



黑長尾雉美麗而高雅，尾羽有白色橫帶紋 / 周光瑩攝  
A male Mikado Pheasant (*Symaticus mikado*) is beautiful and elegant; there are white strips on his tail feather. / by Kuang-ying Chou

## 黑長尾雉

## 迷霧中的王者

## King of the Mist

## The Mikado Pheasant

1990年起發行的新台幣千元紙鈔，背面那挺立著身子的美麗生物，就是台灣特有的長尾雉屬鳥類——黑長尾雉（亦稱台灣帝雉）。由於珍貴稀有，政府已依野生動物保育法公告為保育類動物，加強保護。

1906年的日治時期，有一位英國鳥類採集家叫古費洛來到台灣，在日本警察和原住民的帶領下，沿著清朝開闢的古道，採集台灣特有種鳥類的標本。起初古費洛所採集的都是小型鳥，直到有一天當他準備下山時，發現其中一位挑夫頭飾上有一對黑白相間的羽毛，造型奇特。他問明這兩根羽毛的出處，得知是出自於一種大型的雉雞。後來在古費洛的央求下，這名勇士就很慷慨地將羽毛摘下來送給他。返回英國後，古費洛便將羽毛交由鳥類學家格蘭特鑑定，確認是新種，不過這種雉雞的長相在當時的學界仍舊成謎。

The beautiful, erect creature printed on the back of Taiwan's new thousand-dollar bill issued since 1990 is the Mikado Pheasant (*Symaticus mikado*), a long-tailed pheasant endemic to Taiwan, and listed as a protected wildlife according to the Wildlife Conservation Act.

In 1906, on Japan's occupation, British ornithologist W. Goodfellow came to Taiwan. Led by the Japanese police and Taiwanese aborigines, he collected specimens of birds endemic to Taiwan along the Historic Trail built in Ching Dynasty. Goodfellow's early samples had been confined to small birds, until one day, when he spotted a peculiar pair of black and white feathers on a bearer's head ornament. The feathers had belonged to a large pheasant. On request, the bearer granted him the feathers, which he brought back to England. Ornithologist W. R. Ogilvie-Grant identified the bird as a new species, but its looks remained a mystery to the academia then.

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特別感謝 Special thanks to / 東海大學生命科學系助理教授喬雅玲小姐 Assistant Professor Dr. Cara Lin Bridgman, Department of Life Science of Tunghai University; 林艾德先生 Mr. Ai-Teh Lin; 玉山國家公園陳貞好小姐 Ms. Zhen-yu Chen of Yushan National Park



喬博士聚精會神地進行資料的蒐集與調查 / 劉翠雅攝，玉管處提供  
Dr. Cara Lin Bridgman is investigating and collecting the information attentively. / Photo provided by YSNP, taken by Cui-ya Liu

### 高雅神秘的王氣之尊

或許是因為這神秘的鳥類美得讓人難以忘懷，有許多關於牠的故事流傳著。

據說日本天皇即飼養一對神秘且珍貴的雉，因此格蘭特便將這兩根羽毛命名為「黑長尾雉」，英文名稱 mikado (mikado 是日本天皇的意思) pheasant，學名為 *Symaticus mikado*。這兩根羽毛如今仍完整地保存在英國的自然博物館，而僅以兩根尾羽即鑑定為新種鳥類的例子相當稀少。

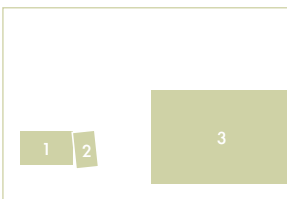
黑長尾雉名如其貌，雄鳥全身像穿著藍黑色錦緞，臉頰有紅色肉垂，美麗高雅，長相和雞相似，不過雞有冠，雉沒有，而雉的尾巴比較硬且長達 50 公分，有白色橫帶紋。雌鳥全身羽毛為黃褐色，夾雜淺色斑紋，腳為灰綠色。雄鳥身長 72 至 97 公分，重約 900 公克至 1.2 公斤。雌鳥比較小，身長約 46 至 55 公分，重約 600 公克至 1 公斤。

### Elegant and Mysterious Royalty

Perhaps due to its exquisite beauty, numerous tales spread, telling of this mysterious bird.

One goes that the Japanese Emperor himself owns a pair of these precious pheasants. Ogilvie-Grant thus named the bird Mikado Pheasant in English, for Mikado stood for the Japanese Emperor, and picked *Symaticus mikado* as its scientific name. The feathers are still kept intact in the Natural History Museum in Britain. It's rare that a new bird species is identified solely from two tail feathers.

