

20
23



國際灰面鵟鷹暨 遷徙猛禽高峰會

INTERNATIONAL SUMMIT ON
GREY-FACED BUZZARD AND
MIGRATORY RAPTORS

SUMMIT HANDBOOK

大會手冊

台灣 滿州鄉
Manzhou, Taiwan

菲律賓 桑切斯米拉
Sanchez Mira, Philippines

日本 宮古島市
Miyakojima, Japan

日本 宇檢村
Uken, Japan

日本 市貝町
Ichikai, Japan





TAIWAN

台灣

本屆高峰會將於台灣最南端的恆春半島上的墾丁國家公園舉辦。墾丁國家公園成立於 1982 年，是二戰後最早成立的國家公園之一，位在屏東縣範圍內，地理座標為北緯 21.948258，東經 120.780299。

墾丁國家公園的氣候屬於熱帶氣候，年均溫約為 23 度，年降雨量約 2200mm。降雨主要集中在五月至十月，而十月至隔年三月間受到東北季風的影響，當地居民俗稱為「落山風」。多變的氣候特點是墾丁國家公園的一大特色。國家公園範圍內擁有多種地形，台灣少見的海岸森林和低海拔原始林，以及高位珊瑚礁等獨特地貌，這些環境同時也孕育多樣化的生物相。

高峰會將在這樣的自然環境中舉行，讓來自灰面鵟鷹遷徙線的專家和研究人員共同探討猛禽保育和生態多樣性等重要議題。這次會議將提供一個難得的機會，讓與會者深入瞭解墾丁國家公園的生態寶庫，以及台灣在灰面鵟鷹與遷徙猛禽保育中的關鍵角色。

Photo by 曾建偉

The 2023 International Summit on Grey-faced Buzzard and Migratory Raptors is being held in Kenting National Park. It is located on the Hengchun Peninsula in the southernmost part of Taiwan. Established in 1982, Kenting National Park is one of the earliest national parks established after World War II. It falls within the jurisdiction of Pingtung County and its geographical coordinates are 21.948258° N latitude and 120.780299° E longitude.

The climate in Kenting National Park is tropical, with an average annual temperature of around 23 degrees Celsius and an annual rainfall of approximately 2,200 mm. Rainfall is concentrated primarily from May to October, while from October to March, the region is influenced by the northeast monsoon, locally referred to as the 'downslope

winds'. Its ever-changing climate is one of the distinctive features of the park. The national park is also home to a variety of different terrains, including coastal forests, low-elevation primary forests, and unique landscapes like uplifted coral reefs. Such different ecologies nurture high levels of biodiversity.

The summit will take place in this natural setting, providing experts and researchers along the Grey-faced Buzzard's migration route with an opportunity to delve into important topics such as raptor conservation and ecological diversity. This conference offers a rare chance for attendees to gain a deeper understanding of Kenting National Park's ecological treasures and Taiwan's crucial role in Grey-faced Buzzard and migratory raptor conservation.



Hengchun Peninsula

恆春半島

墾丁國家公園所在的恆春半島擁有獨特的自然和文化環境，培育了許多本土特色的物產和文化，以下將介紹恆春的民謠、港口茶和雨來菇。

Photo by 張宏銘



恆春民謠

在清國時期（1875年），當恆春成為縣城時，開始有來自台灣其他地區，甚至來自廣東和福建的民眾移居至恆春半島。這些移民帶著思鄉之情，譜出了「思想起」的民謠，並在當地風行傳唱。此外，當地也產生了一些獨特的曲調，如「牛母伴」、「平埔調」、「四季春」和「五空小調」等。這些曲調以自然的節奏和質樸的嗓音著稱，使恆春民謠成為台灣的特色民謠，至今仍有當地團體致力於推廣和傳承。

港口茶

港口茶因種植於滿州鄉港口村而得名，具有四大特點：首先，它是台灣最南端的產茶區，位處海邊的低海拔地區；其次，種植方式採用種子播種法，與台灣其他產茶區不同；第三，茶葉片小而厚，味道濃烈；最後，相較於台灣其他茶區通常只有春季和冬季採摘茶葉，港口茶在夏季和秋季仍可採收，每年可採摘四次。

雨來菇

雨來菇在當地的菜單上擁有浪漫的名字「情人的眼淚」，但實際上它是一種陸生的藍綠藻，在潮濕的野外環境中較容易被發現。雨來菇富含豐富的蛋白質、維生素和礦物質，並具有鮮脆的口感，非常適合用於烹飪。近年來，越來越多的農民在恆春半島種植雨來菇，它已成為當地的特色農業之一。

Hengchun Folk Songs

During the Qing Dynasty (1875), Hengchun became a county seat, and so people from other parts of Taiwan as well as from Guangdong and Fujian began migrating to the area. Feeling homesick, these immigrants created the folk song "Sisouki" which translated means "Remembrance". It became quite popular in the region. Additionally, some other unique melodies which originated in the area include

"Niumu Ban," "Pingpu Melody," "Four Seasons of Spring," and "Wukong Melody." These pieces are known for their natural rhythms and simple vocal styles, making Hengchun folk songs a distinctive music genre in Taiwan. Local groups dedicated to promoting and preserving this heritage still perform the songs today.

Gangkou Tea

Named for Gangkou Village in Manzhou Township, Gangkou tea is characterized by four distinctive features. First, it is produced in the southernmost tea-growing region in Taiwan, situated in a low-elevation area near the sea. Second, it is cultivated using seed sowing, which is different from other tea-producing regions in Taiwan. Third, the tea leaves are small and thick, resulting in a strong and robust flavor. Finally, unlike other tea-producing regions in Taiwan where tea leaves are typically only harvested in spring and winter, Gangkou tea can be harvested in summer and autumn as well, yielding four harvests each year.

Nostoc commune

Though on the menu it has the romantic name of "Lover's Tears," *Nostoc commune* is actually a terrestrial blue-green algae found in humid environments. Rich in protein, vitamins, and minerals, it has a crisp texture which makes for excellent cooking. In recent years, more and more farmers on the Hengchun Peninsula have started cultivating *Nostoc commune*, making it a local specialty agricultural product.

Photo by 曾建偉



Kenting National Park, located on the Hengchun Peninsula, boasts a unique natural and cultural environment that has fostered many local products and cultural practices. Below, we will introduce Hengchun's folk songs, Gangkou tea, and *Nostoc commune*.



Photo by 呂佳家

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Summit
Program

議程

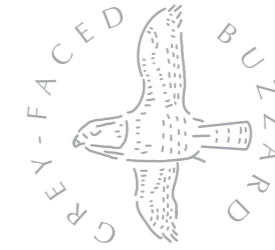
10/13 (五) Friday

12:30-12:40	開幕表演	Opening ceremony
12:40-13:10	開幕致詞	Opening address
13:10-13:40	地方代表的訊息	Messages from the mayors
13:50-14:30	重點演講	Keynote lecture
15:00-15:30	灰面鵟鷹與遷徙猛禽現況報告：台灣	Country report: Taiwan
15:30-16:00	灰面鵟鷹與遷徙猛禽現況報告：日本	Country report: Japan
16:00-16:30	灰面鵟鷹與遷徙猛禽現況報告：菲律賓	Country report: Philippines
16:30-16:50	綜合討論	Discussion
16:50-17:30	交流：海報、保育攤位	Poster session

10/14 (六) Saturday

Photo by 曾建偉

08:30-09:00	灰面鵟鷹與遷徙猛禽現況報告：韓國	Country report: South Korea
09:00-09:30	灰面鵟鷹與遷徙猛禽現況報告：泰國	Country report: Thailand
10:00-11:20	地方保育行動分享	Sharing of local conservation actions
11:20-11:35	亞洲灰面鵟鷹守護宣言	The Declaration of the Grey-faced Buzzard conservation
11:35-12:00	下屆主辦交接儀式	Handover of the host country
12:00	大會閉幕	Closing ceremony



Opening Performance

開幕表演

光影戲 風起鷹揚 滿州國小

成立於 1905 年（明治 38 年），前身為恆春國語傳習所的豬勝東分教場，僅供原住民學童學習日語之學校，創立於 1896 年（明治 29 年），至今已經擁有百年歷史。滿州國小一直積極推動環境教育和人文特色課程，並設立多元的社團，如扯鈴、月琴、直排輪和等，以實現自然友善的學校願景，並培養學生對自然的熱愛。

在本次會議的開幕典禮中，滿州國小將精彩呈現「風起鷹揚」光影戲。這部戲劇的情節改編自全校師生共同創作的同名繪本，該繪本講述了滿州人與灰面鵟鷹之間的特殊關係。故事透過孩子的視角和長輩的回憶，重新呈現了當年捕獵灰面鵟鷹的情景，以及後來居民轉變為保護灰面鵟鷹的巡守隊的故事。這本由全校師生共同編繪的繪本，見證了當地社區轉型的一段歷史，具有特殊的意義。



Photo by 墾丁國家公園管理處



Photo by 廖朝慧

Shadow Puppetry Soaring on the Wings of the Wind Manzhou Elementary School

The Manzhou Elementary School is quite historical, with a history going back over 100 years. Initially founded in 1896 as the Cilasaq Branch School of the Hengchun Language Propagation Institute. It was then established to provide Japanese language education for indigenous students. In 1905 it was re-established with its current name and education goals. Manzhou Elementary School has consistently promoted environmental education and cultural enrichment programs. It offers a diverse range of clubs, including Diabolo (Chinese Yo-yo), Yueqin (Moon Guitar), Inline Skating, and Track and Field. The school's vision is to create a nature-friendly school and cultivate students' love for nature.

During the opening ceremony, Manzhou Elementary School will present an enchanting shadow puppetry performance entitled 'Soaring on the Wings of the Wind.' The plot is adapted from a picture book of the same name, co-created by teachers and students. It tells the story of the unique relationship between the people of Manzhou and the Grey-faced Buzzard. Through the perspectives of children and the memories of elders, it tells the story of how the Grey-faced Buzzard was hunted in the past, yet over time those same people transformed into a dedicated patrol team tasked with protecting the birds. This work was created by the entire school community and documents an important piece of local history and culture.

Opening Address



林思民

理事長

社團法人台灣猛禽研究會

LIN Si-Min

President

Raptor Research Group of Taiwan

TAIWAN

開幕致詞

藉由跨國的旅行，灰面鵟鷹串起了遷移線上仰望天空的人們，也帶起了新世代的保育風潮。在繁殖地，牠們與居民的生活環境緊密結合；在遷移季節，牠們成千上萬地飛越鄉鎮與郊山，成為台灣最壯觀的自然景象。雖然過去曾是遷移路徑上重要的狩獵對象，但民眾的保育觀念有了很大的提升，讓牠們受到更多的關注。這不僅來自教育的成效，也來自居民對野生動植物資源保育的認同。2022年，《生物多樣性公約》會議訂定新的《全球生物多樣性框架》，希望在2030年之前將各國30%的陸域與海域面積納入保護。這代表未來保育的對象不只是傳統的保護區，也必須包括鄉村、城鎮、與其他的生物多樣性敏感環境；而保護者的角色，也將拓展到全球的跨國企業與消費者。串起跨國工作的遷移性猛禽，將在此之中扮演穿針引線的角色。

然而，灰面鵟鷹的威脅並未消失，人類對環境改變的速度遠超過牠們的適應能力，讓遷移路徑充滿各種挑戰。我們對灰面鵟鷹度冬環境的生態了解仍極為匱乏，也有待更多的研究來解答。藉由遷移線上喜歡猛禽的朋友集結在此，我們分享近年的研究保育成果，也希望大家凝聚共識，期待讓灰面鵟鷹與其他遷移性猛禽的保育，成為新世代的普世價值！

INTERNATIONAL SUMMIT ON GREY-FACED BUZZARD
AND MIGRATORY RAPTORS



Through their transnational migrations, the Grey-faced Buzzards have connected people across migration paths, casting their gaze skyward, and have ignited a conservation movement among the new generation. In their breeding areas, these buzzards closely intertwine with the daily lives of local residents. During the migration seasons, they fly by the thousands over towns and foothills, presenting one of Taiwan's most spectacular natural phenomena. Although once a primary hunting target along their migration routes, public conservation awareness has significantly improved, drawing increased attention to these birds. This heightened interest stems not only from educational efforts but also from residents' recognition of the importance of preserving our wildlife resources. In 2022, the Convention on Biological Diversity set forth a new Global Biodiversity Framework, aiming to bring 30% of each country's terrestrial and marine areas under protection by 2030. This means that future conservation efforts will not be confined to traditional protected areas but will also encompass villages, towns, and other biodiversity-sensitive environments. Moreover, the roles of protectors will extend to international corporations and consumers worldwide. Migratory raptors, bridging international efforts, will play a pivotal role in these endeavors.

