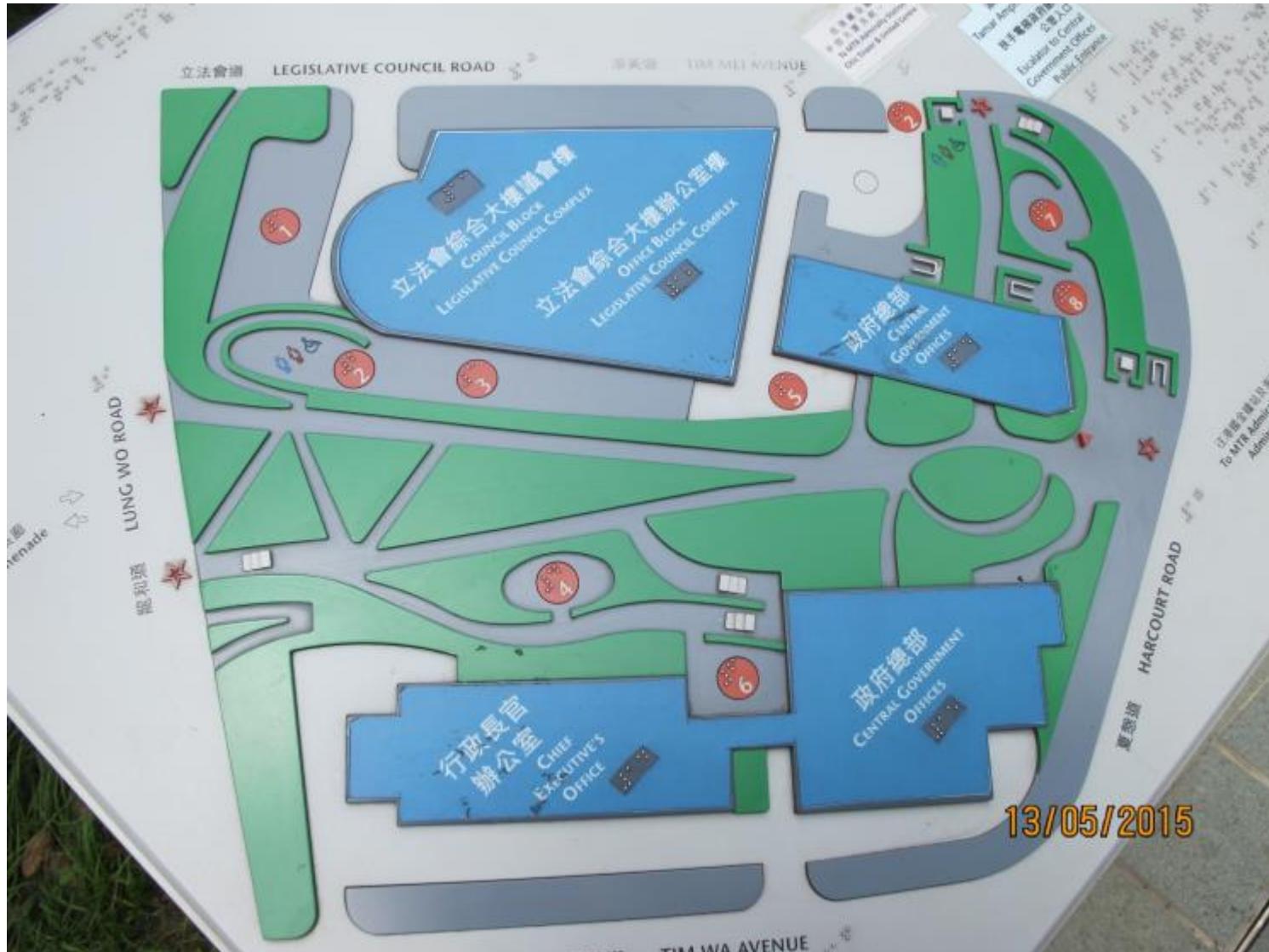
添馬公園

Tamar Park, April 2015



# 添馬公園

## Tamar Park, April 2015



# 漆馬公園

## Tamar Park, April 2015

- Large open area to public.
- Regular and frequent maintenance effort noted by contractor.
- Upper section of the lawn built on inclined land and the those in the lower section on flat ground.
- Some medium-sized tree were planted in the upper and lower section.
- Perhaps the best looking lawn in Hong Kong for now.
- 大型向公眾開放的草地。
- 注意到承包商的工作人員有規律及頻繁的維護工作。
- 上方的草坪建在傾斜地面，下方的草坪建在平坦地面。
- 上,下方的草坪種有一些中型的樹。
- 並無預裝的噴灌系統。
- 也許現在是全港最好看的草坪。

# 漆馬公園

## Tamar Park, April 2015

- Turfgrass species: Initially planted with Carpetgrass. Over-seeded with perennial ryegrass in Winter months. At present predominately ryegrass with small & scattered thin patches of carpet grass
- Turf Coverage: ca. 90% (mainly ryegrass).
- Rootzone: Fabricated soil over 300 mm
- Drainage: Mostly via surface; sub-soil drainage nominal.
- Lawn divided in sections; upper sections are on inclined land and the larger ones in the sea-side end are flat.
- Small patch of bare and compacted surface noted, e.g. those next to siting benches/statues.
- Small slimy & black patches of algal growth noted everywhere. Sign of poor drainage.

- 草坪草種：最初種以地毯草(大葉草). 在冬季幾個月蓋種上多年生黑麥草. 在目前絕大多數黑麥草而混以小片的地毯草.
- 草皮覆蓋範圍：約 90%(主要是黑麥草)。
- 根系層：由超過 300 毫米混合土組成。
- 疏水(排水)：主要通過表面；經滲透泥層排水微不足道。