The Mikado Pheasant appears as its name foretells. Males are elegantly coated in shimmering blue-black plumage, with red face wattles, closely resembling the cock but without the comb and featuring firmer tails extending up to 50cm as well as white bars on the rump. Females have grey-green feet and olive-brown plumage covered with pale specks. Males measure 72 to 97cm, weighing 900g to 1.2 kg, while females measure 46 to 55cm, weighing 600g to 1 kg.



1-2. 陷阱的設置須以不傷害黑長尾雉為前提 / 喬雅玲攝，玉管處提供

The trap should be set on the premise that it won't hurt the Mikado Pheasant (*Symaticus mikado*). / Photo provided by YSNP, taken by Dr. Cara Lin Bridgman

3. 水鹿啃食過的地區，幾乎寸草不留，直到植物長出來，黑長尾雉才會回到故地覓食 / 喬雅玲提供  
Sambhars would exhaust the grass in the areas they have been to. Mikado Pheasant (*Symaticus mikado*) will return to the old place when the grass grows again. / Photo provided by Dr. Cara Lin Bridgman

### 藏身 雲深霧裡間

黑長尾雉常出現在海拔1,600公尺至3,200公尺左右的霧林帶。所謂霧林帶就是人們登山時所見到的雲海。在溫帶、暖溫帶氣候區的針闊葉混合林間，在樹底下長滿了黑長尾雉愛吃的植物嫩芽、葉及果實，由於其分布海拔包含了容易起霧的霧林帶，因此黑長尾雉而享有「迷霧中的王者」美譽。

黑長尾雉和雞同樣屬雜食性鳥類，常於雲霧飄渺的霧林帶或草原中的小徑覓食。牠們常曲頸低頭不停地啄食地表植物，像是草籽、漿果、玉山懸鉤子、車前草等，連地上爬的螞蟻、蚯蚓、甲蟲也都成了美食。

在中、高海拔的林道及登山步道上因森林濃密且地表植物較多，除了吸引黑長尾雉來此覓食外，還可發現水鹿的蹤影。只要是大型水鹿啄食過的地區，幾乎寸草不留。覓食棲地被大型哺乳類動物佔據，也是造

### Hermits in the Fog and Mist

Mikado Pheasants are often spotted in cloud forests, often referred to as seas of clouds, 1,600 to 3,200m above sea-level. As an assortment of sprouts, leaves and fruits that the birds love flourish in the understory of mixed broadleaf and coniferous forests, where fogs often form, these birds are crowned the name "King of the Mist."

Like chickens, Mikado Pheasants are omnivores, foraging in misty cloud forests or grasslands. They feed on the ground cover plants such as grass seeds, fruits, creeping raspberries, and dooryard weeds. Even ants, worms, and beetles are also their food.

Besides the Mikado Pheasants, sambhars also frequent mid to high-altitude mountain trails, where forests and ground cover are denser. The visit of large mammals, however, often exhaust food sources, thus shriveling the living spaces of the pheasants. Nonetheless, Dr. Cara Lin Bridgman of Tunghai University sees this contest over food





成黑長尾雉生存空間日漸減少的原因之一。根據東海大學生命科學系助理教授喬雅玲博士的說法，黑長尾雉與水鹿爭奪食物棲地為生物界自然現象，無需進行人為干預。當地表植物被水鹿啃個精光，黑長尾雉就會另覓棲地，直到植物長出來，黑長尾雉就會回到故地覓食。

黑長尾雉除了面臨天敵的威脅以及競爭者搶奪食物而導致族群減少，喬博士更進一步指出，近年來台灣高山地區經常發生豪大雨，讓來不及換羽成鳥的雛雉，經常夭折，故天災也是造成族群減少的另一大因素。

### 生性膽怯 獨立孤行

黑長尾雉生性膽怯機警，觀察牠非常辛苦，必須躲在隱蔽帳內，苦苦守候。為了確定黑長尾雉活動範圍和作息時間，玉山國家公園於1996至1999年間曾委託喬博士等人進行黑長尾雉族群及行為的調查研究，三年下來，足跡遍及玉山國家公園。她在黑長尾雉身上裝了無

and habitat as a natural phenomenon that needs no human intervention. The Mikado Pheasants will seek food elsewhere if sambhars drain all nourishment, and return when the land replenishes itself.

