

陽明山國家公園特有的芒草原景觀，如此美麗的景象怎能錯過？
/ 陽管處提供，陳志明攝
How could one miss this spectacle of a sea of silvergrass exclusive in Yangmingshan National Park?
/ Photo provided by YMSNP and taken by Zhi-ming Chen



Autumn Festival of Silvergrass

鋒芒畢露的秋天盛宴

陽明山國家公園古道秋芒尋訪之旅

A Visit to *Miscanthus* on Ancient Trails in Yangmingshan National Park

我默默獨坐在那裡，一向就是這樣默默，然而惆悵的，看車窗外白芒花閃過，不斷閃過，不知道這其中是否有什麼道理。起先僅僅如此，花在與我視線平行的小丘上，英英雪雪，迅速來去，或者在遠處山坡，如成群無數的綿羊，車聲不斷起落，羊群和平低頭。

—節錄自楊牧《十一月的白芒花》—

知名詩文作家楊牧曾以芒花入題，將其比喻為母愛，完成一篇讀來令人動容、自然而然不矯情的感人之作。有別於春天百花爭豔的絢麗，生長於秋冬的植物總是在蕭颯中，帶著那令人讚賞的挺拔之美，故常常成為騷人墨客筆下幽古懷情的詠頌之物。製稿期時值秋芒花開，記者跟著在陽明山國家公園解說課服務多年的陳吾妹小姐的脚步，來趟古道秋芒尋訪之旅。

我不是雜草 我是個寶

早期農業生活時，農家習慣將芒草取用為茅草屋頂的建材，或是用芒花穗桿當掃把，然芒草的實用價值，其實遠遠超乎我們的想像。

芒草的生命適應力強，種子能隨風易地而生，在破壞地、荒地、惡地和高山等再惡劣的環境，都能見其憑藉叢生的習性從容以對環境的變異。有專家學者甚至賦予芒草一種好管閒事、浪跡天涯的俠客形象，因為芒草能在土壤中蓄積有機物，並能整治受重金屬污染的土地，加上水土保持的修補功能，這種種特質讓它在生態環境的角色中，扮演著不可或缺的重要地位。



擎天崗草原上的牛群襯著一片翻騰的白芒，悠哉低頭吃草 / Matt 攝
Cattle are grazing on the meadow in a backdrop of silvergrass on Cingtiangang Grassland. / by Matt

I sat alone in silence as usual, but at a loss. I didn't feel a thing as I saw the flowers of silver grass keep flashing by outside the window and flashing by. As simple as that at first, the flowers spread along the hill parallel to my line of sight, coming and going fast as bits and pieces of snowflakes, or on farther slopes, like countless sheep bowing their heads quietly as the sound of cars heard on and off.

— from Yang Mu's *Silvergrass in November*

The renowned writer-poet Yang Mu once wrote a touching and spontaneous work using silvergrass (*Miscanthus*) as a metaphor for a mother's love. Differing from colorful blossoms in spring, plants in autumn and winter display their upstanding beauty in the chill, a well-liked subject among writers. As silvergrass was in full bloom during the making of this issue, let's follow Ms. Wu-mei Chen, a veteran of Interpretation and Education Section, YMSNP, on a visit to *Miscanthus* in ancient trails.

Not Weed but Treasure

In the agricultural society, farmers used to use silvergrass as materials in building thatched huts or use its stem to make brooms. But the practical values of silvergrass, in fact, are far beyond people's imagination.

Silvergrass has strong vitality and adaptability as its seeds may emigrate through wind to anywhere, even the toughest environments such as damaged lands, wastelands, high mountains, etc. Some experts even depict silvergrass as an officious, vagrant swordsman because it could preserve the organic compounds in the soil and recover lands from heavy metal pollutions. With its healing effects on soil and water conservation, silvergrass plays an indispensable role in the ecological environment.



不妨抽個時間，到陽明山國家公園來趟古道秋芒之旅 / Matt 攝
Be sure to take an autumn silvergrass trip along the ancient trails in Yangmingshan National Park. / by Matt



餘暉下的秋芒，讓大屯山有著一片火紅欲燃、如夢似幻的迷人景象 / 徐富康攝

Silvergrass in an autumn sunset cast a dream-like, flaming-red charm for Datun Mountain. / Photo taken by Fu-kang Xu.