- 整個草坪分成若干部分；上半部分是在傾斜的土地上；較大草地則在下方及近海及平坦的地方。
- 草坪的長椅及陳列品前草地多泥土多裸露無草及板結。
- 因藻類生長而產生的黑色小斑點無處不在。排水不暢的跡象。

漆馬公園

Tamar Park, April 2015



漆馬公園

Tamar Park, April 2015



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# 添馬公園

Tamar Park, April 2015



# 漆馬公園

Tamar Park, April 2015



# 中山紀念公園

**Sun Yat Sen Memorial Park, April 2015**



# 中山紀念公園

## Sun Yat Sen Memorial Park, April 2015

- Large lawn open to public.
- Some maintenance effort noted but not systematic and frequent by contractor.
- Some medium-sized tree were noted in the peripheries.
- A few shrubs were noted.
- No built-in irrigation system.

- 大型向公眾開放的草地。
- 注意到承包商的工作人員進行有規律的草地維護工作。
- 周邊種有一些中型的樹。
- 草地一邊種有一些灌木。
- 並無預裝的噴灌系統。

# 中山紀念公園

## Sun Yat Sen Memorial Park, April 2015

- The area is flat.
- Turfgrass: Predominately Seashore paspalum.
- Rootzone made of very sandy loam of unknown depth.
- Scattered weeds of various kinds noted especially in areas close to or under trees and /or shrubs.
- Shrub pits were badly infested with weeds.
- Field always got over-watered as evidenced by water ponding in large patches after watering and also after raining. Drainage is poor.
- Small slimy & black patches of algal growth noted everywhere. Sign of poor drainage or over watering.
- 整個草地是平坦的。
- 草坪草種：主要為海濱雀稗。
- 根系層：由非常砂質壤土組成。深度不明。
- 常有各類零星的野草，特別是鄰近或樹下和/或灌木地區。
- 灌木植物泥坑生有大量雜草。
- 草地經常過度澆水，地面在澆水或下雨後常有大面積積水。排水系統很差。
- 因藻類生長而產生的黑色小斑點無處不在。排水不暢的跡象或過度澆水。

