

**VIRTUAL WORKSHOP ON MARKET SURVEYS FOR ADDRESSING ILLEGAL TAKE  
OF MIGRATORY BIRDS**

*(2 August 2023 and 7 August 2023)*

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UNEP/CMS/ITTEA2/Workshop Report

**WORKSHOP REPORT**

## WORKSHOP REPORT

### Background

At the 11<sup>th</sup> Meeting of Partners of the East Asian-Australasian Flyway Partnership (EAAFP), in Brisbane, Australia, in March 2023, the ITTEA convened jointly with the EAAFP Task Force on Illegal Hunting, Taking and Trade of Migratory Waterbirds to inaugurate activities aimed at preventing continued decline of migratory birds in the region due to illegal take. Since taking of wildlife is often a complex socio-economic issue along with a conservation issue, knowledge gaps on illegal take of migratory bird populations in the region present a major barrier to advancing the goals of combatting illegal take and providing guidance on on-the-ground conservation action. Protecting and preserving migratory birds threatened by illegal take is difficult without an updated understanding of the species, localities, and numbers of birds being taken. In service of Objective 1 of the ITTEA Programme of Work (POW)<sup>1</sup>, a technical workshop on methodology for surveying is proposed. This training aims to ensure that scientifically sound protocols are being used to collect data from markets and on net usage, and that the data are standardized across the region. These data are critical to accomplishing Objective 2 of the ITTEA POW<sup>2</sup> related to the improvement of legislative frameworks addressing illegal take.

### Understanding the importance of surveys on wildlife and food markets and netting

Market surveys are a key tool for gathering data on migratory bird species that are intentionally taken for food or caught as bycatch and provide data for estimation of relative volume and demand for those species. Similarly, surveys of nets and other traps can provide data on the trapping efforts for specific locations, allowing for estimates of relative abundance of captured species, while hunter and motivation surveys can illuminate what actions may be taken to change behaviors. These surveys are necessary for understanding the contributions of food and wildlife markets, mistnet use in agricultural landscapes, and hunter motivations to illegal take of birds (ITB). The application of market or net surveys for addressing ITB is still limited in the East Asian-Australasian Flyway (EAAF), likely due to inadequate capacity for conducting surveys. A workshop is proposed to address this skill gap, along with a better understanding of how these data can then be applied to relevant conservation policy. The aim is to provide participants with a basic understanding and resources for setting up market surveys on ITB.

### Workshop goals

- a) Introduce participants to the CMS ITTEA and its relevant mandate
- b) Equip participants with a basic understanding of market surveys, net surveys, and hunter surveys
- c) Equip participants with a basic understand of how survey data can be utilized in natural resource management policies to address challenges, specifically how they can inform understanding of the scope, motivation, and impacts of illegal take of migratory birds
- d) Provide participants with a general protocol and resources for surveying to address illegal take of migratory birds

### Meeting Summary

#### SESSION 1 (2 August 2023)

#### 1.1. Opening of the Meeting and Introduction

##### 1.1.1. Welcoming Remarks

Dr. Susan Tsang (CMS ITTEA) opened the meeting and welcomed participants to the first session of the workshop titled “Virtual Workshop on Market Surveys for Addressing Illegal Take of Migratory Birds.” Dr. Mark Carey provided some opening remarks in his capacity as Vice Chair of the EAAFP

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<sup>1</sup> Objective 1 of the [ITTEA](#) Programme of Work is “To understand the scope, scale and motivations behind illegal hunting, taking and trade of migratory birds through a situation analysis of illegal take of migratory birds in the flyway.”

<sup>2</sup> Objective 2 of the ITTEA POW is “To understand and develop national legislative frameworks on illegal taking of birds that are appropriate, effective and efficient, and to develop guidance to fill in legislative, enforcement, and sentencing gaps.”

Task Force on Illegal Hunting, Taking, and Trade of Migratory Waterbirds. Mr. Carey also represented Australia as the Chair of the ITTEA as Narelle Montgomery was not able to attend. He provided a brief overview of the importance of addressing illegal take in the region to the conservation of migratory birds and summarized how the workshop would serve to advance implementation of the joint Programme of Work.

### **1.1.2. Introduction to CMS Mandates and Initiatives Related to Illegal Taking of Migratory Birds**

A brief summary of the CMS approach and framework was presented by Tilman Carlo Schneider (CMS Secretariat). He outlined multiple initiatives and projects that the CMS Secretariat has already contributed towards in the EAAF region and encouraged participants to further engage with the CMS and ITTEA.

## **1.2. Overview – Market Surveys**

### **1.2.1. Introduction to Market Surveys**

Dr. Ding Li Yong (BirdLife International) presented some background context for the issue of illegal take in Southeast Asia and shared examples from their ground experience on market surveying. He highlighted the work that BirdLife International completed using market surveys that aimed to fill this gap and provided insight on how to address challenges that commonly arise from these efforts. BirdLife worked with teams from four countries in Southeast Asia in collaboration with local partners and colleagues: Wildlife Conservation Society Laos (Lao PDR), Nationwide Cambodia (Cambodia), BD Nature Conservation Association (Myanmar), and Viet Nature (Vietnam). The objective of the study was to get a snapshot of species diversity, what species are being traded, and relative abundance of species. Mr. Yong also acknowledged the limitations in their studies and encouraged future studies for collection of sufficient data on state of turnover, scope, and number of birds sold in varying time periods. He summarized his findings with lessons learned from these surveys.

