

Emerging international trade in vulnerable species of South Asian freshwater turtles

Report by Sarah Stoner

BACKGROUND

The illegal trade in freshwater turtles and tortoises for pets is widespread and is increasingly characterised as transnational, organised wildlife crime (Nijman and Stoner, 2014; Leupen, 2018). This trade poses a substantial threat to numerous species, many of which are already Critically Endangered (Gong *et al.*, 2009; Nijman and Shepherd, 2015). The demand to own live wildlife is often coupled with a desire for rarer and harder to obtain species and is particularly prevalent for freshwater tortoises and turtles as exotic pets, the latter having become one of the most threatened vertebrate groups globally (IUCN, 2018). Furthermore, freshwater turtles are one of the most desired and highly threatened chelonian groups in the world (van Dijk *et al.*, 2000).

In March 2015, the Wildlife Justice Commission (WJC), a non-profit organisation based in The Hague, Netherlands, was established with the aim of disrupting and helping to dismantle transnational criminal networks. They do this by collecting evidence and turning it into accountability by, *inter alia*, empowering mandated law enforcement agencies to tackle wildlife crime by providing actionable investigative findings that have been diligently documented. One such case, described here, set out to investigate the illegal trade in freshwater turtles and tortoises; to galvanise law enforcement action and remove enabling criminal factors. As a result, the WJC identified individual traders and organised criminal networks operating out of India and Bangladesh transporting considerable quantities of illegally obtained freshwater turtle and tortoise species through South-east Asia for sale, predominantly to markets in Hong Kong and mainland China. Malaysia featured predominantly during the investigation as a key transit country, and has historically hosted a strong pet trade, especially for species such as the Indian Star Tortoise *Geochelone elegans* (Shepherd *et al.*, 2004). Similarly, the investigation focused on the suppliers and those operating at the wholesale end of the trade chain, some of whom were known to be providing stock to many of the traders operating at Chatuchak Market, Bangkok.

INTRODUCTION

As part of the WJC's mission to disrupt and help dismantle transnational criminal networks, the WJC sought to tackle the freshwater turtle and tortoise trade in Asia, which is particularly prevalent in this region (Nijman and Shepherd, 2015). Between January 2016 and January 2018, WJC conducted "Operation Dragon" an investigation designed to support law enforcement

agencies in targeting those individuals responsible for enabling and benefiting from wildlife crime the most. This focused and closely co-ordinated investigation resulted in the arrest of 30 high-level persons of interest across Malaysia, India and Bangladesh, of which five have been given custodial sentences and one remains outstanding on INTERPOL's Red Notice. During this two-year investigation, the WJC operatives were offered and often directly sighted several species of tortoises and freshwater turtles, allowing for corroboration of species for sale. As part of the evidence collection, all such instances and the species, quantity and value of these offers were documented. During "Operation Dragon", an estimated minimum of 20,400 specimens of 16 species of tortoises (four) and freshwater turtles (12) listed in Appendix I and II of CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) were offered for sale. While this approach made it possible to quantify the scope of illegal trade, it also meant that species of concern not commonly seen on the international market could be detected.

METHODS

The WJC undertakes undercover, intelligence-led investigations and will often engage directly with traders and brokers as prospective buyers. Using intelligence and analysis of social media, the WJC identified a network of Indian males based in Chennai and Kuala Lumpur engaged in the trafficking in primarily CITES Appendix I-listed species such as Black Spotted Turtles *Geoclemys hamiltonii* and Indian Star Tortoises (Appendix II). However, the authors also detected the emergence of several other species of freshwater turtles less frequently encountered in trade during the investigation. The WJC seeks to substantiate offers of products for sale made online or via mobile messaging by arranging meetings to view the products, and to discuss purchase. All engagements with traders are recorded, transcribed and documented for evidential purposes. To contextualise investigative findings, the WJC also undertook several desktop reviews to understand the occurrence of these species in trade.

RESULTS

Some of the wildlife traders engaged with during the course of the investigation in India and Malaysia were trafficking species of South Asian freshwater turtles, such as Red-crowned Roofed Turtles *Batagur kachuga* and Three-striped Roofed Turtles *B. dhongoka*, as well as other popular, well-recognised species on the market such as Black Spotted Turtles. While the number of these turtles offered during the investigation is relatively low in comparison to other species (Table 1), there is concern that any removal from the wild is likely to have a detrimental impact on populations. Black Spotted Turtles featured significantly during the investigation and have been included in Table 1 for comparative purposes.

Species	Distribution	*IUCN Status	CITES Appendix	Indian Wildlife Protection Act	No. of individuals offered to WJC
Assam Roofed Turtle <i>Pangshura sylhetensis</i>	Bangladesh, India	E (Bangladesh) (CR in India)	II	Schedule I	125
Black Spotted Turtle <i>Geoclemys hamiltonii</i>	Bangladesh, India, Nepal, Pakistan	E (Bangladesh) V (India)	I	Schedule I	7,342
Brown Roofed Turtle <i>Pangshura smithii</i>	Bangladesh, India, Pakistan	NT	II	Not Listed	265
Red-crowned Roofed Turtle <i>Batagur kachuga</i>	Bangladesh, north-east India, central Nepal	CR	II	Schedule I	306
Three-striped Roofed Turtle <i>Batagur dhongoka</i>	Bangladesh, north-east India	CR (Bangladesh) E (India)	II	Not listed	172