# 中山紀念公園

**Sun Yat Sen Memorial Park, April 2015**



# 中山紀念公園

**Sun Yat Sen Memorial Park, April 2015**



# 愛秩序灣公園

## Aldrich Bay Park, April 2015



# 愛秩序灣公園

## Aldrich Bay Park

開放一月即圍封 康文署管理不善

# 億元公園

# 靚草極速枯死

耗資一億三千多萬元打造的港島東愛秩序灣公園，開放僅一個月，園內草地已旋即變黃，需即時進行保養工程。康樂及文化事務署以遊人眾多、使用率高企為由圖作開脫；但園藝專家卻指草地變黃與管理不善有關，直指康文署護養草地不得其法，建議當局須為草地「急救」，包括加密剪草、泥土表面鋪沙以鞏固草坪生長甚至移除草坪上樹木，以即時救草。 ■靜態組

愛秩序灣公園位處筲箕灣風塘填海地，今年四月中旬才正式開放，但早前據有市民發現，園內一個面積約兩個籃球場大的草地表面已呈枯黃，需要封閉進行保養工程。質疑新落成公園旋即有草地瀕臨枯死，與部門護養不力有關。

草地管理專家、中文大學生命科學學院名譽高級研究員兼香港園藝學會會長李贊祉日前與記者實地了解情況，李贊祉指草坪種植品種應為改良品系百慕達草，屬優質「靚草」，管理得宜可長出翠綠草地。現時呈現一片黃色，主要是修剪不足，令莖部過長。李贊祉按小草的長度估計，有幾草坪或三周才修剪一次，較正常一周修剪兩次為少。「要界畝草打橫生先至剪翠綠，慢慢至可以交織成一片翠綠草地。」

### 鋪泥求其植樹不當

李又即場以儀器測量泥土深度，發現各處深度不一，部分泥土僅得一吋，部分則多至六至八吋，反映鋪泥過於「求其」，地面亦未有平整。李稱，鋪泥土過淺，排水頻密下，植物便會出現「惰性」，自動不長根，因而未能「抓實」土地，無法與泥土交融，長遠影響生長。

除草地出現問題外，李又指在草坪上種植樹木亦不恰當。「樹蔭會影響小草吸收陽光，應該將樹木移至草坪邊」；此外，李又發現園內數棵樟樹出現「等勢枝」形態，即樹幹呈「丫」狀。年前赤柱大樹塌下的奪命事件中，涉事大樹亦為等勢枝，擔心樟樹隨着年月增長後，或會再出現類似危機，建議當局移走有關樹木。

就該園草坪被指出現問題，康文署發言人表示，由於該公園遊人眾多，使用率高企，令草地受到一定影響，工程部門已安排由五月廿一日起臨時關封草地養草，以盡快改善草地質素，並於六月中旬重開。



■李贊祉（左）與另一園藝專家林德澤直指康文署管理草地不得其法。（黎達豪攝）



■億元公園草坪啟用圍封施工養草。

# 愛秩序灣公園

## Aldrich Bay Park, April 2015

- The area is flat and small lawn ca. 20-20 m.
- Initially Hybrid Bermudagrass was used then changed to Carpet grass.
- Now predominated by the over-seeded ryegrass and Carpetgrass.
- Rootzone: Initially all-sand-based and the depth was over 200 mm+.
- Scattered weed patches of various kind noted.
- Few trees were noted.
- Poor drainage noted.
- Small compacted “soil” patches noted on the surface.
- Small slimy & black patches of algal growth noted – sign of poor drainage.
- 整個草地是平坦的。面積約為 20 x 20 m<sup>2</sup>
- 草坪草種：最初為雜交百慕達草，後改為地毯草。
- 現時主要見到的是蓋種的黑麥草。
- 根系層：最初由純沙質組成。深度 200mm+。
- 見有各類零星的野草。
- 種有幾棵中型樹木。
- 排水很差。
- 草地表面見有許多板結小泥塊。
- 因藻類生長而產生的黑色小斑點無處不在。排水不暢的跡象或過度澆水。