However, the Grey-faced Buzzards still face significant threats. The speed at which humans are modifying the environment surpasses the adaptive abilities of these birds, rendering their migratory routes full of challenges. Our understanding of the wintering habitats of the Grey-faced Buzzards is still in its infancy, calling for more extensive research. Today, we are joined by friends and enthusiasts of raptors from across their migratory paths. We aim to share our recent findings in conservation research and hope to foster a consensus. Together, let's elevate the conservation of the Grey-faced Buzzards and other migratory raptors to a universally cherished value for the upcoming generation.

Opening Address



山崎 亨

主席
亞洲猛禽研究保育聯盟

YAMAZAKI Toru

President
Asian Raptor Research and
Conservation Network (ARRCN)

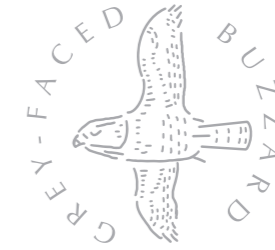
JAPAN

開幕致詞

我非常高興能在台灣舉辦第三屆灰面鵟鷹國際高峰會。我要衷心感謝台灣籌備委員會的所有成員，他們為這次有趣的高峰會盡心盡力做好準備。灰面鵟鷹的生命週期史得到了繁殖地、度冬地和遷徙中繼站的當地自然資源的支持。雖然每個地方的自然資源狀況不同，但灰面鵟鷹的生存，需要所有的資源，因為牠們全年都會使用每一項自然資源。由於每個地方的資源都是透過當地人明智使用來維持，這些地區之間的強大合作夥伴關係不僅對於保育灰面鵟鷹至關重要，也對每個地方社區的永續生產活動和文化有益。

我相信這次高峰會將為所有參與者提供寶貴的機會，彼此能夠互相激勵和鼓勵，從而為人類和灰面鵟鷹的惠益創造一個新的保育舞台。

INTERNATIONAL SUMMIT ON GREY-FACED BUZZARD
AND MIGRATORY RAPTORS



I am very happy to hold the 3rd International Summit on the Grey-faced Buzzard in Taiwan. I would like to express my heartfelt appreciation to all members of the Organizing Committee in Taiwan who have devoted themselves to preparations for this engaging Summit. The life history of the Grey-faced Buzzard is supported by local natural resources in breeding area, wintering area and stopover area. Although quality of each local natural resource is different, the Grey-faced Buzzard needs all of resources to survive, because they use every natural resource throughout the year. Since each local resource has been maintained by wise use activities of local people, the strong partnership among these areas is necessary not only to conserve the Grey-faced Buzzard but also sustainable productive activities and culture in each local community. I'm sure this Summit will provide precious opportunities for all participants to be inspired and encouraged by each other, thereby creating a new conservation stage for the benefit of both humans and the Grey-faced Buzzard.

Opening Address



陳貞蓉

副署長
內政部國家公園署

CHEN Chen-Jung

Deputy Director
National Park Service,
Ministry of the Interior

TAIWAN

開幕致詞

墾丁國家公園成立於 1984 年，是臺灣第一座國家公園，地處臺灣最南端的恆春半島，三面環海，擁有豐富且多樣的生態自然資源。由於位置及地形關係使得秋季南遷的猛禽大量匯聚於墾丁出海，每年 9-10 月可以在這裡觀賞到臺灣島內最壯觀的猛禽過境景觀。過境臺灣的猛禽當中，以灰面鵟鷹最受到關注，早期地方居民大量獵捕作為標本貿易或食用，成為牠們遷徙旅途中的一大挑戰。我們透過長年的調查研究、環境教育宣導與社區合作，配合跨單位盜獵查緝取締，公私協力共同將野生動物保育觀念深植國人心中，化為保育的行動力，如今獵捕情事已鮮少發生，並成為重要的觀光遊憩資源。然而遷移性物種的保育工作需要其繁殖地、度冬地及遷徙路線上各國家、地區合作，我們很榮幸能有這個機會主辦這次在臺灣舉辦的灰面鵟鷹暨遷徙猛禽高峰會，提供各國交流保育經驗的平台，期待能在這裡與大家一起探討亞洲各地灰面鵟鷹與遷徙猛禽的現況、保育措施和經驗，共同為生態保育做努力。

INTERNATIONAL SUMMIT ON GREY-FACED BUZZARD
AND MIGRATORY RAPTORS



Kenting National Park was established in 1984 as the first national park in Taiwan. Located on the southernmost part of the island, the Hengchun Peninsula is surrounded by the ocean, which contains abundant ecological natural resources. Due to the location and topography, southward migratory raptors flock to Kenting in large numbers during autumn. Every September to October, you can see the most spectacular raptors migrating scene in the national park. Among the migratory raptors, the Grey-faced Buzzard is the most noticeable species. In the early years, they were often hunted by the locals for specimen trade or food, which became a harsh challenge during their journey. Through years of investigation and research along with environmental education and community cooperation, we have deeply implanted the concept of wildlife reservation to our citizens by collaborating with interagency poaching investigations, public and private sectors. Nowadays, raptor hunting has been replaced by observing these raptors, which have become an important touristic and recreational resource. However, the conservation

of migratory species requires the collaboration between countries or regions through the raptors' lives and migration routes. It's been an honor to have this opportunity to host the International Summit on Grey-Faced Buzzard in Taiwan, providing a platform to exchange conservation experiences. We look forward to discuss the current conditions, conservation measures and experiences of Grey-Faced Buzzard and migratory raptors in Asia with you.

Opening Address



楊瑞芬

分署長

農業部林業及自然保育署屏東分署

YANG Jui-Fen

Branch Director

Pingtung Branch, Forestry and Nature Conservation Agency

TAIWAN

開幕致詞

林業及自然保育署是臺灣主要的自然資源管理單位，管理森林範圍佔全島面積約 42.5%。森林在減緩全球氣候變遷、維持生態平衡和確保生物多樣性上扮演著關鍵角色，將森林生態系多元服務所產生的惠益，永續、公平且合理地分享給生活在這片土地上的人，正是我們的願景與目標。猛禽象徵生態系統的重要一環，也意味著里山地區富饒的生物多樣性，我們在推動野生動物保育工作上，積極研擬瀕危物種保育行動計畫，評估瀕危絕種野生動物之族群趨勢及威脅壓力，其中包含的猛禽有熊鷹、草鴉。

2018 年開始我們推動國土生態保育綠色網絡建置計畫，透過公民科學及政府部門間的合作，成立臺灣生物多樣性資訊聯盟，進行資料整合、建構全民共享資訊平台；同時戮力串連中央山脈森林地區與濱海之間的棲地，確保生物多樣性完整，亦啟動跨政府部會協力平台、公私協力等方式，推行生態服務給付等措施，使保育工作讓民眾一同參與。而今我們由過去行政院農業委員會林務局改組為農業部林業及自然保育署，廣續運用跨部會與公私合力的方式，持續推動國土綠網、里山倡議及社區林業三合一，串聯韌性的社區並連結生態與生產地景，建立夥伴關係，凝聚地方共識。

很榮幸今日與墾丁國家公園管理處共同辦理 2023 國際灰面鵟鷹暨遷徙猛禽高峰會，增進東亞猛禽遷徙路徑上的各國家交流與合作互助，落實生態資源持續性發展與過境鳥類教育及保育行動。雖然臺灣並非聯合國成員，但我們一直積極關注國際保育議題及共同遵守國際公約。感謝致力於生態保育的大家齊聚於此。林業署屏東分署期待在這樣的場合，能和推動保育行動的夥伴，共同增進生物多樣性保育及明智永續利用自然資源，為人與自然和諧共處的願景邁進。

INTERNATIONAL SUMMIT ON GREY-FACED BUZZARD
AND MIGRATORY RAPTORS



The Forestry and Nature Conservation Agency is the primary natural resource management organization in Taiwan, overseeing forests that account for 42.5% of the island's total area. Forests play a key role in mitigating global climate change, maintaining ecological balance, and ensuring biodiversity. It is our vision and goal to share the benefits of forest ecosystems in a sustainable, fair, and reasonable way with the people who live on this land. Raptors are an important part of the ecosystem and the rich biodiversity of the Satoyama area. In promoting wildlife conservation, we have been actively working on the Endangered Species Conservation Action Plan, assessing the trends and threatening pressures on the populations of endangered species of wildlife, which include raptors such as the mountain hawk-eagle and the eastern grass owl.

Since 2018, we have been promoting the formation of Taiwan Ecological Network. Through cooperation between civic science and government departments, we have established the Taiwan Biodiversity Information Consortium to integrate data and build a shared information platform. At the same time, we have made efforts to connect habitats between the forested areas of the Central Mountain Range and the coastal areas to ensure the integrity of biodiversity. We have also initiated inter-ministerial collaboration platforms and public-private partnerships to implement measures such as payment for ecological services, so the public can participate in conservation efforts. Now that the Forestry Bureau of the Council

of Agriculture has reorganized into the Forestry and Nature Conservation Agency of the Ministry of Agriculture, we will continue to promote the three-in-one policy that combines the Taiwan Ecological Network, the Satoyama Initiative, and Community Forestry through inter-ministerial and public-private cooperation, to connect resilient communities and the ecological and production landscapes, to establish partnerships, and to build local consensus.

We are honored to co-host the 2023 International Summit on Grey-faced Buzzards and Migratory Raptors with the Kenting National Park Headquarters, to enhance exchange, cooperation and mutual assistance among countries along the migratory path of raptors in East Asia, and to implement sustainable development of ecological resources as well as education and conservation efforts for transient birds. Although Taiwan is not a member of the United Nations, we have always been mindful of international conservation issues and have abided by international conventions. We are grateful to all of you who are committed to ecological conservation for gathering here. The Pingtung Branch of the Forestry and Nature Conservation Agency looks forward to working with our partners on this occasion to promote biodiversity and the sustainable use of natural resources, and to move towards our vision of harmonious coexistence between people and nature.

Messages from the Mayors



古榮福

鄉長
屏東縣滿州鄉公所

GU Rong-fu

Mayor
Manzhou Township office,
Pingtung County

TAIWAN

地方代表的訊息

親愛的朋友們，大家好！

每年的十月，一場壯麗的自然奇觀即將上演 - 灰面鷲將過境恆春半島，牠們住宿滿州，滿州就是讚、讚、讚。過去鄉民認知神秘而美麗的候鳥們不僅是大自然的驚奇，更是我們生態保育的重要使者。

保護環境，保育生態是我們每個人的責任。這些灰面鷲在長途跋涉中，都是為了尋找更適合繁殖及人鳥共存的好地方就是蚊蟀（滿州舊名）。而我們，就是他們重要的歇息站，應該給予他們友善的歡迎和安全的環境。

因此，我們計畫未來與日本關東地區的栃木縣市貝町締結姊妹市，以促進灰面鷲保育的交流與合作。這個計畫將讓我們能夠互相學習，分享經驗，共同努力保護這些珍貴的候鳥。就像我們的朋友灰面鷲一樣，這個計畫將穿越國界，彼此聯繫，讓我們一同成為環保的先行者。我們的行動不僅將影響當地生態，也會成為更大範圍的示範，鼓勵更多人加入到生態保育的行列。

所以，讓我們一同揮動友誼的羽翼，讓愛與保護成為我們的共同語言。讓我們期待每年的十月，不僅是灰面鷲的過境，更是我們合作的盛大時刻！

謝謝大家！讓我們一起守護我們的家園，讓自然的奇跡繼續綻放。展現台灣人愛地球，愛生態，愛每一個生命！謝謝！

INTERNATIONAL SUMMIT ON GREY-FACED BUZZARD
AND MIGRATORY RAPTORS



Dear friends, welcome to Hengchun Peninsula!

