Protecting Vietnam’s Turtles

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There are 22 confirmed species of tortoises and freshwater turtles occurring in Vietnam. Most of these are considered valuable within the wildlife trade with prices ranging from 5000VND ($0.40) to 1.8 million VND ($125.00) per kilo, depending on species, availability, and the market. Turtles are favored for their supposed medicinal value, are consumed as food, and kept as pets. The Chinese market appears to be the end destination for most species of Vietnam’s turtles, exceptions being perhaps softshell turtles (Amyda spp.) and smaller individuals of several species that are favored as pets (e.g., Geomyda spengleri).

Although it is difficult to determine accurate figures relating to the volume of turtles in the trade, it is clear that the trade is unsustainable and responsible for the systematic destruction of natural populations of many species in Vietnam, as well as possibly neighboring Cambodia and Laos. Turtles are particularly vulnerable to rapid and devastating population declines as a result of over-harvesting. This is due to the low fecundity of most species, low annual survivorship, and the relatively long time it takes for young animals to reach maturity.

Efforts to combat the illegal wildlife trade in Vietnam have focused mainly on enforcement actions by Forest Protection Department (FPD) rangers who routinely seize illegal shipments of reptiles, birds, and mammals from smugglers on their way to China. Reptiles usually comprise the greatest numerical component of the trade, with turtles and snakes (Naja spp., Bungarus spp., Elaphe spp., and Pytas spp.) nearly always present in seizures. Up until recently, there has been little concern for the apparent high volume of turtles in the trade, but these attitudes are slowly changing as both international and local attention to the threat to Indochina’s freshwater turtles and tortoises becomes more apparent.

Vietnam may be a weigh station for the wildlife trade in Indochina, amassing a diverse and geographically disbursed assortment of species from the region for the insatiable markets of China. As one FPD official put it, “The price you can get [for animals] in Laos is cheap so they ship them to Vietnam where the price is good. But the price in China is better.” Vietnam’s traders most likely see the illegal wildlife trade as a lucrative and profitable venture where the rewards far outweigh the risks along the way.

While buses remain the most common mode of wildlife trade transportation, recent confiscation at Hanoi’s train station and Noi Bai airport have illustrated that traders probably utilize a much more elaborate transportation network to get their goods north. Presently, most turtles that are seized in trade shipments are either locally released or go back to the traders. Releases often follow brief periods of confinement at holding areas like the Soc Son Rescue Center outside Hanoi. Unfortunately, limited by financial and technical constraints, these releases tend to be poorly planned and
often involve introducing animals, many of which are in poor health, into (often unsuitable) environments with little consideration given to the ecological impacts on potential native populations of the species in the release area. These areas also tend to be in relative close proximity to the confiscation or holding point (within 100k).

Fines are generally imposed on traders caught smuggling wildlife. They are assessed by the weight and value of the animals seized. In most cases, the impracticality of release and lack of a feasible and acceptable alternative more than often results in the protection authorities returning the animals to the market or traders, often seizing only clear cases of endangered or threatened species (particularly primates and large mammals) for placement at zoos or other facilities.

Just south of Hanoi on Highway 1 lies the provincial city of Ninh Binh where FPD officials have aggressively sought to restrain the trade in Vietnam’s wildlife. Rangers assigned to the station routinely receive information from police and informants about buses loaded with wildlife heading north from as far south as Ho Chi Minh (Saigon). The rangers then wait along the highway for the bus to arrive from the south before seizing the bus and its cargo. According one ranking FPD officer, traders often circumvent Ninh Binh on back roads or change the number on the bus to avoid the rangers. A few less lucky traders and their wildlife contraband are caught.

**Ninh Binh FPD Seizure, 25 August 1998**

On August 25, Forest Protection authorities stopped a public bus on Highway 1 as it reached the provincial city of Ninh Binh, about 100 kilometers south of Hanoi. Authorities had received information from informants in Hue indicating that the bus was carrying a shipment of animals destined for the north. When Forest Protection officers stopped the bus they discovered approximately 800 kilos of turtles and tortoises representing 13 species. The shipment also included water monitors (~15), pangolins (6), geckos, and common palm civets (34).

The turtles were mixed in large bags and crates with approximately 40 turtles each. The total number of turtles in the seventeen bags and crates was estimated at about 700. The condition of the turtles appeared surprisingly good considering the distance they had traveled. Only one dead specimen was observed during subsequent inspection, but most other turtles appeared in better shape than seen in previous confiscations. According to FPD officials, the bus on which the turtles were being transported was air-conditioned, possibly reducing what would likely have been a higher transport mortality.

Due to the great number of bags and crates, not all of the turtles were inspected. In most cases, the species could be identified through the bag mesh. Most of the bags contained *Indotestudo elongata* (470 kilos) with *Heosemys grandis* representing the second most numerous species followed by *Pyxidea mouhotii*. Small numbers of other species comprised the remainder of the shipment. In all, there were 13 species identified, the confiscation representing perhaps the most diverse turtle trade seizure on record for protection authorities in Vietnam.

