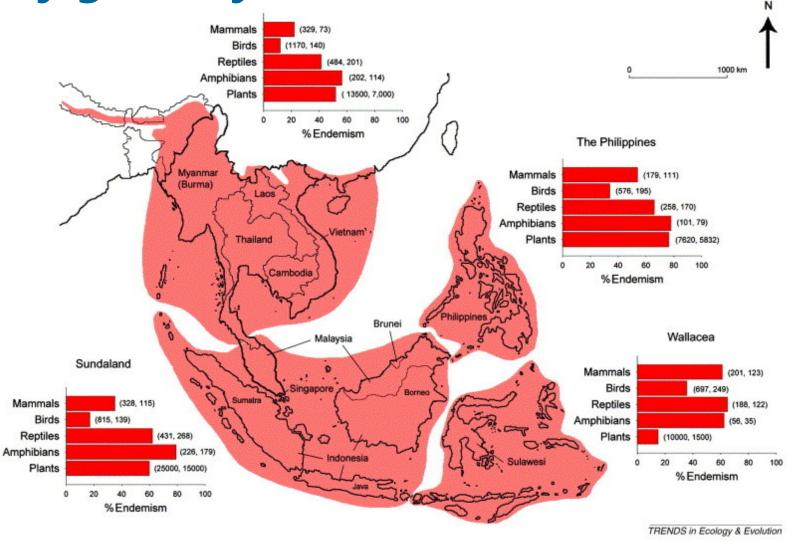


Outline

- Background on the bird hunting situation analyses in Southeast Asia
- Updates on key findings
- Updates on new publications
- Next steps for the situation analysis
 - Review of draft report
 - External review
 - Publication
- Next steps for conservation action



Southeast Asia – a region important for biodiversity globally



INTERNATIONAL

Hunting a key threat to wildlife in SE Asia

- Hunting the greatest immediate threat to Southeast Asia's biodiversity, especially vertebrates
- There is also widespread targeted hunting of high-value species
- Wildlife hunting in SEA cannot be considered sustainable
- Focus on cross-border trade is insufficient to address overexploitation of wildlife because hunting of wildlife is significant at national and local scale

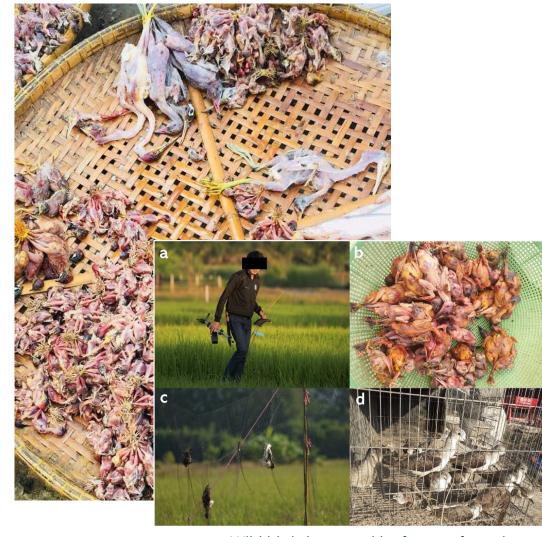


Wild meat in Indonesian markets (Source: The Straits Times)



Scale of bird hunting in Southeast Asia

- Large numbers of waterbirds taken across the region for food (and domestic trade for wild meat)
- Also large scale trapping of passerines in many parts of region (China and Southeast Asia)
- Little systematic survey of bird hunting and trade (at local level) for food and other uses





Reasons why people consume or trade wildlife in Southeast Asia

- Perceived health/medicinal value of wild meat
- Local poverty, limited livelihood opportunities
- Improved access to forests, wetlands and markets
- Improved (or cheaper) **hunting tools** (e.g. nets, snares)
- Increasingly local and regional demand for wild meat, medicinal products, and wild animals as pets
- Hunters often take common species for their own consumption, but also take rarer species opportunistically and sell surplus meat and commercially valuable parts.



We need to better understand bird hunting in Southeast Asia

- Understand the magnitude/extent of hunting and the underlying motivations
- Understand the legal dimensions and content of bird hunting
- Assess the relative impact of hunting pressure on species
- **Establishing critical baselines** for measuring impact of future conservation action.
- Form an evidence base to allow for identification of priorities and strategies to guide policy development and support government action



Objectives of situation analysis on bird hunting

- To develop an assessment and synthesis of wildlife protection and protected area legislation in each Southeast Asian country
- To identify the scale of (lethal) hunting of birds and develop a quantitative assessment of species being hunted.
- To develop road-map(s) for subsequent efforts and action plans at the national level to tackle illegal hunting and trade
 - Strengthen monitoring
 - Contribute to the work of the CMS-EAAFP Task Force on the Illegal hunting, taking and trade of migratory birds