Every October, a magnificent natural spectacle is about to unfold – the Grey-faced buzzards will migrate through the Hengchun Peninsula. They will find refuge in Manzhou, which is truly a fantastic place! The once enigmatic and beautiful migratory birds that the local residents used to know are not only wonders of nature but also essential messengers for our ecological conservation.

Protecting the environment and conserving ecosystems are responsibilities that each one of us bears. These great creatures embark on long journeys, seeking suitable places for breeding and coexistence between humans and birds, just like “Mhan-sut” (the former name of Manzhou). And we, are their crucial resting stop, obligated to provide them with a welcoming and secure environment.

Therefore, I plan to establish a sister city relationship with Kaichi Town in Tochigi Prefecture, Kanto Region, Japan, in the future to promote exchanges and collaboration for the conservation of these amazing angels. This project will enable us to learn from each other, share experiences, and work together to protect these precious migratory birds.

Just like our friends, the Grey-faced buzzards, this project will transcend national borders, connecting us and making us pioneers of environmental protection. Our actions will not only improve local ecosystems but also serve as a broader demonstration, encouraging more people to join the ranks of ecological conservation.

So, let us together wave the wings of friendship, transforming love and protection our common language. Let us eagerly anticipate every October, which will not only be a time for the Grey-faced buzzards' migration but also a grand moment of our collaboration!

Thank you, everyone! Let us preserve our homeland together and allow the miracles of nature to continue flourishing. Let us show the world that Taiwanese people love the Earth, cherish ecosystems, and hold each and every life dear! Thank you!

Messages from the Mayors



入野正明

町長
栃木縣市貝町

IRINO Masaaki

Mayor
Ichikai Town, Tochigi Prefecture

JAPAN

地方代表的訊息

守護灰面鵟鷹免於滅絕的城鎮——市貝

市貝獲選為環境省「重要的 500 個里山地區」之一，市貝的多多良沼是許多稀有植物物種的家園，正尋求被該鎮指定為「特別重要的里山保育區」。市貝町內灰面鵟鷹繁殖巢密度最高，該物種在日本紅皮書中歸類為易危物種。

市貝正努力實現「創建灰面鵟鷹之村綱要」，該綱要旨在以灰面鵟鷹為象徵，實現兼顧生態系保育和地方創生，透過灰面鵟鷹提供的生態系服務。去年，在「市貝零碳之村宣言——灰面鵟鷹之村」之後，我們提出了「有機之村宣言」。為了保護灰面鵟鷹免於滅絕，我們將盡最大努力復育對其繁殖至關重要的稻田，並透過市民參與來保護全球環境。

如果灰面鵟鷹滅絕，不僅將影響牠們的繁殖、過境和度冬地，還將導致全球生態系統崩解，劇烈影響人類的生存。我們致力於推出一系列具體措施，以保護灰面鵟鷹免於滅絕。

INTERNATIONAL SUMMIT ON GREY-FACED BUZZARD
AND MIGRATORY RAPTORS



Ichikai, a Town that Protects Grey-faced Buzzards from Extinction

Ichikai has been selected as one of the “500 Important Satoyama Areas” by the Ministry of the Environment, and Ta t ara swamp in Ichikai, home of many rare plant species, is seeking designation as a “Special Important Satoyama Conservation Area” by the town. Ichikai is also estimated to have the highest nesting density of the Grey-faced Buzzard (*Butastur indicus*) which is classified as Vulnerable in the Red List of Japan.

Ichikai is working towards the “Framework of creating a village for Grey-faced Buzzards,” which aims to achieve both ecosystem conservation with Grey-faced buzzards as its symbol and local promotion through the utilization of the ecosystem services it provides. Last year, following the “Declaration of Zero Carbon Town, Ichikai, the village for Grey-faced Buzzards”, we made the “Organic Village Declaration”. In order to protect the Grey-faced buzzard from extinction, we will do our utmost to restore the paddy fields that are important for their breeding and to preserve the global environment with the citizen’s participation. If Grey-faced buzzards were to go extinct, not only their breeding, stopover, and wintering grounds would be affected, but also the global ecosystem would collapse, and the survival of the human race would be severely impacted. We are committed to launching a series of concrete measures to protect them from extinction.

Messages from the Mayors



嘉数 登

副市長

沖繩縣宮古島市

KAKAZU Noboru

Deputy mayor

Miyakojima city, Okinawa Prefecture

JAPAN

地方代表的訊息

感謝各位邀請我們參加 2023 年台灣灰面鵟鷹及遷徙猛禽國際高峰會議。宮古群島是灰面鵟鷹度冬期間的棲息地，每年寒露時節有許多灰面鵟鷹來訪。因此，牠們已經成為群島歷史和文化的一部分，我們群島居民始終歡迎牠們到來。此外，多年來我們一直推動保育工作，去年還舉行了慶祝調查宮古群島上飛過的灰面鵟鷹 50 週年的儀式。這些調查與市區小學和中學合作，對於學生學習自己的文化和生物多樣性發揮重要的教育功能。此外，我們還定期舉辦樹木種植活動，以維護灰面鵟鷹度冬時的棲息地。我們將繼續推動保護、教育和研究活動，如宮古島國際灰面鵟鷹高峰會議所宣布的，以保護灰面鵟鷹和該地區的生物多樣性。

我相信今年的高峰會議將取得巨大成功，並加強進一步保護灰面鵟鷹和生物多樣性的行動網絡。最後，祝大家身體健康、幸福快樂。

INTERNATIONAL SUMMIT ON GREY-FACED BUZZARD
AND MIGRATORY RAPTORS



Thank you very much for inviting us to The International Summit on Grey-faced Buzzard and Migratory Raptors 2023 in Taiwan.

Miyako Islands are staging grounds for the Grey-faced buzzards as they overwinter, and many of them visit us every year during the cold dew season. Therefore, they have become an integral part of the islands' history and culture, and we as citizen on the islands always welcome them. Also, conservation efforts have been made for many years and last year a ceremony was held to celebrate the 50th anniversary of the surveys of counting the Grey-faced buzzards flying over the islands. The surveys are conducted in cooperation with elementary and junior high schools in the city and playing a big education role for the students to learn about our culture and biodiversity. In addition, regular tree-planting activities have been carried out to maintain the forest for the Grey-faced buzzards' resting places when they pass winter. We will continue to promote preservation, education, and research activities as declared at The International Summit on Grey-Faced Buzzard Miyakojima to conserve the Grey-faced buzzards and the biodiversity of the region.

I believe that this year's summit would be a great success and strengthen the network for further actions to protect the Grey-faced buzzards and the biodiversity.

Finally, I would like to conclude my greetings by wishing you all good health and happiness.

Messages from the Mayors



元山公知

村長
鹿兒島縣宇檢村

MOTOYAMA Akira

Mayor
Uken Village, Kagoshima Prefecture

代理人

植田 稔

副村長
鹿兒島縣宇檢村

Represented by

UEDA Minoru

Deputy mayor
Uken Village, Kagoshima Prefecture

JAPAN

地方代表的訊息

我謹代表宇檢村的居民，深感榮幸能參加在台灣屏東舉辦的2023年國際灰面鷲鷹高峰會議。我也想感謝所有參與舉辦這次高峰會議的所有人。

在過去幾年，全球經歷了新冠疫情的困難時期。然而，這段時間也可以是人們感知平凡生活中不常有的時刻。在奄美大島上，灰面鷲鷹遷徙是秋天的來臨的預告。牠高亢高昂的鳴唱聲在山地間迴響，為整個島嶼帶來一種溫和的氛圍。

我期待著擴大各市町之間的交流，最重要的是，我希望每一項有關灰面鷲鷹保育的活動都能成功。非常感謝各位的邀請。我由衷地祈禱您健康和幸福。

INTERNATIONAL SUMMIT ON GREY-FACED BUZZARD
AND MIGRATORY RAPTORS



On behalf of the people of Uken Village, I am deeply honored to attend the 2023 International Summit on Grey-faced Buzzards in Pingtung, Taiwan. And I would like to thank everyone who cooperated in holding the Summit.

In the past few years, the world has gone through a difficult time with the coronavirus. However, those times could have been the meanwhile for people to perceive what is rarely granted in standard life.

On Amami Island, migration of Grey-faced Buzzards is considered as an announcement of the arrival of autumn. Its high-pitched song spread over the mountainous land gives us a mild atmosphere across the Island.

I am looking forward to expanding the interaction between each municipality, and more than anything, I hope each conservation activity on Grey-faced Buzzards will come successfully together.

Thank you so much for inviting us. I profoundly appreciate it in prayer for your health and happiness.

Messages from the Mayors



Abraham B. BAGASIN

市長
桑切斯米拉市地方政府
Mayor
Municipality of Sanchez Mira

代理人 Represented by

Carla Pulido OCAMPO

一級觀光事務官
桑切斯米拉市地方政府
Tourism Operations Officer I
LGU Sanchez Mira

PHILIPPINES

地方代表的訊息

十多年前，我們謙遜的家鄉桑切斯米拉在灰面鵟鷹保育方面有重大進展。在當地政府的支持下，與菲律賓猛禽觀察網絡、日本和台灣的合作夥伴協會合作，進行研究和基層教育努力。

然而，要想真正看到我們的進步，必須走出舒適區，跪下來，搜尋我們居所中最黑暗的角落。這正是我們現在正在做的，我們已經揭示了在拯救菲律賓的灰面鵟鷹和其他易危物種方面的許多不便和不舒適的真相。

高談我們市政府過去的成就並沒有太多意義。我們必須看到，並接受，我們在地方研究、地方立法、打擊獵人和盜獵者的執法、資訊和教育，甚至是救援和復健傷病野生動物方面仍然有所差距。

這些真相帶來了困擾和不適，尤其是有時候感覺桑切斯米拉對灰面鵟鷹的努力似乎已經達到瓶頸，這是在全球大流行疫情使我們全部停滯不前的情況下。

但現在還不算太晚。既然我們了解了我們的灰面鵟鷹保育努力的真實狀況，我們將在方法上更加科學和以證據為基礎，我們的立法解決方案將更加詳細，我們的觀察和行動將更加警惕。

這次灰面鵟鷹國際高峰會議對我們來說是非常受歡迎的活動，讓我們重新充電並重新點燃我們在這場戰鬥中的決心。隨著桑切斯米拉準備在 2024 年主辦下一次高峰會議，我們將努力為灰面鵟鷹創建一個更加穩固的生態系——這不僅是以健全的生物多樣性為特徵的生態系統，而且還由警覺、深受教育的管理者所構成，並由以科學為基礎的立法所指導，由強大的政治意志支持。

你們，我們的合作夥伴，將成為我們的力量倍增器。我們熱切期待與你們見面。

INTERNATIONAL SUMMIT ON GREY-FACED BUZZARD AND MIGRATORY RAPTORS



More than a decade ago, our humble hometown Sanchez Mira made big leaps in the conservation of the Grey-faced Buzzard – what we call the *Sawi* in our northern territories – especially when our local government unit began partnering up with Raptorwatch Network Philippines, and eventually with our other partner associations from Japan and Taiwan in terms of research and grassroots education efforts.