芒草在破壞地環境中能快速生長的優勢特性，也讓重視環境保護的歐盟國家注意到了。歐洲科學家將其進行改良與雜交，進而用作纖維、火力發電廠燃料以及二氧化碳的固定，而台灣芒草高度遺傳變異的特性，更是科學家尋找作為作物馴化的研究基礎來源。於是，這可能是國內農民、或大多數人眼中的「雜草」，實質成為了歐美科學家奉在手上的「寶」，若國內相關單位能將這珍貴豐富的生物遺傳資源再進一步的轉化利用，相信在氣候變遷所影響的環境挑戰上，能達到相對的應用價值。

秋季之約 芒花有情

陽明山的芒草種類以「白背芒」為主。白背芒抽出的花穗初期呈特殊的鮮紅色，成熟後則變成灰白或黃褐色。由於受火山地質的影響，在吸收硫氣與熱氣後，所抽出的花穗會顯得特別紅潤，每當風一吹過，總讓秋冬季節的草山，有著一片火紅欲燃、如夢似幻的迷人景象。

時序進入深秋，整個草山山區便是秋芒專屬的舞台，從大屯、七星山到魚路古道，皆可見一路翻滾的芒花宛如導遊似的帶領你遊訪山林。交織著歷史故事與人文風情的魚路古道，更為健行賞芒不可錯過之地。

由上礦溪開始，便可見綻放的芒花在東北季風的吹拂下，隨風飄逸；沿著石階而上，隨路可看到當年礦工煮飯的紅磚灶遺跡；經過許顏橋，可順道參訪擁有歷史紀念性的「憨丙厝地」與土地公廟。再順著河南勇路，沿著百二崁石階陸上，行至高處時，別忘了回頭望望

The advantage silvergrass shows in its fast growth in damaged lands has been noticed by EU countries. Scientists in Europe have refined and crossbred silvergrass and used it as fiber, fuel for electricity, and carbon dioxide fixation. The high genetic variation of *Miscanthus* in Taiwan has also made it the basic source for research on crop domestication. Thus, this “weed” widely viewed by most people in Taiwan has indeed become a “treasure” highly valued by European researchers. Once further utilized and applied to various aspects, this precious bio-genetic resource will be of relative values in facing the challenges brought by climate change.

A Date with Silvergrass in Autumn

The main species of silvergrass in Yangmingshan is *Miscanthus sinensis* Anderss var. *glaber* (Nakai) J.T.Lee. Its flowers are characteristic bright red in the beginning and turn grayish white or yellowish brown upon maturation. After absorbing the sulfurate hot air amid volcanic terrain, the flowers exhibit a particularly red color, creating a dream-like, flaming-red charm for Yangmingshan in autumn and winter.

In late autumn the whole mountain would become the stage for silvergrass, whose flowers, like tour guides, lead visitors everywhere from Mt. Datun, Mt. Cising Mountain, to Historic Fisherman Trail, a must-visit with a rich history and humane qualities.

Starting from Shanghuangxi, one may see blossoming silvergrass waving in the northeast monsoon. Along the stone stairway upwards is the brick kitchen range relic, while past Syuyan Bridge the historical Hangbing's House Ground and Earth God Temple are also great tourist spots. And be sure to look back on the spectacle of a sea of silvergrass when walking on the steep One Hundred and Twenty Stairs along



陽明山國家公園特有的芒草原景觀，如此美麗的景象怎能錯過？
/ 徐富康攝

How could one miss this spectacle of a sea of silvergrass exclusive in Yangmingshan National Park? / Photo taken by Fu-kang Xu.



芒草的花穗脫落時，分枝會形成像是掃把的樣子 / 陽管處提供
，柳正鳴攝

When the tassels of silvergrass come off, they would split like a broom. / Photo provided by YMSNP and taken by Cheng-ming Liu.

那一整片浪捲似的芒花在「獅子回眸圓山」底下的遼闊壯觀；之後登上金包里大路的城門，再來到擎天崙草原，偶爾可欣賞到牛群襯著一片翻騰的白芒，悠哉低頭吃草的情景。

每逢秋季，陽明山國家公園皆會舉辦古道秋芒的活動，讓民衆能跟隨解說員的脚步，一邊欣賞遍野的芒花之美，一邊細聽前人在古道上胼手胝足的歷史故事，體會這思古又浪漫的饗宴之旅。

下次不妨抽個時間，到陽明山國家公園來趟秋芒之旅，除了魚路古道外，其他地方如七星山步道、大屯山、擎天崙與菁山吊橋等，都是值得走訪的賞芒地點。唯有真正的貼近欣賞，才能領會它的重要價值，真心守護這強韌珍貴的美麗生命。 

Ho-Nan-Braves Military Road. Afterwards, reaching the gate at Jinbaoli Trail and then Cingtiangang Grassland, one might see cattle grazing on the meadow in a backdrop of silvergrass.