### **1.2.2. Examples of Usage of Surveys for Bird Conservation**

In addition to the examples of market surveys provide by Mr. Yong, Rongrong Angkaew (King Mongkut's University of Technology Thonburi, Thailand) gave a presentation on her research using net surveys in agricultural and aquacultural landscapes in Central Thailand, the findings of which are reported in her published paper.<sup>3</sup> Ms. Angkaew also encouraged everyone to submit any observations of entangled birds to the iNaturalist "Tangled and Trapped" project<sup>4</sup> to provide a broader global understanding of this issue. Questions and comments for both presentations were received from the audience via chat. Vicky Jones (BirdLife International) asked what the rough proportion of vendors only selling wild birds or wildlife versus vendors selling other products, as this may have a bearing on livelihood implications of efforts to reduce trade in wild birds, to which Mr. Yong responded that it was relatively low and explained the mix of species found in a variety of shops. He stated that it may be difficult to fully capture the extent of species being hunted, and Ms. Tsang added that it may be dependent on whether the market was surveyed on the specific dates where wildlife is offered for sale. Dr. Ram Pratap Singh (Central University of South Bihar, India) mentioned that his research team has conducted a systematic study on illegal trade of birds in Assam, India and that he was interested in collaborating to further this work. Claire Papazoglou (CMS MIKT) added that the visible trade is usually inversely proportional to enforcement, and Cyprus has a long-standing monitoring program regarding nets and can provide a good estimate of birds caught illegally every year.<sup>5</sup>

### **1.2.3. Discussion of Knowledge and Technical Gaps**

Ms. Tsang opened the conversation by asking everyone to consider what are the limitations to the abilities at their respective offices or organizations that may be obstacles to doing market surveys. Mr. Yong underscored that the threat of nets as a rather widespread problem throughout Asia, and that more online surveillance studies are needed. Ms. Papazoglou added that in the Mediterranean,

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<sup>3</sup> Rongrong Angkaew, Philip D. Round, Dusit Ngoprasert, Larkin A. Powell, Wich'yanan Limparungpatthanakij, George A. Gale. 2022. "Collateral damage from agricultural netting to open-country bird populations in Thailand. Conservation Science and Practice 4(11): e12810. <https://doi.org/10.1111/csp2.12810>

<sup>4</sup> The "Tangled and Trapped" project can be found here: <https://www.inaturalist.org/projects/tangled-trapped>

<sup>5</sup> <https://birdlifecyprus.org/combating-bird-crime/surveillance-programme/>

social media is a huge issue, but legal frameworks need to be developed first to use this in prosecutions or investigations. Ms. Tsang agreed that this was something that needed to be worked on more, and that data from vendor websites need to be collected more comprehensively. Dr. Thiri Aung summarized her work in Central Myanmar on bird hunting and the cooperation between the forest department with the local conservation group to form a community patrol. Ms. Angkaew stated that in Thailand, birds are sold less frequently recently, likely due to higher levels of law enforcement, but still occurs in areas with low food security, and more research is needed to understand the commodity chain more fully.

### **1.3. Any Other Business and Closure of Meeting**

The floor was open to any other business. Ms. Tsang thanked the participants for attending and reminded everyone the time and date of the second session. She closed the meeting at 9:30 CEST.

## **SESSION 2 (7 August 2023)**

### **2.1. Opening of the Meeting and Introduction**

#### **2.1.1. Welcoming Remarks**

Ms. Tsang opened the meeting and welcomed participants to the second session of the workshop titled "Virtual Workshop on Market Surveys for Addressing Illegal Take of Migratory Birds. She provided a brief recap of the previous session and an overview of the objective of this session of the workshop.

#### **2.1.2. Participant Introductions**

Participants introduced themselves and shared what level of familiarity they have with any kind of surveying. Participants from government agencies, NGOs, and the CMS Secretariat had varying levels of experience ranging from no experience at all, a little bit of experience, and many years of experience.

### **2.2. Survey Methodology and Protocols**

#### **2.2.1. Discussion of General Best Practices for Conducting Surveys and Known Challenges**

Ms. Tsang started with an explanation of the best practices in sampling, including common terminology and methods in sampling. Mr. Yong continued providing general best practices by using his presentation from the prior session as a basis for demonstrating lessons learned when applied to commonly encountered situations.