But to see if we have made real progress hence, we must jump out of our comfort zones, get down on our knees, and sweep the darkest areas of our abode.

This is what we are doing right now, and we have since uncovered many inconvenient, uncomfortable truths in this fight to save the Grey-faced Buzzard and other vulnerable species in the Philippines.

There is little use crowing about our municipality's past achievements. We have to see, and accept, that we still have gaps in localized research, local legislation, law enforcement against hunters and poachers, information and education, and even in protocols for rescuing and rehabilitation of wounded wildlife.

These truths bring distress and discomfort, especially how it sometimes feels like the great beginnings of Sanchez Mira's efforts for the *Sawi*

have plateaued, beyond the worldwide pandemic that stopped all of us in our tracks.

But it is not too late. And now that we know the real state of our *Sawi* conservation efforts, we shall be more scientific and evidence-based in our methods, more detailed in our legislative solutions, and more vigilant in our observations and actions.

This International Summit for the Grey-faced Buzzard is a very welcome event for us to recharge and reignite our resolve in this fight. And as Sanchez Mira prepares to host the next one in the Philippines in the year 2024, we shall strive to create a more solid ecosystem for the *Sawi* – an ecosystem not just characterized by healthy biodiversity, but also peopled by vigilant, deeply-educated stewards, guided by science-based legislation, and propped up by strong political will.

You, our partners, shall all be our force multipliers. We eagerly look forward to meeting you all.

Messages from the Mayors

Carla Pulido OCAMPO

一級觀光事務官
桑切斯米拉市地方政府

Tourism Operations Officer I
LGU Sanchez Mira

PHILIPPINES

地方代表的訊息

灰面鵟鷹保育： 不言敗——持續為灰面鵟鷹而戰

在菲律賓的不同地區，「sawi」有不同的含義。例如，在菲律賓的塔加洛語地區，「sawi」意味著失敗、毀滅、死亡。然而，在伊洛卡諾語地區，「sawi」是指灰面鵟鷹，牠會捕食危害椰子的鞘翅目害蟲。這種甲蟲在桑切斯米拉稱為「aros-aros」和「abal-abal」。桑切斯米拉是菲律賓北部最大的椰子生產地。椰子的品種是桑切斯米拉高椰，從大小和內容來說，一直是菲律賓最大的。

據菲律賓猛禽觀察網報導，灰面鵟鷹對桑切斯米拉的椰子健全產生了積極的影響，這樣的共生關係有助於在灰面鵟鷹度冬期間，讓我們栽培椰子的條件更好，而不必使用化學農藥。

疫情爆發前，Cagayan State University 發現灰面鵟鷹的數量增加。然而，儘管有鼓舞人心的統計數據，我們不應該畫一幅關於保育努力的浪漫畫面。

在菲律賓，世界上數一數二的生物多樣性是最深植人心的特色，保育仍然是我們必須奮鬥的戰爭，特別是在我們的城鎮，桑切斯米拉。

過時的地方制度，由於 COVID-19 大流行而停止的鳥類調查，缺乏野生動物救傷協議，以及保育目標在全國和地方主管機關缺乏良好體制化。這些都是灰面鵟鷹和脆弱野生動物保育的原因，整體而言，都是一場艱苦的鬥爭。

但是決心依然存在。灰面鵟鷹不會消失。桑切斯米拉的地方政府，連同我們所有的合作伙伴，將繼續為更好的保育努力和更廣泛的教育而奮鬥，不僅在我們的社區，還在更廣闊的範圍內。

INTERNATIONAL SUMMIT ON GREY-FACED BUZZARD
AND MIGRATORY RAPTORS



HINDI MASASAWI ANG SAWI: CONTINUING THE FIGHT FOR THE GREY-FACED BUZZARD

The word “sawi” in different parts of the Philippines has differing meanings. In Tagalog-speaking territories, for one, “sawi” means to fail, perish, die. In Ilocano-speaking territories like ours, meanwhile, “sawi” is the Grey-faced buzzard, the raptor responsible for preying on a menace for coconuts: beetles, what we call the aros-aros and abal-abal in our town Sanchez Mira, a place known as one of the biggest producers of Coconut in the Philippine North. Our coconut variant, the Sanchez Mira Tall, is consistently the Philippines’ biggest in terms of size and content.

Raptorwatch Network Philippines reports that the Grey-faced buzzard contributes to the health of Sanchez Mira coconuts in this symbiotic relationship. A healthy Sawi population ensures that we have a better opportunity to grow coconuts organically, without resorting to chemical pesticides, at least for the part of the year when the Sawi migrates to our area.

The Cagayan State University recorded an uptrend in Sawi numbers before the pandemic. Yet, encouraging statistics notwithstanding, we must not paint a romantic picture of conservation efforts.

In the Philippines where biodiversity is one of the world’s most impressive, conservation is still a war we have to fight, especially in our town, Sanchez Mira.

Obsolete local laws, halted bird surveys due to the COVID-19 Pandemic, lack of protocols for wildlife rescue and rehabilitation, and the poor institutionalization of conservation goals even among law enforcement agencies of the national and local governments are among the reasons why conservation of the Sawi and vulnerable wildlife, in general, is an uphill battle.

But the resolve remains. Hindi Masasawi ang Sawi – The Grey-faced Buzzard will not perish. The Local Government of Sanchez Mira, together with all our partners, will continue the fight for better conservation efforts and broader education amongst our constituents and beyond.



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灰面鵟鷹在台灣的遷徙與 地方俗名之關聯性

The Correlation Between the Migration Route and Local Common Names of Grey-faced Buzzard Eagle in Taiwan

摘要

灰面鵟鷹在台灣擁有 15 個以上的地方俗名，也是台灣目前擁有最多地方俗名的鳥類。這些地方俗名出現的原因絕大部分都是因為地方居民為了獵捕灰面鵟鷹之便而命名。命名的原則以出現地區、特徵、習性及行為、節日、節氣及地方習俗或是傳說或事件有關。不同地方的地方俗名產生後也會伴隨產生具地方特色的獵捕文化及料理方式。

In Taiwan, the Grey-faced Buzzard has more than 15 local names, making it the bird species with the most local names in the country. The majority of these originated from how local residents would hunt the migratory raptor. Other factors related to names include the region of occurrence, characteristics, habits and behaviors, festivals, solar terms, local customs, legends, or events. Different parts of Taiwan had distinctive hunting practices and cooking methods associated with Grey-faced Buzzards as well.



Photo by 謝季恩

Country Report



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TAIWAN

灰面鵟鷹與遷徙猛禽現況報告

灰面鵟鷹保育歷程與現況

灰面鵟鷹每年春秋季過境台灣，成群遷徙及對夜棲地高度忠誠的習性，使之成為早年獵捕供食用和販售做標本的對象。經過野保法施行、長期的教育宣導、保育觀念提升和飲食習慣的改變，近年來只有非常稀少的獵捕情事發生。1989年墾丁國家公園管理處開始執行並延續至今的秋季遷徙猛禽調查結果顯示，過境灰面鵟鷹族群數量穩定且呈增長趨勢，推測日、台、菲三地的獵捕壓力減輕可能是其族群成長的主因。除此之外，救傷單位、學界與各地的賞鷹愛好者也透過衛星追蹤、氣象雷達以及觀察紀錄的交流，試圖勾勒出灰面鵟鷹遷徙行為、遷徙路徑以及生態習性更完整的面貌。聚落擴張和產業結構改變所導致的棲地劣化情形，讓台灣里山生態系面對艱困的挑戰；近年來因應全球性減碳目標而快速增設的太陽能發電場入侵森林和農漁用地、離岸風電機組設置在候鳥遷徙廊道，也是當今受到關注的保育課題，這些課題牽涉到複雜的施政方針、能源工程和生態影響，若要實際評估技術上的限制和對生態環境的影響，以及研擬將傷害減到最低的方法，各領域維持暢通的溝通和理解是現在非常重要的課題。

INTERNATIONAL SUMMIT ON GREY-FACED BUZZARD
AND MIGRATORY RAPTORS



The Conservation History and Current Status of the Grey-faced Buzzard in Taiwan

The grey-faced buzzards migrate through Taiwan every spring and autumn, their flocking migration behavior and strong fidelity to roosting sites made them targets for hunting and collecting specimens in the past. Thanks to the implementation of wildlife conservation laws, long-term educational campaigns, the elevation of conservation awareness, and changes in dietary habits, there have been only very rare instances of hunting in recent years. The ongoing migratory raptor surveys by Kenting National Park since 1989 indicate a stable and increasing population trend, possibly influenced by reduced hunting pressure across Japan, Taiwan, and the Philippines. Collaboration among NGO, academia, and enthusiasts has furthered knowledge through satellite tracking, weather radar, and observation records, shedding light on migration behaviors, routes, and ecological habits. However, Taiwan's mountainous ecosystems face challenges from habitat degradation due to changing industries and urban expansion. Rapid expansion of solar power facilities and offshore wind farms, driven by global carbon reduction goals, encroaches on

forests and farmland, and disrupts bird migration corridors. These issues involve complex policy directions, energy engineering, and ecological impacts. In order to devise methods for minimizing negative impacts, maintaining open communication and understanding among experts from various fields is a highly significant current challenge.

Country Report



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JAPAN

灰面鵟鷹與遷徙猛禽現況報告

日本灰面鵟鷹生態和保育的現況

在日本，灰面鵟鷹是里山環境的代表性猛禽，屬於里山生態系的高階消費者。灰面鵟鷹在日本屬於夏候鳥，春季時遷徙至日本各地並繁殖，除了北海道和沖繩縣。鹿兒島縣以南的地區是過境和度冬地。在度冬和繁殖季期間，牠們的主食包括蛇、蜥蜴、壁虎等爬行動物，青蛙和各種昆蟲。牠們會在三月中旬到四月初遷移到繁殖地。山區稻田是繁殖棲地，牠們偏好稻田和森林相鄰的地區。森林中面向稻田的松樹經常作為巢樹，牠們成對築巢，雌鳥平均下三枚蛋。下蛋後約一個月內孵化，孵化約 35 天後，於六月底或七月初離巢。九月中旬到十月底，灰面鵟鷹開始南遷。在日本，灰面鵟鷹的族群量急劇下降，環境省於 2006 年接旗認定為易危物種。過去，高爾夫球場、住宅區開發和道路建設對繁殖地的破壞是一大議題，但近年來，超大型太陽能和風能發電設施的建設，以及過去做為繁殖地的稻田被棄耕，成了威脅灰面鵟鷹繁殖的原因。在日本，保護灰面鵟鷹的法律體系尚未取得進展。

INTERNATIONAL SUMMIT ON GREY-FACED BUZZARD
AND MIGRATORY RAPTORS



Current status of Grey-faced buzzard ecology and conservation in Japan

In Japan, Grey-faced buzzard (GFB) is the representative raptor of satoyama and is at the top of the satoyama ecosystem. It is a summer bird that migrates and breeds in spring in all areas except Hokkaido and Okinawa Prefectures. Areas south of Kagoshima Prefecture are migratory transit and wintering areas. Throughout the wintering and breeding seasons, their staple diet consists of reptiles such as snakes, lizards, and geckos, amphibians such as frogs, and a variety of insects. They migrate to their breeding grounds around mid-March to early April. Mountain areas with rice paddies are used as breeding grounds. They prefer areas where paddy fields and forests are adjacent to each other. Pine trees in the woods facing paddy fields are often used as nesting trees, and they nest in pairs, with the female laying an average of three eggs. The eggs hatch from late May to early June, about one month after laying, and leave the nest around late June or early July, about 35 days after hatching. From mid-September to late October, they migrate south. In Japan, the population of the GFB has been drastically declining,

and in 2006 it was listed as a critically endangered species by the Ministry of the Environment. In the past, the destruction of breeding grounds by golf courses, housing complex development, and road construction was a problem, but in recent years, the construction of mega solar and wind power generation facilities and the increasing abandonment of rice paddies that used to be breeding grounds have become threats to their breeding. In Japan, there has been no progress in the establishment of legal systems to protect the GFB.