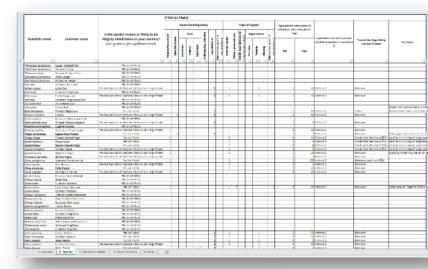
Activities under the situation analysis

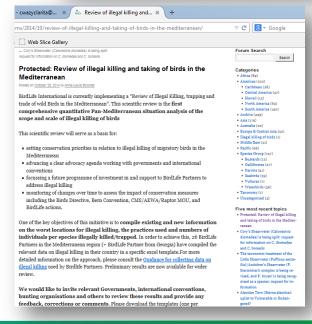
- Reviewing national legislation on wildlife protection, hunting and natural resource (NTFP) use
- Identifying current hotspots of bird hunting/sale across the country
- Field surveys of currently known hotspots of bird hunting and bird markets for wild meat
- Consultation and interviews with stakeholders (local people, site managers)
- Compiling of information from diverse data sources on bird hunting
- Provide recommendations to support government action & build road-map for future conservation intervention including advocacy, CEPA, community engagement and enforcement



Compiling data on bird hunting

- Data collected species by species
 - Minimum and maximum estimate of no. of individuals killed or taken/year
 - Reason(s) for killing/taking
 - **Type(s) of illegality involved** (protected species under national legislation, within a protected area, illegal method, etc.)
- Information on worst locations or hotspots
- Datasets available online for peer-review by external experts, feedback used for revision by national data compilers





Hunting and trapping of wild birds widespread across Southeast Asia



Hunting of birds widespread across mainland Southeast Asia

- Widespread evidence of hunting across Indo-Burma region
- More than 500 species hunted in Bangladesh, Cambodia, Myanmar, Malaysia, Vietnam, Lao PDR, Thailand
- Evidence from news reports, youtube videos on hunting, and direct survey observations
- Hunting widespread in agricultural areas where little enforcement for wildlife (e.g. paddy fields)



Estimated hunting take for shorebirds

Species	Latin	Lower	Upper
Whimbrel	Numenius phaeopus	2700	27000
Eurasian Curlew	N. arquata	900	9000
Far Eastern Curlew	N. madagascariensis	5	10
Bar-tailed Godwit	Limosa lapponica	900	9000
Black-tailed Godwit	L. limosa	900	9000
Great Knot	C. tenuirostris	900	9000
Red Knot	C. canutus	5	50
Broad-billed Sandpiper	C. falcinellus	900	9000
Sharp-tailed Sandpiper	C. acuminata	5	20
Curlew Sandpiper	C. ferruginea	900	13500
Long-toed Stint	C. subminuta	1350	11250
Spoon-billed Sandpiper	C. pygmaea	1	5
Red-necked Stint	C. ruficollis	2700	27000
Sanderling	C. alba	4500	36000
Dunlin	C. alpina	10	100
Asian Dowitcher	Limnodromus semipalmatus	100	1350
Terek Sandpiper	Xenus cinereus	1800	9000
Common Sandpiper	Actitis hypoleucos	3600	27000
Green Sandpiper	Tringa ochropus	5	50
Grey-tailed Tattler	T. brevipes	5	50
Spotted Redshank	T. erythropus	900	8100
Common Greenshank	T. nebularia	9000	45000
Common Redshank	T. totanus	3600	22500
Wood Sandpiper	T. glareola	6750	27000
Marsh Sandpiper	T. stagnatilis	4500	18000
Nordmann's Greenshank	T. guttifer	1	10



Estimates by Nguyen Hoai Bao, Nguyen Quang Hao, Yong Ding Li & Le Trong Trai

Key groups of species hunted



Shorebirds in intertidal flats and fishponds



Rails and crakes in paddy fields



Herons and bitterns in paddy fields

Passerines in paddy fields, marshes and forests

Evidence of large-scale trade of waterbirds for food



Widespread and open trading of wild birds in food markets in Vietnam (left) and Myanmar (right)



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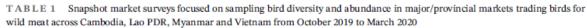
Accepted: 7 February 2022