#### **2.2.2. Examples of Past Surveys and Brief Overview of Analysis**

Dr. Dan Liang (Princeton University) presented on his large-scale net survey study of coastal areas of China that aimed to understand the level of mortality of migratory bird species affected by direct exploitation and bycatch. Mr. Liang encouraged those interested in his study sites or these data to get in touch with him directly. He also briefly explained his data analysis methodology which could be used by others interested in estimations of mortality. He then shared some general guidelines and framing for questions for creating a net survey study and encouraged others to do similar studies of direct mortalities of shorebirds in other parts of the EAAF. Ms. Tsang provided multiple examples of motivation surveys and market surveys from studies of other wildlife. To better understand how the data from these surveys are utilized to inform conservation actions, she explained Theory of Change and how these data fit into models of social behaviors and constructs.

### **2.3. Any Other Business and Closure of Meeting**

Ms. Tsang thanked the participants for attending and indicated that all the resources discussed throughout the workshop would be available via the event website. She closed the meeting at 10:00 CEST.

**Annex 1: Participants List**

<b>Representatives from Parties and Range States</b>		
Australia	Mark Carey	Department of Climate Change, Energy, the Environment, and Water, Australian Government
Indonesia	Siska Amelia Kuscintari	Forest Ecosystem Specialist, Directorate of Biodiversity Conservation of Species and Genetic, Ministry of Environment and Forestry
	Nurul Elmi Faid Suwito Utomo	Staff, Ministry of Environment and Forestry
Malaysia	Rahmah Ilias	Principal Assistant Director, Department of Wildlife and National Parks Peninsular Malaysia
	Ahmad Khusaini	Wildlife Officer, Department of Wildlife and National Parks Peninsular Malaysia
	Noraisah Majri	Conservation Officer, Sarawak Forestry Corporation
	Jenny Ngeian Anak Machau	Wildlife Officer, Sarawak Forestry Corporation
Singapore	Wivian Neo	Manager (Wildlife Management Research), National Parks Board (NParks)
	Steffi Tan	Manager, NParks
	Rekha Mohan	Manager, NParks
	Pei Shan Lee	Manager, NParks
	Li Si Tay	Manager, NParks
	Hazelina Yeo	Senior Manager, NParks
	Dajun Wang	Scientist, NParks
	Rayson Lim	Senior Scientist, NParks
	Malcolm Soh	Principal Researcher, NParks
United States	Liliana Naves	Research Analyst, Alaska Department of Fish & Game, Division of Subsistence
<b>Observers Organizations</b>		
Australian Wader Studies Group	Rosalind Jessop	Committee Member
Biodiversity and Nature Conservation Association	Thiri Dae We Aung	Executive Director
BirdLife International	Vicky Jones	Flyways Science Coordinator
	Jessica Williams	Conservation Officer
	Tohki Inoue	Senior Programme Officer, BirdLife International (Tokyo)
	Nozomu Sato	Manager, BirdLife International (Tokyo)
	Shelby Wee	Asia Conservation Officer, BirdLife International (Asia)
	Ding Li Yong	Regional Coordinator, BirdLife International (Asia)
Bird Society of Singapore	Sandra Chia	Urban Ecologist
Central University of South Bihar	Ram Pratap Singh	Associate Professor
Eotvos Lorand University	Nor Amira Abdul Rahman	Ph.D Student
EuroNatur	Ilka Beermann	Project Manager
Gadjah Mada University	Miftah Nur Fauzan	Undergraduate Student

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Hanns Seidel Foundation (Korea Office)	Minjae Baek	Project Assistant
	Mael Testud	Research Intern
Hellenic Ornithological Society	Nadia Sideri-Manoka	Species Protection Policy Officer
King Mongkut's University of Technology Thonburi	Rongrong Angkaew	Ph.D Candidate
Mahidol University	Philip Round	Associate Professor
Malaysia Nature Society	Rose Nyat Jun Au	Chairperson
	Jacelyn See	Wetlands Conservation Officer
Nature Conservation Egypt	Haitham Mossad	Conservation Director
Nature Conservation Society Myanmar	Pyae Phyo Aung	Executive Director
	Nang Phyu Phwe	Program Officer
	Thura Soe Min Htike	Conservation Officer
National University of Patagonia San Juan Bosco	Florencia Barbato	Undergraduate Student
Paulson Institute	Jianbin Shi	Advisor
Princeton University	Dan Liang	Associate Research Scholar
Pusat Riset Konservasi Gajah dan Biodiversitas Hutan	Yuri Gagarin	Administration and Finance
Swiss Ornithological Institute	Ying Chi Chan	Postdoctoral Researcher
Taiwan Wild Bird Federation	Scott Pursner	Director of International Affairs
Universidad Nacional de Mar del Plata	Josefina Fernandez	Undergraduate Student
Wild Bird Society of Japan	Seiji Hayama	Director
WWF China	Weihua Xin	Officer
<b>EAAFP Secretariat</b>		
	Kyle Esperanza Zuleta	Programme Officer
<b>CMS Secretariat</b>		
	Clairie Papazoglou	MIKT Coordinator
	Nora Weyer	Associate Programme Officer, Terrestrial Species Team
	Susan Tsang	ITTEA Coordinator
	Tilman Schneider	Associate Programme Officer, Avian Species Team