Country Report



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PHILIPPINES

灰面鵟鷹與遷徙猛禽現況報告

猛禽保育：超越界限與邊界

就像台灣一樣，菲律賓位於東亞海洋遷徙線。菲律賓是灰面鵟鷹在這個亞洲遷徙線的主要度冬地。

2013年，菲律賓猛禽觀察網在菲律賓西北呂宋省的Cagayan Province的Sanchez Mira和Pamplona發現了灰面鵟鷹的主要春季遷徙棲息地。同時還發現當地社區在這裡以傳統狩獵捕該物種。

RNP通過教育、宣傳和社區參與計畫努力阻止傳統狩獵，在保育成功上取得很大的進展。

2019年，在Sanchez Mira和Pamplona以南幾英里的呂宋島的Nueva Vizcaya發現了另一個灰面鵟鷹的春季遷徙棲息地。保育工作立即啟動，但由於COVID-19大流行而暫緩。目前保育工作已經恢復運作，希望也能停止那裡的狩獵活動。

像日本、台灣和菲律賓這樣的候鳥保育夥伴，最近聯手合作的保育工作取得了巨大成果，經過台灣的灰面鵟鷹遷徙的數量最近大幅增加。然而，日本的灰面鵟鷹數量仍在下降。

同一個遷徙線中相鄰的國家之間，灰面鵟鷹的族群數量變化不一致仍然無法解釋，而答案很可能就在我們內部，需要由我們確認並有效地解決。

遷徙物種的保育只能透過遷徙線上的人群合作努力來實現。

因此，讓我們加強國際合作，共同保育這些歸類為猛禽、世界上最令人驚奇的生物。

猛禽遷徙無國界。

INTERNATIONAL SUMMIT ON GREY-FACED BUZZARD
AND MIGRATORY RAPTORS



Raptor Conservation: Beyond Boundaries and Borders

Like Taiwan, the Philippines is located along the East Asian Oceanic Migration flyway. The Philippines is a major wintering area in this Asian flyway for the Grey-faced Buzzard (*Butastur indicus*).

In 2013 Raptorwatch Network Philippines (RNP) discovered a major spring migration roosting site for Grey-faced Buzzard in Sanchez Mira and Pamplona in Cagayan Province, Northwestern Luzon, Philippines. It was also discovered that traditional harvesting of this species was practiced there by the local community.

Efforts were exerted by the RNP to curb the practice of traditional hunting through education and awareness and community involvement programs which were largely successful.

In 2019 another spring migration roosting site for the Grey-faced Buzzard was discovered in Nueva Vizcaya, Luzon, just a few miles south of Sanchez Mira and Pamplona. Conservation efforts were forthwith started but were suspended due to the Covid Pandemic. Conservation efforts have been resumed which hopefully can stop the hunting there as well.

The recent joint and cooperative conservation efforts by flyway partners like Japan, Taiwan and the Philippines seem to have produced tremendous

results and the population of Grey-faced Buzzard migrating through Taiwan has lately been greatly increased. However, the population of Grey-faced Buzzard in Japan continues to decline.

This particular disparity in population density of the Grey-faced Buzzard among close neighbors in the same flyway is still unexplained and the answers could well be within us to determine and effectively address.

Conservation of migratory species can only be achieved through cooperative effort of migration flyway communities.

Let us therefore strengthen our effort for this international cooperation for the conservation of this most amazing creatures of the world classified as Raptors.

Raptor Migration knows no boundaries.

Country Report



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SOUTH KOREA

灰面鵟鷹與遷徙猛禽現況報告

大韓民國（以下稱南韓）在超過 50 種日行性和夜行性猛禽中，20 種繁殖猛禽的故鄉。大多數遷徙猛禽在韓國繁殖後，會遷移到東南亞度冬。大多數在韓國度冬或遷徙的非繁殖猛禽物種則在中國、俄羅斯和蒙古的北部繁殖。在這次的演講，我將統整南韓的繁殖和度冬猛禽的族群現況。也提供南韓遷徙猛禽研究和監測的最新進展，並特別關注灰面鵟鷹。我系統性地搜尋和回顧了政府機關執行的監測活動報告，以及同儕審查的研究出版物和學術論文。在過去幾年，南韓的猛禽生物學研究量減少，並且偏向某些領域（生活史觀察和獸醫科學）。監測活動主要由政府機關主導，包括韓國西北海岸所城島新成立的國家候鳥中心。灰面鵟鷹在南韓是罕見的繁殖鳥，繁殖巢和繁殖活動紀錄有限。然而，繁殖巢紀錄遍布全國，觀察數量正在增加，這可能是觀察者增加和森林生長所致。除了少數紀錄，灰面鵟鷹在南韓春季（五月）和秋季遷徙期間（九月至十月）則以過境鳥的身分出現。相較於其他主要遷徙物種如東方蜂鷹或赤腹鷹，所佔比例較小。儘管有這些觀察，南韓的灰面鵟鷹繁殖和遷徙生態仍充滿許多未知。解決如族群趨勢、分布和遷徙生態等議題，將有助於增進在地保育該物種的能力。

INTERNATIONAL SUMMIT ON GREY-FACED BUZZARD
AND MIGRATORY RAPTORS



The Republic of Korea (hereafter South Korea) is home to 20 regularly breeding raptor species among more than 50 species of diurnal and nocturnal raptors that occur in the country. Most migratory raptor species breed in Korea migrate to Southeast Asia for wintering, and most of the non-breeding raptor species that winter or migrate through Korea breeds in northern latitude regions in China, Russia and Mongolia. In this talk, I will summarize the status of breeding and wintering raptor populations in South Korea. I will also provide an update on recent advances in migratory raptor research and monitoring in South Korea with additional attention to Grey-faced Buzzards (*Butastur indicus*). I systematically searched and reviewed government-produced reports on monitoring activities conducted by public institutions, and peer-reviewed research publications and academic dissertations. The number of research on raptor biology has been declining in South Korea in recent past, and was biased toward certain fields (natural history observations and veterinary science). Monitoring activities were mostly led by government agencies, including the newly established National Migratory Bird Center at Socheong Island, located in northwestern coast of Korea. Grey-faced buzzards are rare breeders in South Korea, with limited records of nests and breeding activities. However, nesting records occur throughout the country and observations are increasing, likely due to increased observers and possible forest growth. Besides these

small number of records, Grey-faced buzzards occur in South Korea as passage migrants during spring (May) and fall migration (September-October), in a smaller proportion compared to other dominant migrants like Oriental Honey Buzzard (*Pernis ptilorhynchus*) or Chinese Sparrowhawks (*Accipiter soloensis*). Despite these observations, an extensive knowledge gap persists regarding the breeding and migration ecology of Grey-faced Buzzards in South Korea. Addressing knowledge gaps like population trends distribution, and migration ecology of Grey-faced Buzzards in South Korea would enhance our ability to conserve the species across the region.

Country Report



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THAILAND

灰面鵟鷹與遷徙猛禽現況報告

灰面鵟鷹是國際自然保護聯盟紅皮書的「無危」物種，目前的族群趨勢呈下降趨勢。牠是一種常見的冬候鳥，會在泰國各地多樹木充足的開闊棲息地出現。在泰國的秋季和春季，從最北部一直遷徙到馬來半島。但牠在馬來半島、新加坡和印尼是不常見的冬候鳥。關於灰面鵟鷹的族群規模或趨勢的數據極少。基於遷徙縮減和繁殖範圍的大小。先前的研究主要關注東亞 - 澳大利亞遷徙線中經過遠東遷徙線經由日本和台灣遷徙到菲律賓、蘇拉威西和新幾內亞度冬的族群部分。然而，目前仍然缺乏有關中國經過東南亞的大陸性遷徙族群的研究。2002 年以來，泰國一直在 Chumphon 省與當地社區建立遷徙猛禽的監測和保育工作。附近是馬來半島最狹窄的部分，稱為 Kra 地峽。大量的灰面鵟鷹納入記錄，如 2015 年在泰國曼谷東海岸的 Khao Dinsor 或亞洲之鷹山地的秋季遷徙，共有 24,007 隻，2016 年有 20,773 隻。灰面鵟鷹在秋季遷徙的高峰出現在十月的第三個星期。春季遷徙的統計在 Chumphon 省西側的 Promsri Hill 或 Khao Klai，2007 年有 15,207 隻，2008 年有 19,280 隻，灰面鵟鷹的高峰出現在三月初到中旬。持續進行的年度統計可能有助於追蹤族群趨勢、每年新生個體和遷徙的時間。未來值得將其他面向納入數據收集和分析，並研究塑造族群特定遷徙模式的因素。在收集資料之餘，公眾意識、自然教育、場地管理和保育仍然需要有效強調。

INTERNATIONAL SUMMIT ON GREY-FACED BUZZARD AND MIGRATORY RAPTORS



The Grey-faced Buzzard, *Butastur indicus* (Gmelin, 1788), is a Least Concern status (LC) by IUCN red list and current population trend is decreasing. It is a common winter visitor to well-wooded open habitats throughout Thailand, from the far north southwards throughout the Malay Peninsula during autumn and spring in Thailand. But an uncommon winter visitor in the Malay Peninsula, Singapore and Indonesia. There is very little data available on population size or trends for this species. Based on migratory concentrations and the size of the breeding range. Previous research focused on the segment of the population in the East Asian - Australasian Flyway (EAAF) that migrates through the Far East Flyway via Japan and Taiwan to winter in the Philippine, Sulawesi and New Guinea. However, there is still lack of research about the continental migrant population from China through South East Asia. Since 2002, Thailand has been establishing migratory raptor counting and conservation work with local communities in Chumphon province. Nearby is the Kra Isthmus that is the narrowest part of the Malay Peninsula. Large numbers of the Grey-faced Buzzard have been counted, such as autumn migration at Khao Dinsor or Hawk Mountain of Asia, east coast of Chumphon province by the Gulf of Thailand, in 2015 was 24,007 and 2016 was 20,773. The peak of the Grey-faced Buzzard on autumn migration occurred in the third week of October. For spring migration count at Promsri Hill or Khao Klai, west side of Chumphon province, in

2007 was 15,207 and 2008 was 19,280, the peak of the Grey-faced Buzzard occurring in early to mid-March. Ongoing annual counts could potentially help track population trends, annual recruitment and timing of migration. In future it would be worthwhile to integrate other aspects in data collection and analysis and examining factors shaping population-specific migratory patterns. Public awareness, nature education, site management and conservation also remain to be emphasized effectively alongside data-gathering.

