

**Report on the 13th ARRCN Symposium held in Taiwan**

Kim-Chye Lim



The Asian Raptor Research & Conservation Network (ARRCN) is a membership-based non-profit organisation concerned with the study and conservation of Asian raptors. Based in Japan, its membership is open to scientists as well as raptor enthusiasts. ARRCN meets every two years during a symposium hosted in turn by member countries. Malaysia hosted the 5th symposium in October 2005 and 12th symposium (online due to pandemic) in January 2022. The 14th symposium is scheduled for

2027 in Nepal. More information on ARRCN can be accessed on its website: <https://www5b.biglobe.ne.jp/~raptor/arrcn.htm>

The 13th ARRCN Symposium was held in Taipei, Taiwan from 26 – 28 April 2025. The event had 3 keynote lectures, 53 oral presentations and 32 poster displays and attracted 323 participants from 16 countries.

Abstracts of the keynote addresses and oral presentations can be accessed from the link below: <https://drive.google.com/file/d/1DqJwL3q2dl40OTIYWaDUmBqvrATWKJLA/view?usp=sharing>

The following is a list of the papers and posters presented during the conference.

Keynote addresses:

- Trained Raptors in Field Research: A Novel Approach to more Informed Conservation of Predator and Prey - Clint W. BOAL (USA)
- Connecting Stories, Resources and Generations: Building Long-term Strategies and Capacity for Asian Raptor Conservation – Chong Leong PUAN (Malaysia)
- Mountain Hawk-Eagle, a Feathered Hundred Pacer, in Taiwan - Yuan-Hsun SUN (Taiwan)

Raptor conservation country reports were read out by country representatives from Taiwan, Japan, Republic of Korea, Philippines, Malaysia, Singapore, Indonesia, Austral-Pacific Region and Nepal.

Oral presentations:**1. Migratory Raptors**

- Breeding Home Range and Habitat Use of the Chinese Sparrowhawk (*Accipiter soloensis*) in Korea – Jongbin GO
- Testing Niche Conservatism in the Grey-Faced Buzzard (*Butastur indicus*), a Migratory Raptor Species Breeding in Korea – Hyeok-Jun CHOI
- Loop Migration of the Chinese Sparrowhawk (*Accipiter soloensis*) along the East Asian Flyway – Jo-Szu TSAI
- Long-Term Monitoring of Migratory Raptors in Taiwan: Population Trends and Conservation Implications – Yi-Hua TSAI

- A Note on Annual Raptor Migration Watch at Mt. Segha, Bali, Indonesia – Luh Putu Eswaryanti Kusuma YUNI
- A Framework for Setting Global and Regional Raptor Conservation Priorities – Evan BUECHLEY

2. Resident Raptors

- Breeding Ecology of Flores Hawk-eagle (*Nisaetus floris*) in Ende Regency, Flores, Indonesia – Oki HIDAYAT
- Monitoring of Reproductive Performance of Javan Hawk Eagle (*Nisaetus bartelsi*) in the Rehabilitation Center Using CCTV – Wardi SEPTIANA
- Model Choice for Habitat Prediction of Vulture Species Studied in Northern India – Radhika JHA
- Nestling Diet of Black Kites (*Milvus migrans*) across different Nesting Habitats in Southern Taiwan – Yun-Chieh HUANG
- Landscape influence on diet composition of Australasian Grass-Owl (*Tyto longimembris*) in Southern Taiwan: Insight from pellet analysis – Chih-Yi LU
- The Central Sierra Madre Expeditions and the Discovery of the First Active Philippine Eagle Nest in Mt. Mingan, Luzon Island, Philippines – Rowell L. TARAYA

3. Raptors and Humans

- Using Artificial Perches for Raptor Monitoring and Promoting Ecological Farming – Shiao-Yu HONG
- A Cultural Keystone Species Undergoing Overexploitation-Ethnobiology of the Mountain Hawk-Eagle for the Paiwan People in Taiwan – Yung-Kun HUANG
- Navigating an Urban Matrix - Home Range and Resource Use of Resident Raptors in Singapore – Malcolm Chu Keong SOH
- A Study on the Perception and Tolerance of Malaysians Towards Barn Owls (*Tyto javanica javanica*) – Shakinah RAVINDRAN
- Factors Affecting the Use of Artificial Perches by Black-winged Kites – Le-Yun CHEN
- Discussing Stakeholders' Perspectives towards Existing Payment for Ecosystem Services Schemes in Taiwan, Taking Raptor Conservation for example – Chung-Ping KUO