# 愛秩序灣公園

Aldrich Bay Park, April 2015



# 愛秩序灣公園

Aldrich Bay Park, April 2015



# 佐敦谷公園

Jorden Valley Park, April 2015



# 佐敦谷公園

## Jorden Valley Park, April 2015

- Large area open to public.
- The lawn was built on top of land-filled land following the general contour of the site.
- Drainage mostly via the surface. Run-off and wash out noted during heavy rain.
- Regular maintenance effort noted, e.g. mowing, spiking, etc. The lawn looks in fairly good condition.
- Several medium-sized tree and a few shrubs hedges were noted in the peripheries.
- No built-in irrigation system.
- 大型向公眾開放的草地。
- 該草地是建築在堆填區上，是依地勢而建。
- 疏水主要經由表面；在大雨時有徑流及沖刷現象出現。
- 見有一般草地護養工序進行，例如剪草、打洞等。草地狀況大致良好。
- 草地上見有三數個圓形的“沼氣”通氣裝置上蓋。
- 周邊種有幾棵中型樹木。
- 沿著邊緣種有幾叢灌木。
- 並無預裝的噴灌系統。

# 佐敦谷公園

## Jorden Valley Park April 2015

- Turfgrass: A mixture of nearly all species. Over-seeded perennial ryegrass in the winter months.
  - 草坪草種：混合各草的品種，多為地毯草。冬季有蓋種黑麥草。
- Rootzone made of very fabricated soil of unknown depth.
  - 根系層：由混合土組成，深度不明。
- Grass coverage fairly good with only one large bare patches in the lower point.
  - 草的覆蓋度好，只有在草地中下方較低地方有一片裸露的泥面。
- Soil highly compacted.
  - 泥土嚴重板結。
- Some small slimy & black patches of algal growth and organic matter accumulation noted on the surface.
  - 地面可見到一些因藻類生長而產生的黑色小斑點及有機物的累積。

# 佐敦谷公園

Jorden Valley Park , April 2015



# 佐敦谷公園

Jorden Valley Park, April 2015



# 佐敦谷公園

Jorden Valley Park , April 2015



# 佐敦谷公園

Jorden Valley Park , April 2015



# 大埔海濱公園

## Tai Po Waterfront Park, April 2015



# 大埔海濱公園

## Tai Po Waterfront Park, April 2015

- This park has two major lawn areas: the Kite Flying Area and the Wedding Lawn plus many smaller lawns.
- 這公園具有二大型草地：一為風箏放飛區，一為婚禮草坪，外加一些較小型的草地。



# 大埔海濱公園

Tai Po Waterfront Park, April 2015



# 大埔海濱公園

Tai Po Waterfront Park, April 2015



# 大埔海濱公園

## Tai Po Waterfront Park, April 2015

- Large open area open to public.
- Not much maintenance effort noted.
- Lawn built on existing contour.
- Medium-sized tree planted in the peripheries. Bare ground noted under the trees and neighbouring area.
- No built-in irrigation system noted.
- 大型向公眾開放的草地。
- 草地明顯地沒有太多護養工作。
- 草地依照地形而建造。
- 草地外圍種有中型的樹木。樹下泥土多裸露。
- 無預裝噴灌系統。

# 大埔海濱公園

## Tai Po Waterfront Park, April 2015

- Turfgrass: A mixture of nearly all species. Over-seeded perennial ryegrass in the winter months.
- Rootzone made of very fabricated soil of unknown depth.
- Grass coverage very poor with a lot of bare patches of various sizes.
- Field always got over-watered as evidenced by water ponding in large patches after watering and also after raining. Drainage is poor.
- Small slimy & black patches of algal growth noted everywhere. Sign of poor drainage or over watering.
- 草坪草種：混合各草的品種。冬季多種有黑麥草。
- 根系層：由混合土組成。深度不明。
- 草的覆蓋度很差，有很多裸露的泥面。
- 灌木植物泥坑生有大量雜草。
- 草地經常過度澆水，地面上在澆水或下雨後常有大面積積水。排水系統很差。
- 因藻類生長而產生的黑色小斑點無處不在。排水不暢的跡象或過度澆水。