Predators and food competitors may affect the population of Mikado Pheasants. Dr. Bridgman further points out that that in recent years, large rains are more frequent in Taiwan's mountains. When these large rains occur during the breeding season, newly hatched chicks may not survive, because these very young chicks cannot manage their own body temperatures.

### Naturally Shy and Solitary

As Mikado Pheasants are naturally shy and alert, observation requires patient wait in a disguised tent. To ascertain the birds' range of activity and biological clock, Yushan National Park commissioned Bridgman's team to study their communities and behaviors from 1996 to 1999.





線電發報器，每天穿梭在郡大林道、八通關古道上，找尋和記錄黑長尾雉的蹤跡。利用無線電追蹤，讓她知道黑長尾雉喜歡在開闊的次生林活動，雌鳥的活動範圍較廣，為13.7公頃，雄鳥活動範圍較小，頂多只有7.4公頃。活動範圍以春、秋較大，分別是13.1及8.8公頃。冬天的活動區域雖然只有1.6公頃，卻是全年的中心。

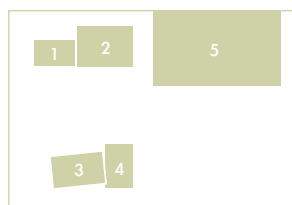
根據喬博士的觀察，黑長尾雉習慣單獨行動，在非繁殖期很少出現兩隻以上，僅在繁殖季時才會出現成對的情形。每天活動高峰時間為清晨，特別是有霧的時候，於傍晚回巢。隱藏於濃密的樹叢或雜草中，以躲避老鷹、貓頭鷹的襲擊。到了晚上，為了安全，多半會躲在草叢裡或樹枝上過夜。不過，黑長尾雉的飛行能力不佳，無法飛太遠或太高，除非受到驚嚇或遇到襲擊，才勉為其難地展翅，但僅能飛行100公尺左右，相當於從這棵樹飛到毗鄰的另一棵樹上。

每年2月為黑長尾雉的求偶期，有時雌雄鳥會因爭奪配偶而發生鬥毆情事。四、五月為孵卵期，黑長尾雉築巢於隱密而陡峭的山坡，因鳥巢位於大石頭下方，上面覆蓋著濃密的菅草、咬人貓和懸鉤子等刺棘植物，即便傾盆大雨，依然可保持其乾燥。每窩產5至8枚蛋，

Bridgman fixed radio transmitters on the birds and made daily rounds on trails they often appear. Transmitter data find the pheasants fond of spacious secondary forests. Females cover a larger activity range of 13.7ha., compared to the males' 7.4ha.. In spring and autumn they travel further, covering 13.1ha. and 8.8ha. respectively, while in winter confining to just 1.6ha., their central area of activity all year round.

Bridgman observes that Mikado Pheasants scarcely travel with companion outside the mating season. They are most active in early foggy mornings, and return to their nests at nightfall. In the daytime, they often hide from eagles and owls in thick groves or grass, and spend their nights in brushwood or on branches. Mikado Pheasants are poor flyers, spreading wings only when startled or attacked, but then just capable of soaring around 100m, simply enough to travel from one tree to another nearby.

February is the mating season; both sexes are in contest for mates and picking fights sometimes. Incubation takes place in April and May, when the pheasants keep their nests dry from pouring rain by building them under huge rocks, covered with thorn bushes like miscanthus, urtica thunbergiana, and creeping raspberry. Each clutch contains 5 to 8 cream-



- 1-2. 捕捉到的黑長尾雉，在身上裝無線電發報器，以記錄其行蹤 / 玉管處提供  
Bridgman fixed radio transmitters on the Mikado Pheasant (*Symaticus mikado*) to record their trails. / Photo provided by YSNP
- 3-4. 唯有用心守護，才能讓後代子孫得以看到牠們嬌豔的王者之姿 / 玉管處提供  
Only if we protect them with our heart, Taiwan's future generations will be able to see their gorgeous royalty. / Photo provided by YSNP
5. 雌黑長尾雉將巢築於陡峭山坡，隨時警戒天敵偷襲 / 李志忠攝，玉管處提供  
Female Mikado Pheasant (*Symaticus mikado*) builds nest on the steep hillside to be alert to the attack of its natural enemy anytime. / Photo provided by YSNP, taken by Zhi-zhong Li

玉管處積極推出黑尾長雉的相關文宣品，並以中英文對照方式深入解說，期使國人也能一同珍愛這美麗的物種，讓牠們能永遠在台灣的土地上展現雄姿。右圖的紀錄片曾入圍1992年金馬獎紀實報導片。/ 玉管處提供