4. Population Ecology

- Population Expansion and Adaptation to Suburban Habitats of the Black Eagle in Taiwan – Wen-Horn LIN
- Satellite Tracking and Habitat Use of Australasian Grass-Owl – Jo-Szu TSAI
- Assessing Population Trends of the Mountain Hawk-Eagle in Taiwan Using Occupancy Modeling – Lee-Lien WANG
- Estimating the Population Size of Crested Honey Buzzards (*Pernis ptilorhynchus orientalis*) Using the Photographic Mark-Resight Method in Yangmingshan, North Taiwan – Yi-Hua TSAI
- The Populations of Only Two Breeding Raptor Species of Taiwan Have Grown in Recent Decades – Da-Li LIN
- Invasive Species as Breakfast: Predation on the Giant African Snail (*Lissachatina fulica*) by the Crested Serpent-Eagle (*Spilornis cheela*) – Yu-Cheng HSU

5. Raptor Conservation

- Raptor Conservation in northern Southeast Asia – Tulsi R. SUBEDI
- State of the World's Raptors: Indonesia – Zaini RAKHMAN
- Investigating the Importance of Glass Collision Injuries in Raptors: A Retrospective Analysis of Raptor Rescue Cases from 2017 to 2024 in the Raptor Rehabilitation Station in Taiwan – Ling-Min WANG
- Projected Impacts of Climate Change on Raptor Distributions: A Case Study of the Migratory Oriental Honey-Buzzards and the Endemic Javan Hawk-Eagle in Indonesia – Syartinilia
- Slender-billed Vultures: Projected Future in Asia Based on Climate Change and Distribution Modelling – Kaushalendra Kumar JHA

6. Acoustics and Genetics

- Assessing Vocal Activity Pattern of Crested Serpent-Eagle (*Spilornis cheela malayensis*) in a Lowland Forest in Peninsular Malaysia: A Pathway for Long-term Monitoring of Tropical Raptors – Amirul Mukminin Shamsul MIZA
- Collared Owlet Moonlit Songs: Vocalization Patterns under Lunar Cycle Dynamics – Shih-Hung WU
- Seasonal Activity Patterns of the Australasian Grass-Owl (*Tyto longimembris*) Revealed Through Passive Acoustic Monitoring – Chia-Hao CHANG
- DNA-based dietary analysis and evaluation of sampling methods for The Japanese Mountain Hawk-Eagle during the nestling period – Hiromichi ICHINOSE
- Conservation Genetic/Genomic Analyses of the Mountain Hawk-Eagle – Annegret Moto NAITO-LIEDERBACH
- The Reflection of 25th Years of Conservation Efforts of Javan Hawk-Eagle (*Nisaetus bartelsi*) in Indonesia – Zaini RAKHMAN
- Neotropical Raptor Network: A Model for Raptor Conservation in the Americas – Marta CURTI
- Ecology and Conservation of Endangered Flores Hawk-eagle *Nisaetus floris* in Nusa Tenggara Island, Indonesia – Usep SUPARMAN
- Impact of Urbanization on the Nesting Materials of Black Kite Breeding in Pokhara Valley, Central-west Nepal – Sandesh GURUNG
- Twenty Years of Black Kite Conservation in Taiwan: From Scientific Monitoring to Conservation Actions – Hui-Shan LIN

7. Threats to Raptors

- The Impact of Typhoon GAEMI on Australasian Grass-Owl Along Zengwen River – Jia-Jia LYU
- I Know Places: Identifying Threats and Mapping Occurrences of the Globally Endangered South Philippine Hawk-eagle (*Nisaetus pinskeri*) Through Citizen Science Approaches – Tristan Luap P. SENARILLOS
- Raptors and Airports in Indonesia: State, Risk, and Opportunity – Raden Achmad SADIKIN
- Preliminary Study on Secondary Poisoning of Raptors by Rodenticides in Northern Taiwan – Ling-Min WANG
- Risks of avian collision at the Pokhara Regional International Airport, Nepal – Hemanta DHAKAL