# 大埔海濱公園

Tai Po Waterfront Park, April 2015



# 大埔海濱公園

Tai Po Waterfront Park, April 2015



# 大埔海濱公園

Tai Po Waterfront Park, April 2015



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一些觀察

Observations

# 草的品類

## Turfgrass Species

- Carpetgrass (*Axonopus compressus*)
- Hybrid Bermudagrass *Cynodon dactylon* x *C. transvaarensis* cv. Tifway)
- Seashore paspalum (*Paspalum virginatum*)
- Bahiagrass (*P. notatum*)
- Zoysia spp
- Perennial Ryegrass (*Lolium perenne* - winter only)
- Other grass +++
- Non-grass, e.g. sedges
- 地毯草(大葉草)
- 雜交百慕達草
- 海濱雀稗
- 百喜草
- 結縷草
- 多年生黑麥草 (冬天)
- 其他草 +++
- 非草類, 例如莎草類

# 一般狀況

## General Condition

- Poor Maintenance –
  1. Not knowing what to do !
  2. Not willing to do ?
  3. No proper supervision!
  4. Rely on contractor
- Poor turf coverage
- Highly compacted soil surface.
- No built in irrigation system.
- Poor drainage – water ponding noted after rain or irrigation.

- 護養差
  1. 不知道該怎樣做!
  2. 不願意去做?
  3. 沒有適當的監管。
  4. 依賴外判承建商
- 草的覆蓋度低。
- 土壤板結程度高。
- 沒有建立灌溉系統。
- 排水差 – 注意到下雨或灌溉後地面積水。

# 草地之護養

## Turf Management

- Nearly all the lawns are maintained by contractors.
- Not much skilled workers carrying out the works.
- Not much supervision by the respective department as they don't really know what to do?!
- No proper turf maintenance equipment for carrying out the task. Poor maintenance of the equipment.
- No job continuity of the management staff.
- Lacking of proper training of the staff.
- 幾乎所有的草坪由外判承建商負責護養的。
- 多數由不很熟練的工人進行各種工作。
- 各部門沒有太多的監督，因他們真的不知道應該怎樣做?!
- 沒有適當草坪維護機械以執行這些工作。機械的保養不善。
- 管理人員沒有工作連續性。
- 缺乏適當的工作人員的培訓。

一些提議

Suggestions

# 改良的一些建議

## Suggestions for Improvement

- **Changing the mind-set of the management.** • 更改管理層的思維。
- **Building the lawn right.** • 正確的草地建造。
- **Maintaining the lawn right.** • 正確的草地養護。
- **Put your heart in.** • 全心投入。

# 更改管理的思維

## Change the Mind Set

- Natural grass field can be sustainable provided it was managed right.
- Professional training for the staff.
- Keeping job continuation - career development for lawn care staff.
- Acquire and proper turf maintenance equipment. Maintain and operate the machinery properly.
- Stop contracting out!
- 只要管理得當，天然草場的持續性是可行的。
- 工作人員的專業培訓。
- 維持工作持續性 – 草坪護理人員的職業發展。
- 購置及使用正確的草地護養機械。草地護養機械要正確地保養及使用。
- 停止外判。

# 正確的草地建造

## Building it Right

- Active participating during the planning/designing stage.
- Choose the right type of turfgrass
- Adopting the modern technology in building a high standard field.
- 1. Sand-based vs. “Soil”-based rootzone profile
- 2. Proper built-in drainage system
  - a. Built-in surface fall.
  - b. Build-in camper
  - c. Sub-soil drainage
  - d. Catch pit
  - e. U-channel along peripheries
- Irrigation

- 在規劃/設計階段積極參與。
- 選擇正確品種的草坪草。
- 採用現代技術以建造高標準場地。
- 1. 以“純沙”或“土壤”基質建根系層。
- 2. 正確的內置疏水系統。
  - a.) 表面坡度。
  - b.) 向四周的坡度。
  - c.) 地下疏水管系統。
  - d.) 集水穴。
  - e.) 周邊的 U 渠。
- 噴灌系統。

