

# Introduction

The following position paper has been prepared by members of the Hong Kong Wildlife Trade Working Group (HKWTWG)<sup>1</sup>, an informal alliance of stakeholders with interests in the legal and illegal animal trade. It has been compiled in response to: i) the increasing trade in live exotic animals in the Territory, many of which are threatened with extinction; and ii) the need for regulatory enhancements to better manage environmental, animal/public health and animal welfare concerns. The following paper outlines Hong Kong's position as a major importer of exotic animals, the causes for concern and potential means of addressing these.

## Hong Kong is a Leading Importer of Live Exotic Animals

Despite the economic and logistical impacts of the COVID-19 pandemic, the Hong Kong International Airport (HKIA) continued to rank first globally in terms of international freight throughput in  $2020.^2$  Transport and Logistics Bureau data shows Hong Kong handled five million metric tonnes of cargo in 2021, up 12.8% since 2020 and up 6% since 2019. (Box  $1)^3$ 

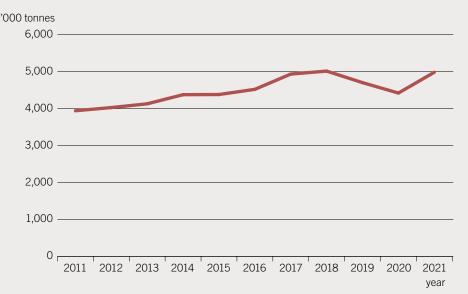
According to Hong Kong's import requirements, live exotic animals "must be transported by the fastest and most direct route from the exporting country/place to or through Hong Kong as manifested cargo" and birds must be transported "by air". As such, the vast majority of live exotics must and do arrive in the city via air. 5

### Box 1

#### Hong Kong's Air Freight Movement, 2011-2021

(Inward & Outward)

Data Source: Transport and Logistics Bureau (2022)

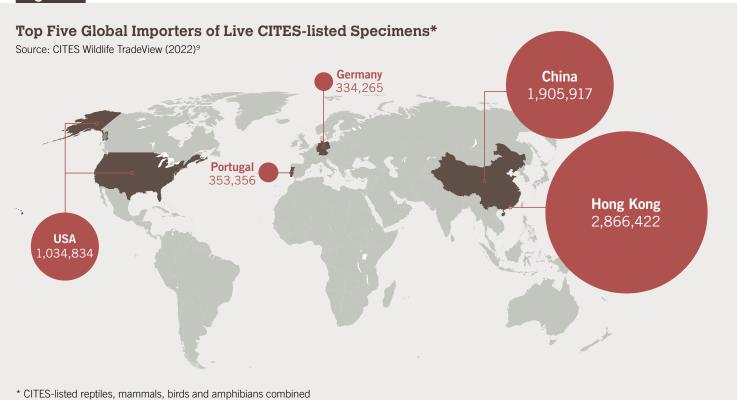


Connectivity of HKIA is a critical factor for prompt delivery of air cargo, as direct flights can effectively shorten delivery time. Compared with other major airports in the Greater Bay Area, HKIA was the only airport with more than 100 international flight routes, making it an effective cargo transhipment hub for the Mainland.

Source: Adapted form Research Office Information Services Division Legislative Council Secretariat 8 November 2019 Imports for the trade have increased notably as the demand for exotic pets has risen and the excellence of HKIA as an air cargo hub undoubtedly facilitates such trade.<sup>6</sup> In the context of this paper exotic animals include reptiles (e.g., lizards, snakes, turtles and tortoises), birds (e.g., parrots, songbirds), mammals (e.g., hamsters, rabbits), amphibians (e.g., frogs, salamanders) and arthropods (e.g., spiders, scorpions).

It is estimated that 4 million exotic animals from over 700 species were imported into Hong Kong for the pet trade from 2015-2019, of which 2.8 million were mostly threatened species imported under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Globally, Hong Kong imported more live specimens for commercial purposes under CITES than any other countries and territories over this period (Figure 1).