Every autumn YMSNP would organize events guided by the Park's interpreters for tourists to enjoy a trip of reminiscence and romance as they relish the beauty of silvergrass and listen to historical stories of the ancient trails.

YMSNP highly recommends a tour to the silvergrass in the Park. In addition to Historic Fisherman Trail, other attractions, such as Mt. Cising Trail, Mt. Datun, Cingtiangang, and Jingshan Suspension Bridge, are also worth a visit. Only by up-close appreciation will people truly understand the value of and guard this perseverant and beautiful plant. 

陳吾妹小姐簡介 //

Profile of Ms. Wu-me Chen

現任職於陽明山國家公園解說教育課，曾任職於雪霸國家公園。熱愛自然，喜愛登山活動，長期投入環境教育活動推廣，並推動傳統產業文化—植物染概念與實際操作。

Once serving in the Shei-pa National Park Headquarters, Chen currently works at Interpretation and Education Section, Yangmingshan National Park Headquarters. As a Nature-lover, she enjoys mountaineering and has long been promoting environmental education activities and one of the traditional cultures – vegetable dyeing.



部落客看過來！

本期感謝【樂多—Allen Hsu's Blog】、【CH的親子週遊記】熱情提供作品。國家公園季刊廣邀部落客，您的好文好圖，都能透過國家公園季刊讓更多人看見喔！詳情請上 <http://blog.pixnet.net/sky1111>

Hey bloggers !

This is a call from the National Park Quarterly for your nice articles and pictures. Let more people see your work through our magazine. Please go to <http://blog.pixnet.net/sky1111> for more details.

簡單分辨 不再茫茫然

管芒花的種類有很多，過於相似的外觀常讓人難以辨別。茲另舉四種植物與芒草做整理比對，下次來到野外時，您也可判別眼前的是何種植物喔！

Silvergrass (*Miscanthus*) is commonly mistaken for its look-alikes listed in the following chart. Here is a comparison among these similar plants. Try to distinguish them when you see them next time!

	甜根子草 <i>Saccharum spontaneum L.</i>	蘆葦 <i>Phragmites australis (Cav.) Trin. ex Steud.</i>	蘆竹 <i>Arundo donax L.</i>	白背芒 <i>Miscanthus sinensis Anderss var. glaber (Nakai) J.T.Lee.</i>
				
	林文智攝 / by Wen-chih Lin	林文智攝 / by Wen-chih Lin	林文智攝 / by Wen-chih Lin	林文智攝 / by Wen-chih Lin
生長地 habitat	河床 riverbed	海邊 seashore	內陸河邊 inland riverside	各地 everywhere
土質與環境 soil type and environment	石礫地 gravel ground	會淹水的泥灘地 flooded mud flats	泥灘或 河岸土質地 mud flats and riverbank soil	低海拔至 中海拔破壞地 damaged land at low- and mid- altitude
葉形與寬度 leaf shape and width	葉形狹長，成條片或劍狀。寬度約1公分。 long, slim, shaped like sharp blades or swords; about 1 cm wide.	葉形短胖，與竹葉相似。寬度約3公分。 short, broad, resembling the bamboo leaf; about 3 cm wide.	葉形短胖，與竹葉相似。寬度約5公分。 short, broad, resembling the bamboo leaf; about 5 cm wide.	葉形長橢圓形，寬度約4公分。 long and oval; about 4 cm wide
開花期 flowering period	九月 (中秋節)前後 around Sep. (Mid-Autumn Festival)	十月前後 around Oct.	十月前後 around Oct.	九到十二月 Sep. to Dec.
花穗剛抽出 時的顏色 color of new tassels	純白色 pure white	褐色系 brownish	褐色系 brownish	紅色 red

(參考來源：<http://e-info.org.tw/node/5154>，環境資訊中心網頁)
(Source: Taiwan Environmental Information Center <http://e-info.org.tw/node/5154>)