Sharing of Local Conservation Actions



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JAPAN

地方保育行動分享

日本中部栃木縣市貝町 灰面鵟鷹保育與里山環境

灰面鵟鷹是一種在日本繁殖的遷徙猛禽，也是日本里山環境的象徵性猛禽，里山環境指的是水田、溪流和森林在一塊如馬賽克般的鑲嵌地景中共存，而且牠們是該生態系的頂級掠食者。最近，許多繁殖地區的灰面鵟鷹的族群正在下降，環境省已將此物種列為日本紅皮書中的易危物種。族群下降主要是繁殖地破壞和劣化所致。

日本中部的市貝町是灰面鵟鷹的繁殖熱點，該地擁有豐富的生物多樣性和里山環境。許多灰面鵟鷹選擇利用此地的原因是山坡上有許多水田，農業一直在這裡發展。然而，由於人口老齡化導致農民數量減少，牠們的棲息地也受到了破壞。

為了未來的灰面鵟鷹保育和里山環境做出貢獻，以農業為中心，以環保的方式振興社區至關重要。因此，設計了「創造灰面鵟鷹之村綱要」，並將「一個在以灰面鵟鷹和里山地景為基礎，實現環境和經濟活動均衡的城鎮」定為未來的城鎮願景。目前，為了實現這一目標，市政府以及市內各種組織正在進行生態系保育、觀光旅遊和充分利用里山特性的農業等工作。

在此，我介紹一下作為 Goshawk Protection Fund 地區基地的灰面鵟鷹自然學校的活動，以及市貝町「創造灰面鵟鷹之村綱要」。

INTERNATIONAL SUMMIT ON GREY-FACED BUZZARD
AND MIGRATORY RAPTORS



Conservation of the Grey-faced Buzzard and Satoyama Environment in Ichikai-Town, Tochigi Prefecture, Central Japan

The Grey-faced buzzard (*Butastur indicus*) is a migratory raptor species breeding in Japan. This species is a symbolic raptor species of Satoyama environment in Japan, where paddy fields, streams, and forests coexist in a mosaic landscape and they are the top predator in its ecosystem. Recently, their population has been declining in many parts of the breeding areas and the Ministry of the Environment has designated this species as Vulnerable in the Red List of Japan. Their population decline is mainly caused by habitat destruction/degradation in the breeding grounds.

The Grey-faced buzzard breeds in a high density in Ichikai-town, central Japan, where there is a Satoyama environment rich in biodiversity. The reason why many of them utilize this area is that there are a lot of paddy fields on hills and agriculture has been practiced there. However, their habitats have been deteriorated due to decreasing number of farmers caused by an aging population.

It is essential to revitalize the community in an environmentally sound way, centering on agriculture, in order to contribute to the conservation of Grey-faced buzzards and Satoyama environment for the future. Therefore, the “Basic framework of creating a Village for the Grey-faced Buzzard” was designed, and “a town where environmental and economic activities are balanced based on Satoyama landscape with the buzzards” was targeted as a future vision of the town. Currently, in order to

fulfill this, the town government and the various organizations based in the town are working on ecosystem conservation, tourism, and agriculture that make good use of Satoyama.

Here, I present the activities of the Grey-faced Buzzard Nature School, which is a regional base of the Goshawk Protection Fund, and “a framework of creating a Village for the Grey-faced Buzzards” in Ichikai Town.

Sharing of Local Conservation Actions

地方保育行動分享



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昔日獵人、今日解說員

昔日里德「獵人」

里德村，地處偏遠的小聚落，居民生活不便，物質取之不易，每年 10 月候鳥過境，天空成群飛舞的飛鷹蔚為奇觀，也成了居民獵捕的對象，成為補充蛋白質的來源，成為每個家庭經濟來源，因此，外界對里德的印象為「鷹的墳場」。

今日里德「解說員」

時至今日，受國際保育團體重視，我國保育政令嚴謹實施，從而社區轉型發展生態旅遊，提供就業機會，提高居民生活品質，同時激發了居民保育觀念，維持良好的生態環境資源，讓社區能永續經營。

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Once Hunters, Now Interpreters in Lide Village

Lide Village is a small and remote settlement east of Manzhou Township in Pingtung, Taiwan. In the past, residents there experienced very difficult living conditions and restricted access to resources. Every October though, the sky would fill with migrating birds. This wondrous spectacle was a hunting target for villagers since the meat served as a source of supplementary protein as well as income. Eventually Lide Village had earned itself a reputation as the “eagle graveyard”.

Things have since changed. Today, Lide Village has transformed into a community of interpreters due to a mix of growing attention from international conservation groups and rigorous implementation of national conservation policies. This has led to the development of ecotourism, providing employment opportunities and improving the quality of life for residents. It also sparked a sense of conservation awareness among the villagers, fostering the preservation of a healthy ecological environment and allowing the community to operate sustainably.

TAIWAN

Sharing of Local Conservation Actions



陳俊山

副處長

內政部國家公園署墾丁國家公園管理處

CHEN Jen-Sen

Deputy Director

Kenting National Park Headquarters,
National Park Service, Ministry of the Interior

TAIWAN

地方保育行動分享

地方保育行動—墾丁

臺灣位於東亞澳候鳥遷移路徑的重要中繼站，最南端的恆春半島是候鳥南遷飛越巴士海峽前最後的停棲地，秋冬之際可見到種類跟數量相當豐富的候鳥，成為當地居民生活及文化的一環。墾丁國家公園成立初期便開始執行遷移猛禽調查，監測猛禽過境種類、數量變化，至今已累積超過 30 年的資料。除了過境期間配合警力加強取締違法獵捕及騷擾行為之外，更與當地社區建立夥伴關係，成立巡守隊，輔導居民從獵鷹到護鷹，進行棲地巡護、環境教育解說及發展生態旅遊，共同營造友善的自然棲地環境。此外亦積極走入當地校園與社區，辦理候鳥保護相關環境教育課程及活動，傳達生態知識與觀念，提高民眾對保育的認識和尊重。在相關單位各種保育措施的推動下，恆春半島居民已經普遍具有自然生態之保育觀念，每年舉辦的「琅嶠鷹季」活動將政府機關、社區、學校、保育團體齊聚一堂，結合賞鷹及表演活動，以寓教於樂的方式將保育意識融入民眾及遊客心中，成為最具代表性之生態環較旅遊活動。

INTERNATIONAL SUMMIT ON GREY-FACED BUZZARD
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Local Conservation Action-Kenting

Taiwan is an important stopover site for migratory birds along the East Asia-Australasian Flyway. Located at the southernmost part of Taiwan, the Hengchun Peninsula is the last oasis for southbound birds headed towards the Philippines via the Bashi Channel. The birds have become part of local life and culture in the area, with residents now used to flocks of migratory birds of various species every autumn and winter. Soon after it was established, Kenting National Park began conducting migratory raptor surveys to monitor numbers and trends for species. Accumulated data now goes back over 30 years. Aside from this, in addition to cooperating with the police to clampdown on illegal hunting and harassment of transiting birds, the park staff also worked diligently to establish partnerships with local communities and created a patrol team. These efforts led residents to go from raptor hunters to raptor protectors who even do habitat patrols too. They also worked to improve local environmental education and develop ecotourism, with the goal of creating a place for people to coexist with the birds harmoniously. Park staff also go to local campuses and communities to provide environmental education courses and activities related to migratory bird protection, convey ecological knowledge and concepts, and enhance public awareness and respect for conservation. Due to the promotion of conservation measures created by the government, residents of the Hengchun Peninsula have now

generally adopted the concept of ecological conservation. The annual Jonkea Raptors Festival brings together local government, communities, schools, and conservation groups for an event featuring raptor-watching, performances, and other activities. The event makes conservation awareness both entertaining and educational, and has become a truly inspiring representation of an eco-friendly tourism activity.

Sharing of Local Conservation Actions



楊中月

自然保育科科長
農業部林業及自然保育署屏東分署

YANG Chung-Yueh

Nature Conservation Section
Section Chief
Pingtung Branch, Forestry and
Nature Conservation Agency

TAIWAN

地方保育行動分享

屏東分署保育行動摘要

林業及自然保育署屏東分署身為南部最大的土地管理者，管理森林面積含有 22.8 萬公頃，佔臺灣森林面積 13%，秉持永續森林經營、維護自然生態的信念，從環境保護、經濟發展及社會公義三方面，以建置國土生態保育綠色網絡藍圖。同時長期致力於國土保安、林地巡護、環境教育及森林育樂等工作，同時也積極投入物種監測、保護行動。近年來藉由林地巡護與保七、八大隊合作查獲非法陷阱獵捕案件，包含非法獵捕工具鳥仔踏以及紅尾伯勞 3 隻。

為了推廣並落實環境教育，我們藉由辦理宣導活動走入校園，將過境鳥類（灰面鵟鷹、赤腹鵟、紅尾伯勞等）面臨的挑戰與困境，傳達給學齡階段的學生，讓孩子們了解生物多樣性的重要並友善對待過境猛禽，促進生態環境之維護。

此外，每年猛禽過境墾丁的候鳥季，亦是恆春半島秋季重要的觀光賞鷹活動，屏東分署配合半島盛事，邀請猛禽達人分享鷹揚主題的講座、老鷹摺紙手作體驗、線上趣味漫畫及濾鏡拍照抽獎等多項活動，提供民眾無論是線上線下都能共享賞鷹遊趣，帶領著大家從不一樣的視角體驗過境猛禽飛躍山海的生命之旅。

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Pingtung Branch Conservation Action Summary

As the largest land manager in southern Taiwan, the Pingtung Branch of the Forestry and Nature Conservation Agency manages 228,000 hectares of forests, accounting for 13% of Taiwan's forested area. The Pingtung Branch upholds the belief in sustainable forest management and ecological conservation, and builds a blueprint for Taiwan Ecological Network in the three areas of environmental protection, economic development, and social justice. At the same time, our organization has long been committed to national land security, forest patrolling, environmental education, and forest recreation, while being actively involved in wildlife monitoring and protection. In recent years, our Forest Patrol Unit, in cooperation with the Eighth Division of the Seventh Special Police Corps, has found illegal traps as well as three captured Brown Shrikes (*Lanius cristatus*).

In order to promote and implement environmental education, we have been organizing awareness-raising activities in schools to convey the challenges and plight of migratory birds (*Butastur indicus*, *Accipiter soloensis*, *Lanius cristatus*, etc.). The goal is to help school-age students understand the importance of biodiversity and contribute to the preservation of the environment.

In addition, the annual migratory bird season in autumn, when raptors pass through Kenting, is also an important season for sightseeing and eagle watching on the Hengchun Peninsula. In conjunction

with this, the Pingtung Branch organizes a variety of activities, including lectures from raptor experts, origami workshops, online comic drawing, and photo lotteries, providing the public with opportunities to experience and learn more about Hengchun's raptor population and migration.

Poster Exhibitions

01.

【鷹事芬解】柴山猛禽季

1. 王惠芬
2. 陳添彥，社團法人高雄市野鳥學會

居東亞猛禽遷徙路徑的台灣，每年南遷北返數十萬隻。位於台灣西南端的柴山自19世紀中葉至今雖有鷹群被目擊/紀錄，卻未有系統性調查。故2022春過境開始自主系統性紀錄研究。柴山猛禽季調查結果出乎意料令人驚豔……

Raptors Season in Ape Hill

1. WANG Zoe
2. CHEN Tien-Yien, Kaohsiung Wild Bird Society

Kaohsiung Ape Hill (Chaishan or Monkey Mountain), located at the southwestern edge of Taiwan, where sightings of birds of prey have been recorded since the mid-19th century. As there has been no systematic investigation, we voluntarily started to survey from 2022. Surprisingly, the results of the investigation are amazing and unexpected.

海報投稿

02.

以環境教育推動跨國灰面鵟鷹保育

1. Somi Kelvin Valentine，長榮大學永續發展國際學士學位學程
2. 洪慶宜，長榮大學環境教育國際實驗學院
3. 甘玲華，長榮大學綠色大武崙推動辦公室
4. 劉蘇萱*，長榮大學綠色大武崙推動辦公室

長榮大學協同墾丁國家公園、國際珍古德協會發展多國灰面鵟鷹繪本教材教法，以串聯跨國保育行動。自2021年起，共有6國22名國際生入校推廣，3612人次學生參與學習，本項工作並以質化及量化研究評量教學成效。

Promoting Gery-faced Buzzard Conservation through Environmental Education

1. Somi Kelvin Valentine, International Program for Sustainable Development, Chang Jung Christian University
2. HORNG Ching-Yi, International College of Practice and Education for the Environment, Chang Jung Christian University
3. KAN Ling-Hua, Green DaWuLun Community Office, Chang Jung Christian University
4. LAU Sue-Xuan*, Green DaWuLun Community Office, Chang Jung Christian University

Chang Jung Christian University, in collaboration with Kenting National Park and International Jane Goodall Institute, is implementing Grey-faced Buzzard conservation education by developing multi-language green picture books and teaching methods. Since 2021, a total of 22 international tutors from 6 countries have conducted the conservation education to 3612 students. The effectiveness of the program also has been evaluated through qualitative and quantitative research.