# 正確的草地養護: 行政措施

## Maintain it Right: Administrative Measures

- Proper mind-set for the Management.
- Trained staff/operator.
- Control uses
  - a.) Proper scheduling
  - b.) Spread out the uses by sectionalizing
- Own mechanic and operator for proper maintaining and use of turf-care equipment.
- 管理層要有正確心態。
- 要有受過訓練的工作人員/操作員。
- 控制性使用場地：
  - a.) 正確使用時間分配。
  - b.) 分散場地的使用。
- 要有自己的機械工及操作工以妥善保養及使用草地護養機械

# 正確的草地養護: 護養方法

## Maintaining it Right: Cultural Practices

- Mowing height setting
- Mowing frequency
- \*Frequent aeration
- \*Decomposition
- Control irrigation
- Proper pest control
  - a. Weed
  - b. Disease
  - c. “Insects”
  - d. Algae
- Fertilizing
- Top-dressing
- Rolling

- 剪草高度
- 剪草頻率(次數)
- 疏氣
- 消除泥土板結
- 噴灌的控制
- 適當病/害蟲控制
  - a. 雜草
  - b. 疾病
  - c. 昆蟲
  - d. 藻類
- 施肥
- “皮”泥 (覆土)
- 滾壓

# 機器品牌名稱

## Brand Name of Machine

- The mention of some brand names of the following machines does not constitute any endorsement by the author of this presentative.
- It is for your reference only.

- 以下所提及的機器品牌名稱的並不構成作者對其任何贊同。
- 它僅是供您參考而已。

# 停止外判

## Stop Contract Out

- No sure continuity
- 無肯定的連續性。
- No truly qualified professional supervision
- 無真正的專業監管。
- Not much skilled worker
- 很少熟練的工人。
- No/little control/supervision by the governing bodies.
- 無或很少控制/監督的主管機構。
- Not much proper turf maintenance equipment, mechanic and operator.
- 無適當的草坪維護機械,機械工及操作員。

**我對這批辛勤的工人有崇高的敬意, 但我會詢問是否應由他們負上最終管理這些草地的責任!  
I have great respect on these hard working people, but only query should they bear the ultimate responsibility of managing those lawns!**



# 不要種植樹木/灌木

## No Tree/Shrub Planting

- A lawn is a lawn. It has its mission, unique growth pattern, cultural practice in maintaining it, etc.
- Grass will never grow well under the shade.
- Planting pits of tree/shrub serve as weed/pest shelter.
- Cleaning falling leaves is always a nuisance.
- 草坪就是草坪。它有其特殊的使命、獨特的生長形式及護養方法，等等。
- 草在樹蔭下永遠不會生長良好。
- 種植樹木/灌木的土面往往成為雜草/有害生物避難所。
- 清除落葉是總是令人討厭。

# 跟隨“黃金”規律

# Follow the “Golden Rule”

## Golden Rule

1. Building it right, i.e. 30%

2. Maintaining it Right, i.e. 70%

To do it better, you  
need to add in:

3. Passion - Putting  
your heart in the job,  
i.e. 10%

Total: 110%

## “黃金”規律

1. 正確的建造佔 - 30%。

2. 正確的護養 - 佔70%。

為了做得更好, 你要加上:

3. 激情 - 把你的心放在  
工作上佔 - 10%。

總數: 110%

# 仍然不行!

# Still not Working!

- If you have exhausted all the methods mentioned above and still ended up with lousy law, then go to the next slide.
- 如果你用盡上述的一切辦法仍然得不到一塊良好的草地 - 請見下一張幻燈片.

# 最簡單的辦法?!

# An Easiest Way Out ?!

**Put up another  
advertisement and create  
a new position:**

**Head, Amenity Turf  
Management Section.**

刊登另一個廣告，建立一  
個新職位：

休憩草地護養部門主管。

<完>  
<The END>

謝謝

Thank You