Table 1. Species and no. of South Asian freshwater turtles offered to the WJC, 2016–2018, and their protection status. CR=Critically Endangered; E=Endangered; V=Vulnerable; NT=Near Threatened. *assessed 2000

Species	Total no. sighted/ offered to the WJC	2014	2015	2016	2017	Total no. seized from trade
Assam Roofed Turtle <i>Pangshura sylhetensis</i>	125	0	0	0	0	0
Brown Roofed Turtle <i>Pangshura smithii</i>	265	0	0	0	3	3
Black Spotted Turtle <i>Geoclemys hamiltonii</i>	7,342	4,627	3,362	1,653	28	9,670
Red-crowned Roofed Turtle <i>Batagur kachuga</i>	306	0	0	1	27	28
Three-striped Roofed Turtle <i>Batagur dhongoka</i>	172	0	0	0	0	0

Table 2. No. of individuals seen in trade by the WJC (2016–2018) compared to no. seized from trade (2014–2017).

It was noted that traders would place an emphasis on a species' rarity on the market. This was substantiated to the WJC by a trader based in Malaysia, who was known to source products from India, claiming he had many buyers from Hong Kong and Thailand who sought *Batagur kachuga* and *B. dhongoka* specimens on account of their rarity and that he had stocks of these species available for sale.

Conversely, it appears that while the WJC observed these four species of freshwater turtles being offered for sale covertly, it is apparent that they are seldom reported as being seized from trade, as is illustrated in Table 2 which records reported seizures between 2014 and 2017 across Asia according to open source research. It also highlights how frequently Black Spotted Turtles are seized from trade in comparison. This disparity between what is being documented in underground trade compared to the number recorded in illegal trade may mean that current efforts by law enforcement agencies are not sufficient to detect such species in illegal consignments. Furthermore, according to the CITES Trade Database, none of these four species has featured in legal trade between 2014 and 2017, with fewer than 15 individuals recorded for 2013.

The author suspects that the occurrence of these four species in trade could be attributed to several factors:

VALUE: The species appear to command a higher price than other more commonly traded species such as Black Spotted Turtles. Consequently, smaller consignments can be transported more easily and still yield a healthy profit, requiring less complicity of corrupt officials, keeping costs low. During the investigation the WJC collected over 200 different data points on prices of species offered for sale; the median price per head for Black Spotted Turtles was calculated to be USD110, compared to USD1,150 for a Three-striped Roofed Turtle or USD1,700 for a Red-crowned Roofed Turtle.

LEGALITY: The species are listed in CITES Appendix II. Although documentation is still required for trade in these species to be permitted, they may not be targeted, or as well known, by law enforcement agencies compared to specimens listed in CITES Appendix I.

CRIME DISPLACEMENT: As enforcement cracks down on the high-volume species found in trade, such as Black Spotted Turtles, lesser-known species may become appealing to wildlife criminals. The species appear to be less well known in international trade and therefore may not be easily identifiable by port and Custom officers, thus reducing the risk of detection.



Advertisements featuring Red-crowned Roofed Turtle (left) and Three-striped Roofed Turtle provided to the WJC by a trader via Facebook Messenger, October 2016.

OPPORTUNITY: *These species occur in the same areas being used as a trade route by traffickers.* Specifically, these species originate from geographic ranges in north-east India, Nepal and Bangladesh, and local populations, particularly in Bangladesh, are severely threatened (Table 1). The investigation found that many of the Red-crowned Roofed Turtles and Three-striped Roofed Turtles on offer had originated from Uttar Pradesh (in north-east India) and are transported to Bangladesh via West Bengal, before being smuggled overseas.

The occurrence of these species on the international markets in Thailand, Malaysia and Hong Kong appears to be rarely reported. While some literature exists in relation to the threatened status of the species, there is little published research and/or sufficient data supporting this. However, WJC was frequently offered these species during the investigation, albeit to a lesser extent to other, better-known species. Of note is that the rarity of these species is cited as a selling feature, facilitated by the above factors, which may be aiding crime. This desire is further compounded by harder to obtain species, where “the rarer the species the better”. This is likely to encourage an anthropogenic allee effect, where the value attributed to rarity may precipitate the extinction of rare species (Hall *et al.*, 2008; Courchamp, 2014). Rarity in the wild is a particularly unique characteristic of the freshwater turtle and tortoise trade—the Critically Endangered Ploughshare Tortoise *Astrochelys yniphora* likely qualifies as testament to this phenomenon.

CONCLUSIONS AND RECOMMENDATIONS

The possibility of these species of South Asian freshwater turtles being targeted for international markets such as Hong Kong and mainland China, with Thailand and Malaysia facilitating the trade, is great cause for concern given the fragile status of these species in the wild (Table 1). This article should form sufficient basis to direct further research to assess the extent to which these species are in demand at an international level. This will assist in the formulation of recommendations to tackle trade to prevent these species being further threatened and

foster closer collaboration between countries implicated in the trade. It will also provide much needed data to update assessments of population levels in the wild.

Of further note is that the Three-striped Roofed Turtle and the Brown Roofed Turtle, despite being threatened, are not included in India’s *Wildlife Protection Act, 1972* (Table 1). As a matter of urgency, they should be considered by wildlife agencies for inclusion in the law in order to prevent further exploitation of legal loopholes.

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