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03.

從分享到共享：台灣猛禽回報系統

吳世鴻，農業部生物多樣性研究所

「台灣猛禽回報系統」由一群熱愛觀察和分享過境猛禽訊息的同好在2020年自發建置，統計至2022年底，已有近百位同好上傳1,714次觀察活動，共記錄猛禽23種、15,777筆、553,533隻次。

From Sharing to Collaborating: Taiwan Raptor Reporting System

WU Shih-Hung, Biodiversity Research Institute, Ministry of Agriculture

The "Taiwan Raptor Reporting System" was spontaneously established in 2020 by a group of enthusiasts who love observing and sharing information about migratory raptors. As of the end of 2022, nearly a hundred enthusiasts have uploaded 1,714 observation events, collectively recording 23 species of raptors, with 15,777 entries, and 553,533 individual occurrences.



04.

壽山國家自然公園半屏山過境猛禽調查

黃雅婷，國家自然公園管理處

壽山國家自然公園於2021年春秋兩季進行半屏山過境猛禽調查，顯示兩季過境猛禽均以赤腹鷹及灰面鵟鷹最多，過境量春季明顯比秋季多。今年(2023)調查顯示灰面鵟鷹春季過境高峰為3月下旬；赤腹鷹高峰則為4月下旬至5月初。

Shoushan National Nature Park's Migratory Raptors Survey in Banpingshan

HUANG Ya-Ting, National Nature Park Headquarters

Shoushan National Nature Park conducted a semi-annual survey of migratory raptors in Banpingshan during the spring and autumn in 2021. The results showed that the most abundant species of migratory raptors in both seasons were the "Northern Goshawk (*Butastur indicus*)" and the "Red-bellied Eagle (*Accipiter solsenis*)".

Poster Exhibitions

05.

運用公民科學監測度冬猛禽趨勢

1. 林大利*，農業部生物多樣性研究所
2. 蔡芷怡，農業部生物多樣性研究所

全球生物多樣性綱要目標於 2030 年實現自然正成長，而族群趨勢為重要基礎資訊。然而，目前的公民科學計畫中，尚未探討度冬猛禽之數量趨勢。本研究以臺灣新年數鳥嘉年華的資料，瞭解度冬猛禽的分布與族群趨勢。

Buidling population trends of wintering raptors by a citizen science project

1. LIN Da-Li*, Taiwan Biodiversity Research Institute, Ministry of Agriculture
2. TSAI Chih-Yi, Taiwan Biodiversity Research Institute, Ministry of Agriculture

The Global Biodiversity Framework aims to realise the Nature-Positive by 2030, and the population trajectories are the fundamental information. However, the citizen science projects of Taiwan have not explored the population trajectories of wintering raptor species. This study determined the spatial distribution and population trajectories of wintering raptors by the dataset of Taiwan New Year Bird Count.

海報投稿

06.

赤腹鷹的海洋遷移路徑

1. 蔡若詩*，國立嘉義大生物資源學系 / 社團法人台灣猛禽研究會
2. 呂佳家，國立嘉義大生物資源學系 / 社團法人台灣猛禽研究會
3. 蔡宜樺，社團法人台灣猛禽研究會
4. CHOI Chang-Yong, Department of Forest Sciences, Seoul National University
5. NAM Hyun-Young, School of Biological Sciences, Seoul National University

從 2016-2022 年，我們在台灣及韓國繫放並以衛星發報器追蹤了赤腹鷹，勾勒出 3 條赤腹鷹海洋遷徙線的南遷路線及 2 條北返路線。發現部份赤腹鷹會有夜間跨海飛行的行為，並且對繁殖地及渡冬地皆有忠誠度。

Migratory routes of Chinese Sparrowhawk using oceanic flyway

1. TSAI Jo-Szu*, Department of Biological Resources, National Chiayi University/ Raptor Research Group of Taiwan
2. LYU Jia-Jia, Department of Biological Resources, National Chiayi University/ Raptor Research Group of Taiwan
3. TSAI Yi-Hua, Raptor Research Group of Taiwan
4. CHOI Chang-Yong, Department of Forest Sciences, Seoul National University
5. NAM Hyun-Young, School of Biological Sciences, Seoul National University

From 2016 to 2022, we captured and tagged Chinese Sparrowhawks (*Accipiter soloensis*) in Taiwan and Korea. We revealed three southbound and two northbound oceanic migration routes. We recorded several individuals with long-distanced nocturnal ocean-crossing behavior and discovered they have high site fidelity for breeding and wintering sites.

07.

玉山國家公園塔塔加地區秋過境猛禽調查

1. 吳宜蓁，玉山國家公園管理處塔塔加管理站
2. 陳炤杰，高雄醫學大學生物醫學暨環境生物學系
3. 何紹璋，玉山國家公園管理處保育研究課

玉管處於麟趾山及自忠地區調查發現，本區位於東亞澳候鳥遷徙路線上，是赤腹鷹、灰面鵟鷹等重要候、留猛禽之過境地。其中塔塔加灰面鵟鷹每日過境量與隔日墾丁觀測量呈正相關，推論本區應位在灰面鵟鷹主要遷徙路線上，值得持續研究及推廣賞鷹解說教育。

Survey of Autumn Migration of Diurnal Raptors at Tataka Area, Yushan National Park

1. WU I-Chen, Tataka Station, Yushan National Park Headquarters (former)
2. CHEN Chao-Chieh, Department of Biomedical Science and Environmental Biology, Kaohsiung Medical University
3. HO Shao-Wei, Conservation and Research Section, Yushan National Park Headquarters

Mt. Linzhi and Zizhong at Tataka area are important stopover sites on the East Asian-Australasian Flyway for raptors like Chinese sparrowhawks (*Accipiter soloensis*) and Grey-faced buzzards (*Butastur indicus*). The annual survey conducted by Yushan National Park Headquarters shows a positive correlation between the number of Grey-faced buzzards observed at Tataka and Kenting, suggesting that the Tataka area is on the main migratory flyway. The results also highlight the need for further research and the potential of Tataka as an important educational venue for hawk-watching.

08.

猛禽過境熱點—禮納里

1. 柯建興，交通部觀光署茂林國家風景區管理處
2. 何秀玲，交通部觀光署茂林國家風景區管理處

每年春、秋二季大量猛禽（赤腹鷹、灰面鵟鷹）過境至南方度冬，禮納里部落剛好是過境中繼站，茂管處藉由賞鷹系列活動，結合部落解說人員辨識猛禽生態知識及部落產業市集行銷活動推廣，頗受遊客及當地部落居民好評，成為屏北轄區新興旅遊賞鷹景點，未來也將朝生態觀光與部落產業結合的方式持續辦理。

Raptor Transit Hotspot-RINARI

- KO Chien-Hsing, Maolin National Scenic Area Headquarters, Tourism Administration, MOTC
HE Siou-Ling, Maolin National Scenic Area Headquarters, Tourism Administration, MOTC

During the Spring and Autumn migration seasons, the mountain area of Kaohsiung-Pingtung is a popular place to view migratory Raptors like Chinese Sparrow Hawk and Grey-faced Buzzard. Rinari visitor center enhances its service to help the Raptor ecologist, local environment education lectures and more importantly, the visitor center simplify the ecological information to local residents and the tourists.

Poster Exhibitions

09.

高雄市鳳山丘陵過境猛禽族群調查

1. 林經國，社團法人高雄市野鳥學會
2. 洪憲明，社團法人高雄市野鳥學會
3. 陳安佑，社團法人高雄市野鳥學會
4. 李振文，社團法人高雄市野鳥學會
5. 鄭政卿，社團法人高雄市野鳥學會
6. 陳建中，社團法人高雄市野鳥學會
7. 林昆海，社團法人高雄市野鳥學會
8. 楊玉祥，社團法人高雄市野鳥學會

鳳山丘陵位於高雄市鳳山區、大寮區及小港區之交界，高雄鳥會自 2013 起每年 3 月至 5 月期間在鳳山丘陵進行過境猛禽調查，每年春季均調查到多種遷徙性猛禽，以赤腹鷹及灰面鵟鷹最多。

Investigation on the Population of Raptors Transiting in Fengshan Hills, Kaohsiung City

1. LIN Jing-Guo, Kaohsiung Wild Bird Society.
2. HONG Hsiang-Ming, Kaohsiung Wild Bird Society.
3. CHEN An-Yu, Kaohsiung Wild Bird Society.
4. LI Zhen-Wen, Kaohsiung Wild Bird Society.
5. CHENG Cheng-Ching, Kaohsiung Wild Bird Society.
6. CHEN Jian-Zhong, Kaohsiung Wild Bird Society.
7. LIN Kun-Hai, Kaohsiung Wild Bird Society.
8. YANG Yu-Hsiang, Kaohsiung Wild Bird Society.

Fengshan Hill is located at the Northern West in Kaohsiung City. Since 2013, Kaohsiung Wild Bird Society has conducted transit raptor surveys here from March to May every year. Every spring, a variety of migratory raptors have been surveyed. Among them, Chinese Sparrowhawk and Grey-faced Buzzard are the most common.

海報投稿

10.

風起鷹揚

屏東縣滿州鄉滿州國民小學師生

滿州有豐富的自然生態，有好聽的滿州民謠，有純厚善良的居民，如果能讓孩子把這裡的故事寫下來，該是一件多麼美好的事啊！故事內容記錄滿州人從獵鷹到護鷹，從拿取到守護，希望引導讀者能更珍惜自己所擁有的美好環境，讓我們代代子孫得以永續生存。

Soaring on the Wings of the Wind

Students and Faculties of Manzhou Elementary School, Manzhou Township, Pingtung

Manzhou boasts a rich natural ecology, captivating Manzhou folk songs, and kind-hearted residents. How wonderful it would be if children could capture the stories of this place in writing! The stories would chronicle the journey of the Manzhou people from hunting the Grey-faced Buzzards to protecting them, from taking to guarding. We hope to guide readers to cherish the splendid environment they possess, enabling our future generations to thrive sustainably.

INTERNATIONAL SUMMIT ON GREY-FACED BUZZARD AND MIGRATORY RAPTORS

11.

觀音觀鷹

1. 處長方正光，交通部觀光署北海岸及觀音山國家風景區管理處
2. 觀音山站主任盧凡鵬，交通部觀光署北海岸及觀音山國家風景區管理處
3. 遊憩課課長翁子涵，交通部觀光署北海岸及觀音山國家風景區管理處
4. 遊憩課專員鐘文君，交通部觀光署北海岸及觀音山國家風景區管理處

觀音山是北台灣觀察遷徙猛禽的絕佳地點，其中又以「赤腹鷹、灰面鵟鷹、鳳頭蒼鷹、大冠鷲」等觀音四秀最富盛名，本處從民國 92 年起舉辦「觀音觀鷹活動」，並於 109 年成立首座以猛禽教育為主題展館，希望能透過館內豐富的猛禽介紹，讓大常常來訪觀音山，享受山海之間的自然氣息。

HAWK-WATCHING ON GUANYINSHAN

1. Director FANG Cheng-Kuang, North Coast and Guanyinshan National Scenic Area Headquarters, Tourism Administration, Ministry of Transportation and Communications
2. SpecialistandChiefofGuanyinshanAdministrationCenter LU Fan-Peng, North Coast and Guanyinshan National Scenic Area Headquarters, Tourism Administration, Ministry of Transportation and Communications
3. Chief of Recreation Division WENG Tzu-Han, North Coast and Guanyinshan National Scenic Area Headquarters, Tourism Administration, Ministry of Transportation and Communications
4. Specialist CHUNG Wen-Chun, North Coast and Guanyinshan National Scenic Area Headquarters, Tourism Administration, Ministry of Transportation and Communications

12.