DOI: 10.1111/csp2.12668

PERSPECTIVE



The specter of empty countrysides and wet of hunting take on birds in Indo-Burma



District (market)	Total abundance (individuals)	Identified species	Forest species	Wetland/paddy associated species	Sampling effort
Cambodia					
Kampong Cham					
Bantheay	120	8	0	7	1 day (October 2019)
Prey Veng					
Prey Veng ^a	c. 300	12	0	10	3 days (October 2019)
Lao PDR					
Bolikhamxay					
Paksan	60	5	2	3	2 days (November 2019)
Khamkert ^b	135	22	16	1	3 days (November 2019)
(Lak Sao)					
Khammouane					
Hinboun	42	12	9	1	1 day (January 2020)
Xiangkhouang					
Paek ^{b,c}	c. 10,500	20	16	3	3 Days (November
					2019)
Salavan					
Salavan	42	16	14	1	1 day (March 2020)
Champasak					
Khong	16	7	2	0	1 day (March 2020)
Myanmar					
Mandalay Region					
Mandalay ^a	143	6	0	5 ^d	2 days (October 2019)
Sagaing Region					
Monywa	122	5	0	5 ^d	3 days (October 2019)
Rakhine State					
Sittwe	4	4	0	4	1 day (December 2019)
Viet Nam					
Hanoi					
Mo Cho	188	3	0	1 ^d	1 day (October 2019)
Lang Hoa Lac	560	13	0	13	2 days (October 2019)

ligh counts of unidentified passerines, small bitterns, shorebirds (i.e. snipes), and quails (mostly de-feathered and difficult to identify).



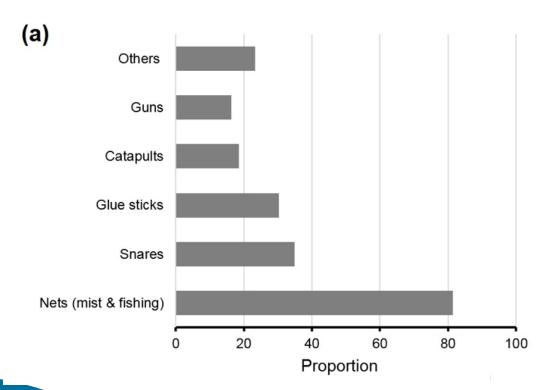
Markets known for wild meat being traded based on past surveys.

^cIncludes common snipe Gallinago gallinago, but potentially also other Gallinago species

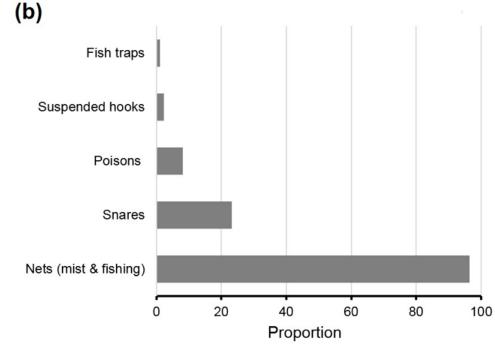
^dCounts contain high abundance of Barn Swallow *Hirundo rustica* (many de-feathered and difficult to identify) but also expected to contain other swallow species.

Type of hunting tools used

Coastal villages in Koh Kong Province (Cambodia)



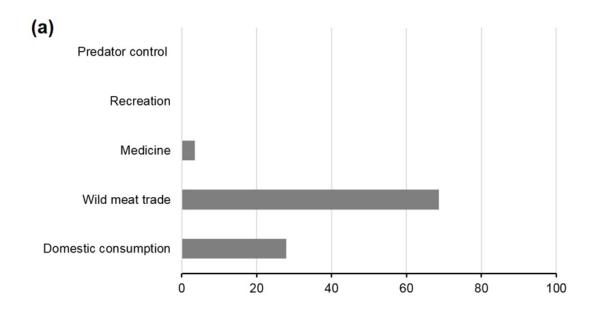
Inland villages in Bolikhamsay and Xiengkhouang (Laos)



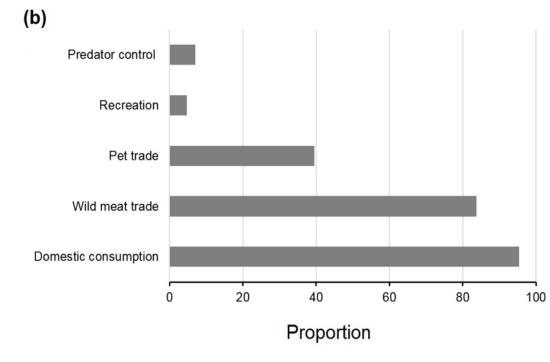


Drivers of bird hunting in two Indo-Burma landscapes

Coastal villages in Koh Kong Province (Cambodia)



Inland villages in Bolikhamsay and Xiengkhouang (Laos)



Mist-nets are easily available and widely used for hunting

Mist-nets are readily available in shops selling farming products in many parts of Southeast Asia



Mist-nets are rampantly planted along wetlands, especially fishponds and mudflats to catch birds, or destroy birds (perceived to be raiding fish farms)





Feedback of bird hunting survey findings to governments

- Myanmar
- Thailand
- Cambodia
- Vietnam
- Malaysia
- Lao PDR





In summary....