The trader claimed that the turtles and tortoises in the shipment were raised on farms in the extreme south of Vietnam and not captured from the wild. Authorities were provided with information about range and distribution, as well as life history traits that would firmly suggest otherwise.
Species and Trade Notes
The following section details the species observed in this shipment as well as some notes recorded at the time of the inspection.

*Indotestudo elongata*: *I. elongata* is perhaps the most common trade species. Despite its CITES Appendix II listing (1975), it appears in most sizeable shipments to China. *I. elongata* comprised more than 50% of this Ninh Binh confiscation. Eighty two tortoises received by the project from the shipment ranged in size 105–310 mm carapace length with the average of 195.2 mm. Sex distribution was about equal (51% female). None of the crates or bags observed with *I. elongata* contained any other species.

*Heosemys grandis*: *H. grandis* is another common trade species but is absent from many shipments that have been observed. This shipment included a fair number of large individuals (carapace length ~370 mm). The size of the *Heosemys grandis* suggest that these turtles might have been stolen from a Buddhist temple. This species, known as the “temple turtle,” is common in temple ponds at Buddhist shrines and many of the turtles in the shipment were unusually large, suggesting that they might have received some degree of protection in previous years.

*Pyxidea mouhotii*: *P. mouhotii* is a common trade species. Adults are observed in the trade with China while juveniles are routinely seen in Hanoi’s Dong Xuan market for sale as pets. *P. mouhotii* is perhaps the second or third most common trade species.

*Manouria impressa*: Only one *M. impressa* was in the shipment. This was a large individual (carapace ~266 mm) with a missing right front limb below the joint.

*Cuora galbinifrons*: *C. galbinifrons* is another common trade species having been observed in numerous previous shipments. An April 13 confiscation at Ninh Binh was comprised mainly of *C. galbinifrons* and probably resulted from harvesting following the first spring rains and mating activity. However, the present shipment contained only a small number (est. < 20) of *C. galbinifrons*, which was unusual (possibly seasonally or geographically related).

*Malayemys subtrijuga*: *M. subtrijuga* is less frequently observed but heavily traded. This species was absent from most previous confiscations observed. However, when it appears, there are usually hundreds of *Malayemys*, often comprising the entire shipment. In September 1996, over 600 of this species were confiscated in a single shipment and released in Ninh Binh. Other similar large shipments of this species have been seized by authorities in Hanoi in early 1998. Inspection of the shipment turned up only one *M. subtrijuga*.

*Cuora amboinensis*: *C. amboinensis* is less common in trade with only a few individuals observed in previous shipments. The numbers in this shipment were estimated at < 5 individuals.

*Cyclemys tcheponensis*: *C. tcheponensis* was present in the shipment with numbers estimated at perhaps 30 individuals or less. Due to similarities between *C. tcheponensis* and *C. dentata*, records of previous appearance in the trade are vague and unreliable.
**Cyclemys dentata (?)**: The shipment may also have included *C. dentata* though no clear examples were observed.

**Annamemys annamensis**: This endemic turtle has been present in small numbers in previous trade confiscation but not in large numbers. The number in this shipment was estimated at < 5.

**Amyda cartilaginea**: *Amyda* is the most common softshell turtle found in the trade. Its meat is valued both here in Vietnam as well as on the Chinese market. Only one crate of this turtle was in the shipment, the crate also including *Platysternon megacephalum* and at least one *Pelodiscus sinensis*. The turtles were packed in wet leaves with several larger *A. cartilaginea* were packed in individual bags on the bottom.

**Pelodiscus sinensis**: *P. sinensis* is a common farmed species in Vietnam. It has not been observed in any previous trade confiscations observed probably because its trade is widespread and legal.

**Siebenrockiella crassicollis**: *S. crassicollis* has never been observed in any previous confiscation that was inspected, nor has it been found on the Hanoi market. There was only one individual in the shipment.

**Platysternon megacephalum**: Possibly two subspecies of *Platysternon* were in the shipment. *Platysternon* is moderately frequent in the trade though in small numbers.

This particular confiscation was important because of the numbers of turtles, the diversity of species, and the geographic distribution of the turtles that were found. It is likely that Hue served as a distribution point rather than source and that turtles were collected throughout the southern and central regions of Vietnam, in addition to neighboring Laos and possibly Cambodia, then shipped from Hue north by public transport.

Ninh Binh authorities released a large number of turtles from the shipment to the Cuc Phuong Conservation Project in support of a pilot study being carried out at Cuc Phuong National Park. The project is working in cooperation with authorities from the National Park, provincial FPD, and national Forest Protection Department to establish a sound and practical solution to dealing with the vast numbers of turtles that surface in the trade. The program has received several previous confiscations of turtles from the trade and intends to develop effective quarantine, habitat assessment, release, and monitoring guidelines for reintroduction, as well as focus on raising the level of awareness and education in local communities about the need to conserve and protect Vietnam’s tortoises and freshwater turtle species. Corresponding efforts on the national level are currently the focus of a broader wildlife trade project proposal being coordinated by TRAFFIC SEA.

For more information or comments about the turtle trade in Vietnam, please contact the Cuc Phuong Conservation Project, Ninh Binh Province, Vietnam, cpcp@fpt.vn.

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