從 eBird Taiwan 尋找遷徙猛禽

1. 邱承慶，社團法人中華民國野鳥學會
2. 潘森識，社團法人中華民國野鳥學會

本報告彙整近年 18 種遷徙猛禽的 eBird 紀錄，得以對照各物種的遷徙高峰期，包含發現田寮洋為遷徙猛禽多樣性最高的地區；對比春秋過境期豐度地圖後，發現兩期遷徙猛禽的過境總量與空間分布有明顯的差異。

Understanding Migratory Raptors Through the Use of eBird Taiwan

1. CHIU Chen-Ching, Taiwan Wild Bird Federation
2. Scott PURSNER, Taiwan Wild Bird Federation

Drawing on eBird data from 2018-2023, this report looks at the migration times and abundance of 18 migratory raptor species in Taiwan. Comparing spring and autumn maps reveal distinctive numbers and spatial patterns.

Guanyinshan is an excellent place for raptor watching in northern Taiwan, with a great variety found here. Because of this, the popular Hawk-Watching Guanyinshan event has been held here since 2003. Exhibition Hall staff and volunteers have worked hard to promote local ecological tourism using birds of prey. We hope that through introducing raptors and their ecology, you can gain a better understanding of Guanyinshan and its environment, as well as a deeper appreciation for nature.

Poster Exhibitions

13.

日本中部栃木縣市貝町統谷地區之環境保育工作

1. 高德則夫，統谷社區發展協會
2. 關澤昭，統谷社區發展協會

為了保護未來的地方環境，統谷社區發展協會致力於水田的管理和里山生態的保護。廢棄的水田被重新復興並灌滿水。現在，灰面鵟鷹能夠在這些環境中捕食。

Conservation Efforts on Local Environment for the Future in the Tsuzukiya District of Ichikai-Town, Tochigi Prefecture, Central Japan

1. TAKATOKU Norio, Society of Tsuzukiya Community Development
2. SEKIZAWA Akira, Society of Tsuzukiya Community Development

In order to conserve nature in Ichikai-Town, the Society of Tsuzukiya Community Development works on the management of paddy fields and the conservation of the ecosystem in Satoyama. The abandoned paddy fields were revived and filled with water. Now, the Grey-faced buzzards are able to hunt in these environments.

海報投稿

14.

宮古島市伊良部島重新造林以保護灰面鵟鷹的棲息地

1. 仲地邦博，宮古野鳥協會
2. 出島誠一，日本自然保護協會

位於日本沖繩縣宮古島市的伊良部島，是日本灰面鵟鷹的最大過境地。但因島內森林覆蓋率下降，和外來種植物的強勢擴張，造成棲地正在惡化。因此，我們設法與政府、企業，還有當地學校合作進行造林工作來因應。

Reforestation on Irabu Island, Miyakojima City to conserve habitat for the Grey-faced buzzard

1. NAKACHI Kunihiro, Wild bird society of Miyako
2. DEJIMA Seiichi, The Nature Conservation Society of Japan

Irabu Island, Miyakojima City, Okinawa Prefecture, is the largest stopover site for the Grey-faced buzzard in Japan. However, because of declining forest coverage and the overgrowth of an invasive species, the habitat of Grey-faced buzzards is deteriorating.

Therefore, we are working on reforestation in cooperation with the government, companies, and local schools.

INTERNATIONAL SUMMIT ON GREY-FACED BUZZARD AND MIGRATORY RAPTORS

15.

神崎町之灰面鵟鷹繁殖調查

1. 出島誠一，寺田本家 株式會社；日本自然保護協會
2. 村石健一，寺田本家 株式會社

透過了解灰面鵟鷹在神崎町的繁殖分布，以及支撐其生存的生物多樣性，我們可以明確知道，維持與修復山谷間現存水田的價值所在。

Survey results of Grey-faced buzzard breeding in Kanzaki Town

1. DEJIMA Seiichi, Terada Honke Co., Ltd. The Nature Conservation Society of Japan.
2. MURASHI Kenichi, Terada Honke Co., Ltd.

By grasping the breeding distribution of Grey-faced buzzards in Kanzaki-cho and the biodiversity that supports it, we clarify the value of maintaining and restoring existing rice paddies in valleys.

16.

奄美大島灰面鵟鷹度冬族群之全島調查

永井弓子，奄美野鳥協會

2021年11月，我們與島內外的自然保育團體合作，對在奄美大島度冬的灰面鵟鷹，進行了全島性的普查。根據調查的結果，推估在奄美大島度冬的灰面鵟鷹族群可能有超過 2,000 隻。

Results of an Island-wide Survey of the Overwintering Population of Grey-faced Buzzard on Amami Oshima Island

NAGAI Yumiko, Amami Ornithologists' Club, Japan

In November 2021, in cooperation with nature conservation groups on and off the island, an island-wide population count survey of the wintering Grey-faced Buzzard on Amami Oshima was conducted. Based on population count data in some areas of the island, it was estimated that more than 2,000 Grey-faced Buzzard were wintering on Amami Oshima.

2023 年 國際灰面鵟鷹高峰會守護宣言

2023 International Grey-faced Buzzard Summit Conservation Declaration

鳥類的飛行無國界。藉由跨國的旅行，灰面鵟鷹串起了遷移線上仰望天空的人們；藉由盤旋而上的力量，灰面鵟鷹帶起了新世代的保育風潮。

灰面鵟鷹是里山環境的象徵。在繁殖地，牠們與居民的生活環境緊密鑲嵌；在遷移季節，牠們成群飛越鄉鎮與郊山，成為最壯觀的自然景象。

牠們曾經是遷移路徑上重要的蛋白質來源，牠們的標本成為櫥窗中的工藝品。如今，攝影機的快門聲取代了過去的槍聲。藉由社群媒體，遷移路徑上的鷹友們將鷹群抵達的消息上傳。牠們受到更多的民眾關注，也凸顯公民科學在研究上的重要性。2022 年，《生物多樣性公約》會議訂定新的全球生物多樣性框架，不僅將棲地保護的概念由傳統的保護區擴展到鄉村與城鎮，也將保護者的角色拓展到全球的跨國企業與消費者。生物多樣性的保育將會是新世代的普世價值，而串起跨國工作的遷移性猛禽，更將在其中扮演穿針引線的角色。

然而，灰面鵟鷹的威脅並未消失。各種開發工程正逐漸蠶食遷移路徑上的夜棲地，而海岸與稜線上佇立的風力發電設施，也讓遷移路徑充滿挑戰。目前我們對灰面鵟鷹的度冬環境尚未了解，未來仍有待更多的研究來了解牠們的生態需求。

本次會議延續過去的傳統，將持續推動灰面鵟鷹與其他遷移性猛禽的永續生存。基於以上立基，我們宣告：

1. 我們將藉由跨國性的合作，促進灰面鵟鷹的研究、教育與保育，以保障其永續生存。
2. 基於生物多樣性公約 30 × 30 的概念，我們將推展更多繁殖區、遷移區與度冬區的棲地保護工作。
3. 基於里山環境的對灰面鵟鷹的重要性，我們支持生態友善的農業、林業、工商業和旅遊。
4. 我們主張強化任何與遷移性猛禽及其棲地保育相關的法律規範，並尋求各國政府和國際組織的合作與支持。

2023 第三屆灰面鵟鷹高峰會所有與會人員

2023 年 10 月 14 日，墾丁國家公園，台灣

Birds traverse the skies, unfazed by political boundaries. As they do, they connect people, creating a bond of inspiration and shared dreams amongst those who live along their migratory path. The Grey-faced Buzzard is one such species. Just as it makes its characteristic upward spiral ascent, so has it kindled a new generation of conservation.

The Grey-faced Buzzard symbolizes the ideals of 'Satoyama', or a harmonious agricultural ecosystem where humans coexist with nature. This can be exemplified in how they seamlessly integrate themselves into local communities during the breeding season and create natural and anticipated spectacles as they fly over towns and countryside mountains in groups during the migration season.

In days past, their migration also meant something else to local people, the arrival of a treasured source of protein. Later, their value shifted as specimens were sought after for home display, a sign of power, stamina, and grace. Today, the click of cameras has replaced the sound of gunshots. Through social media, bird enthusiasts update their friends, family, and communities of the arrival of the birds. This has led to more public attention surrounding raptor migration and emphasizes the significance of citizen science in research. Meanwhile, in 2022, the Convention on Biological Diversity established a new Global Biodiversity Framework, not only expanding the concept of habitat conservation from traditional protected areas to rural and urban areas, but also broadening the definition of nature protectors to include multinational corporations and consumers worldwide. Biodiversity conservation will be a universal value for the next generation, and migratory raptors will play a pivotal role in bringing together this global effort.

However, threats to the Grey-faced Buzzard remain. Development projects are gradually encroaching

upon their migratory roosting sites and wind turbines installed along coastlines and ridgelines present new challenges as well. Human understanding of their wintering sites still remains limited as well, highlighting the necessity for further research of their ecological needs.

In continuing with past tradition, participants of this conference will continue to promote the conservation of the Grey-faced Buzzard and other migratory birds of prey.

It is based on the aforementioned principles that we declare on this day:

1. Through international cooperation, we will promote research, education, and conservation of the Grey-faced Buzzards to ensure their survival for generations to come.
2. Based on the Convention on Biological Diversity's 30 × 30 concept, we will promote habitat protection in more breeding, stopover, and wintering areas.
3. Recognizing the vital significance of 'Satoyama' or traditional rural landscapes for the Grey-faced Buzzard, we endorse eco-friendly practices in agriculture, forestry, industry, and tourism.
4. We advocate for the strengthening of all legal regulations related to the conservation of migratory raptors and their habitats, and actively seek the collaboration and support of national governments and international organizations to do so.

All participants of the 3rd International Grey-faced Buzzard Summit 2023

2023/10/14, Kenting National Park, Taiwan

國際灰面鵟鷹暨 遷徙猛禽高峰會

INTERNATIONAL SUMMIT ON
GREY-FACED BUZZARD AND
MIGRATORY RAPTORS

指導單位

內政部國家公園署

Advisory

National Park Service, Ministry of the Interior

Organization

農業部林業及自然保育署

Forestry and Nature Conservation Agency, Ministry of Agriculture

主辦單位

國際灰面鵟鷹 2023 台灣大會實行委員會

Organizers

Executive Committee of International Summit on Grey-faced Buzzard in Taiwan

內政部國家公園署墾丁國家公園管理處

Kenting National Park Headquarters, National Park Service, Ministry of the Interior

農業部林業及自然保育署屏東分署

Pingtung Branch, Forestry and Nature Conservation Agency, Ministry of Agriculture

台灣猛禽研究會

Raptor Research Group of Taiwan

協辦單位

屏東縣政府

Co-organizers

Pingtung County Government

屏東縣滿州鄉公所

Manjhou Township office, Pingtung County

內政部國家公園署玉山國家公園管理處

Yushan National Park Headquarters, National Park Service, Ministry of the Interior

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North Coast and Guanyinshan National Scenic Area Headquarters,

Tourism Administration, MOTC

交通部觀光署茂林國家風景區管理處

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農業部生物多樣性研究所

Taiwan Biodiversity Research Institute, Ministry of Agriculture

社團法人中華民國野鳥學會

Taiwan Wild Bird Federation

社團法人彰化野鳥學會

Wild Bird Society Of Changhua

國立屏東科技大學

National Pingtung University of Science and Technology

國立嘉義大學

National Chiayi University

長榮大學

Chang Jung Christian University



Photo by 曾建偉



國際灰面鵟鷹暨
遷徙猛禽高峰會

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