Posters

- Haematology and Blood Chemistry of the Japanese Mountain Hawk-eagle (*Nisaetus nipalensis orientalis*) – Toru YAMAZAKI and *Project Team for Research and Conservation of the Japanese Mountain Hawk-eagle, Shiga, Japan*
- Conservation Genetics of Small Island Populations of the Crested Serpent-eagle in Japan – Alisa TOBE *et al*
- Catching the Winds of the World to Study and Conserve Raptors Globally - Diego MÉNDEZ *Aves Rapaces en Bolivia – Programa de Investigación, Sucre, Bolivia*
- The Role of Raptors in Zoonotic Pathogen Transmission Cycles in Northern Taiwan – y HO *et al*
- Phylogeography and Population Genetic Structure Analysis of Raptors: A Case Study of the Black Kite Subspecies (*Milvus migrans formosanus*) in Taiwan – Yu-Ho TSAI *et al*
- AI-Driven Multi-Omics Integration Identifies Genetic and Epigenetic Adaptations in Endangered Raptors Facing Urbanization and Climate Change – Rifaldy FAJAR *et al*
- Breeding Pair Turnover in Mountain Hawk-Eagles – Annegret MOTO NAITO-LIEDERBACH & Takehiko INOUE
- Population Status of the Eastern Grass Owl in Central Taiwan: A Preliminary Study – Yi-Shuo TSENG & Wei-Chia YANG
- Conservation Strategies for the Eastern Grass Owl in Pastures: Balancing Breeding Success and Forage Production – Yi-Shuo TSENG *Tainan Wildlife Conservation Group, Taiwan*
- Aging the Short-eared Owl by 15-years Banding Recoveries of Taiwan – Han CHUANG *et al*
- Territory Size of the Grey-Faced Buzzard (*Butastur indicus*) Breeding in Korea – Ye-Seung HAN *et al*
- Migratory Route of the Grey-faced Buzzards Wintering on Amami-Oshima Island, Japan – Atsuki AZUMA *et al*
- Migration Route of a Male Hen harrier *Circus cyaneus* in Taiwan – Chu-Chun HSU *et al*
- Migration of the Wintering Short-eared Owl *Asio flammeus* in Taiwan – Chu-Chun HSU *et al*
- A Technique to Attaching PinPoint GPS Tag on to Released Javan Hawk Eagle (*Nisaetus bartelsi*) – Septi Dewi CAHAYA *et al*
- Migration Routes of a Rescued Black Kite (*Milvus migrans*) along the Coast of East Asia – Hui-Shan LIN *et al*
- Tracking the Migration of the Eurasian Kestrel Using GPS Transmitters: A Case Study from a Northern Taiwan Airport – Lee-Lien WANG *et al*
- Preliminary Study on Satellite Tracking of Urban Crested Goshawks – Lee-Lien WANG *et al*
- Current Status of Crested Goshawk Banding and Color Ring Resighting Records in Northern Taiwan – Lee-Lien WANG *et al*
- Unseen Threat: Citizen Science Reveals Raptor Involvement in Bird-Window Collisions in Taiwan – Chi-Heng HSIEH
- First Account of Raptor-window Collisions Reported Through Citizen Science in the Philippines – Ezireign Joyce RAMOS *et al*
- Seasonal Trends and Age Distribution of Raptor Window Collisions in Taiwan: Insights from Citizen Science Data from 2021-2024 – Jia-Kai WANG *et al*
- Can Raptor Perches Mitigate Crop Damage from Birds and Rodents? – Chih-Yi TSAI & Da-Li LIN

- Behavioral Composition and Perch Competition of Common Bird Species on Raptor Perches – Li-Chien CHUNG *et al*
- Challenge of Cultural Preservation and Ecological Conservation: Promoting Imitated Feathers of the Mountain Hawk-Eagle – Wan-I WANG *et al*
- The Role of ESG in Grass-Owl Conservation: Industry-Academia Collaboration for Biodiversity Protection – O-Szu TSAI *et al*
- Sexual Differences in Parental Behaviour of Mountain Hawk-Eagle (*Nisaetus nipalensis nipalensis*) – Yu-Shen LU & Yuan-Hsun SUN
- Analysis of Autumn Migratory Raptors Survey in the Tataka Area of Yushan National Park from 2020 to 2024 – Wen-Jie LIN *et al*
- Shoushan National Nature Park's Migratory Raptors Survey in Banpingshan – Yu-Hsiang YANG *et al*
- Machine Learning-Driven Modelling of Prey Switching in Raptors: A Framework for Predicting Population Resilience Under Environmental Change – Prihantini PRIHANTINI *et al*
- Modelling Cognitive Disruption in Raptors Due to Urban Light Pollution: A Neural Network Approach to Conservation – Sahnaz Vivinda PUTRI *et al*

Workshop: How to effectively promote the concept of preventing bird window collisions

- Introduction to bird window collisions and the situation in Taiwan
- Bird-friendly building and glass initiatives in Taiwan
- Sharing and discussion of the situation in different countries or regions
- Low-cost methods for preventing bird window collisions, including hands-on practice

Citation: Kim-Chye Lim. (2025). Report on the 13th ARRCN Symposium held in Taiwan. *Malaysian Bird Report*. Volume 3/2025, Sept 2025: pg. 63-67.