- More than 500 species affected by hunting and trapping in Southeast Asia
- Bird hunting for the wild meat trade (and domestic consumption) a major threat to species in SE Asia, especially in mainland Southeast Asia/Indo-Burma
- Little monitoring in agricultural landscapes used by many waterbird species
- Regulation of hunting tools, especially nets, important in protecting waterbird populations
- Stronger government action needed in most Southeast Asian countries, in complement with local engagement



Next steps for the situation analysis

- Draft outline of situation analysis project report with a focus on mainland Southeast Asian countries (completed, Dec 2021)
- Finalising field work and data compilation for insular SE Asia countries
- Publication of mainland Southeast Asia/Indo-Burma situation analysis (planned early 2023)
- Side event at EAAFP MOP11 (Mar 2023)
- Government consultations (ongoing)



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Situation analysis



Introduction (minds)

1.3. Bird hunting and traditions

In some parts of Southeast Asia, the trapping of migratory birds with traditional methods and tools has been long associated with local and indigenous hunting traditions. having persisted for decades across rural communities from Indonesia (Milton & Mahandi 1989, McCarthy & Noor 1996) to Indochina (Evans et al. 2000) and Myanmar (Thet Zaw Naing et al. 2017). While such hunting may not necessarily violate local regulations or national laws, species lacking legal protection are often exploited at scales that may be unsust an able in the long-term. Some of the best examples of this is the practice of trapping of large numbers of migratory birds by local people.

taking place in Distor's Pass, Nuva Equiprovince, Philippines Diopa-Ong 2010, and most set stainly dissers along set set, in Xiernjahoueng in Lao POR, bool popig continue to use variety of some after set should provide the passes to huntillage numbers of the Bars Swellow, populer inseme past of Lacia sea look deliboory (Evene et al. 2000 ser Figure 3), More workly maintand Soviewal View in the hills, the hunting of withfile is seen to be associated with the cubine of minority eitherid groups even through graphity spools may not recessary be specifically support. These thurst protections presents complex challenges for the implementation of connerwation activities.

1.4. Need for a situation analysis on bird hunting in Southeast Asia

There is an excreasing awareness of the impact of hurting or ming attory bird populations through situation assessments in Europe, the Middle East and parts of Africa (Sechet et al. 2014), and increasingly in Asia (Salor-Cajico et al. 2020). At the global level, several ming story, species have athorw of mastic population decline because of unsustainable hurting pressure Person-Higgines et al. 2017), many afreedy under pressure from habitatioss and climate changes. Recent evidence in pilipidizing the declines of Asian migratory species such as the Yellow-breasted Bunching Camp et al. 2015, Bussic Burning Erussica.

(Edenius et al. 2017), and several shorebird shorebirds (Galle-Calijao et al. 2020), linked to trapping pressure across the East Asian-Australastan Plyway, continues to provide an indication that the situation in Asia may be severe for many species, in addition, there is also in resaining information from regional and notional newspepers highlighting bird trapping at a very large scale across many parts of Asia. There is therefore a clear and urgent need for recent documentation, and a broad-scale assessment of the situation in this recion.



Figure 3

Large numbers of swallows, especially the Barn Swallow Namedo rustices, among other species, are hara-wested in northerns and PBI in Xilengikhousang Province, where they are sought after as foothy local people Evens et al. 2006; Barn Bessilova are also isoson to be trapped in large numbers in Visitnams and Cambodia for religious release and food, and at least until the 1900s in Thiddand, most famously at Blown Bloraget.



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Country sections outline

- Overview of biodiversity laws
- Summary of species hunted
- Reasons and motivations for bird hunting
- Hunting practices
- Sites for further monitoring
- Conservation recommendations

Table 2. Estimates of take of the most heavily hunted bird species in Bangladesh.

	Species	Scientific name	Lower estimate	Upper estimate	Main use(s)
	Western Spotted	Spilopelia suratensis	2,300	2,900	Food, pet bird
	Dove				trade
9	Indian Pond-heron*	Ardeola grayii	700	1,200	Recreation, food
	Northern Pintail	Anas acuta	400	1,100	Recreation, food
	Lesser Sand Plover	Charadrius mongolus	500	1,000	Food
	Lesser Whistling	Dendrocygna javanica	400	850	Recreation, food
	Duck				
	Purple Swamphen	Porphyrio indicus	350	800	Recreation, food
	Kentish Plover	C. alexandrimus	150	700	Food
	Greater Sand Plover	C. leschenaulti	150	700	Food
	Common Coot	Fulica atra	250	550	Recreation, food
	Bar-headed Goose	Anser indicus	150	500	Recreation, food
	Ruddy Shelduck	Tadorna ferruginea	200	500	Recreation, food
	*Difficult to distinguish	non-breeding pluma	ge		

Questions