YSNP has published many promotional publications about the Mikado Pheasant (*Symaticus mikado*) which were illustrated in both Chinese and English. YSNP hopes that the public will cherish this beautiful creature and work together to let their beautiful figures stay on this land forever. The documentary on the right was nominated Best Documentary of Golden Horse Award in 1992. / Photo provided by YSNP



蛋殼為乳白色，經過26至28天孵化，雛鳥才破殼而出。雄鳥於雌鳥下蛋後即離開，繼續找尋下一個想要孵蛋的目標雌鳥，而育雛主要由雌鳥負責。

### 天敵威脅 孵化不易

黑長尾雉的天敵除了老鷹及貓頭鷹，還有地面上的黃鼠狼、台灣獼猴、山羌等掠食者，尤其是黃鼠狼對黑長尾雉的巢穴及幼雉危害最大，使得雌鳥不敢掉以輕心，經常帶著雛鳥一起活動，並隨時警戒以保安全。由此可見，野生黑長尾雉成功孵化率並不高。

從古費洛無意間發現黑長尾雉的一對尾羽，迄今已有103年了，黑長尾雉在台灣的棲息狀況如何呢？喬博士特別提到2008年，國際自然資源保育聯盟因台灣高山地區仍有非法獵捕黑長尾雉情形，且棲息地也有遭受破壞的危機，因而將保育等級由1994年以來的低危險級調升至接近危險級。從這份國際鳥類紅皮書裡，雖然目前黑長尾雉仍是安全物種，但如果人類繼續無情的破壞，隨時可能再度面臨瀕臨絕種的危機。

30多年前，台灣由於森林砍伐嚴重，許多鳥類棲地都受到破壞，直到政府設立國家公園，明訂各項保育措施，才使得珍貴稀有的台灣特有種鳥類免除滅絕危機。雖然政府已全面禁獵，但是色彩鮮豔華麗的黑長尾雉，仍得面對不同的生存威脅，譬如生態環境及棲地遭人為開發與破壞，人類與自然天敵的捕獵等。將來台灣的子孫能否繼續看得到牠的帝王身影，就必須靠全體國民共同來保育。🇺🇸

colored eggs and is incubated for 26 to 28 days. Males leave for the next target female once the eggs are laid; female birds are responsible for nurturing the chicks.

### Natural Enemies Threaten Incubation

Apart from eagles and owls, Mikado Pheasants are menaced by predators such as Formosan Rock-Monkey (*Macaca cyclopsis*), Formosan Reeve's Muntjac (*Muntiacus reevesi micrurus*), and weasels in particular. Females must therefore be on alert and often take her fledglings along with her. The incubation rate of wild Mikado Pheasants has thus been low.

103 years have passed since Goodfellow's incidental encounter with the tail feathers. How do Mikado Pheasants fare presently? Bridgman notes that due to the persistence of illegal hunting in high mountain areas and risks posed to their habitat, the International Union for Conservation of Nature (IUCN) has altered the birds' conservation status from Lower Risk since 1994 to Near Threatened. Mikado Pheasants may currently be on the green list in The BirdLife International Red Data Book, but human activities may still easily endanger their existence.

Over three decades ago, serious deforestation damaged many bird habitats in Taiwan, and precious bird species endemic to Taiwan were only exempt from extinction threats on the launch of national parks and conservation regulations. Now, Mikado Pheasant hunting may be wholly prohibited, yet the gorgeous birds face other threats, including predation and ecology disruption. It takes collective efforts to ensure that Taiwan's future generations will still be able to gaze upon the majestic beauty of these creatures. 🇺🇸



## 喬雅玲博士簡介

### Profile of Dr. Cara Lin Bridgman

美國田納西大學生物學博士，現兼任東海大學生命科學系助理教授，專長為鳥類生態研究。曾參與 IUCN 雉雞研究、玉山國家公園帝雉生態研究計劃、林務局南投林區及東勢林區管理處森林生態調查等。

Holding a Ph.D. in biology from The Univ. of Tennessee (U.S.A), Bridgman is currently an Assistant Prof. at the Department of Life Science in Tunghai Univ.. Specialized in bird ecology, she has participated in the IUCN pheasant research program, Yushan National Park Mikado Pheasant Ecology Research Program, forest ecology surveys with the Nantou and Dongshih Forest District Offices of the Forestry Bureau, etc.