## Figure 1



Re-exports appear to have been minimal, with fewer than half a million exotics officially departing the city, suggesting that a large number may remain in Hong Kong.<sup>10</sup> It is possible, however, that many animals have died, driving traders to import more animals to meet demand. Another scenario is that large numbers of exotics have been smuggled out of the city. Due to limited traceability in the trade, it is not possible to determine which of these scenarios is most likely. The reality may well lie in a combination of all three. These millions of exotics have been both captive-bred and wild-caught, originating from almost every biome across at least 84 countries (2015-2019).<sup>11</sup>

# **Issues of Concern**

## **Environmental Impacts**

The world is facing a biodiversity crisis driven by, amongst others, land-use and climate change, pollution, disease, the spread of invasive alien species and overexploitation of resources. In 2019, the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) released the first ever intergovernmental assessment of the status and trends of the natural world.<sup>12</sup> A key message was that the diversity within species, between species and of ecosystems is declining faster than at any time in human history, and consequently over a million species are at risk of extinction.

The large-scale extraction of wildlife from their ecosystems for the global pet trade is a contributor to the crisis, exerting extreme and highly targeted pressure on thousands of species. For example, approximately one in four of the 6,660 known species of songbirds have been documented in the international wildlife trade.<sup>13</sup>

A major challenge in regulating exotics in trade is the threat of extinction before scientific research can assess the viability of their populations, or the sustainability of breeding or harvesting operations. This is compounded by the lack of insight or information on their sources, with limited country-specific information on whether animals traded originated from the wild or from captivity, as well as further consideration of the import of "ranched" specimens that are effectively sourced from the wild. Concerns have been raised by CITES Parties that incorrect codes, false declarations, fraudulent claims around sourcing and the legality of parental stock are affecting aspects of the international trade and are in need of review.<sup>14</sup>

The wild populations of nine in ten CITES live exotic animals and seven in ten non-CITES live exotic animals imported into Hong Kong (2015-2019) for commercial purposes were either in decline or else their conservation status was poorly understood. Moreover, Hong Kong is home to several endemic reptile and amphibian species<sup>15</sup>, on which imported species can have an impact if released, by competing for habitat and resources and/or by being potential hosts of their parasites and pathogens. Continuing to import animals without understanding the potentially detrimental impacts of the trade is problematic, presenting risks to the survival of wild populations and of increasing biodiversity loss. By contrast, it should be noted that in the EU, for example, non-detriment findings are required for the trade in certain species not listed under CITES Appendix I and II, to ensure import into the EU does not have a harmful effect on the animals' conservation status. Many of these species, amounting to tens of thousands of animals have been imported into Hong Kong with no additional regulation regarding conservation status.

Furthermore, the Convention on Biological Diversity (CBD) was extended to Hong Kong in 2011 and requires the control/eradication of alien species which threaten ecosystems. However, a recent review of Hong Kong's implementation of CBD revealed that the Territory has not achieved its strategic goal in this area. Hong Kong's implementation of CBD revealed that the Territory has not achieved its strategic goal in this area.

#### **Animal and Public Health**

Many infectious animal diseases persist in the international exotic pet trade. Spreading of diseases as well as trauma or envenomation inflicted by exotic pets are public health and safety concerns. The large volumes and wide variety of animal species involved in the trade and the often-poor conditions the animals are transported and kept in (e.g., small containers or cages without appropriate ventilation or hygrometry), results in stress and ill health, affects disease resistance and increase the potential for the shedding of pathogens and risks of transmission.<sup>18</sup> This may include pathogens established in a species spreading to another host in the trade or in home environments, or being introduced into native wildlife where exotic pets have been released or escaped.<sup>19</sup>

When a disease is established in a wild population, it can have dramatic impact on local biodiversity, and controlling or eradicating it can be challenging.<sup>20</sup> One example is the amphibian fungal disease (Chytridiomycosis, better known as Chytrid fungus) that has caused global amphibian declines and extinctions.<sup>21</sup> A 2014 study showed evidence of chytrid and ranavirus in commercial shipments of live amphibians exported from Hong Kong.<sup>22</sup> Exotic reptile species are also becoming a higher source of concern regarding public health by transmitting zoonotic parasites by direct contact or faecal contamination.<sup>23</sup> A lack of biosafety procedures on import may mean that both disposal of waste and escape pose a risk of disease spread to native species.

The prevalence and diversity of both epizootic and zoonotic pathogens in Hong Kong's exotic pet trade have, however, not been well studied. Such research is needed to inform the development and enforcement of robust and comprehensive regulations and policy, to control, manage and prevent potential disease outbreaks.

Furthermore, exotic species are wild animals that are not domesticated and, even if captive-bred, are likely to retain much of their natural behaviour.<sup>24</sup> In captivity, animals may bite, scratch, kick or envenomate handlers, often while trying to evade restraint due to fear or as part of their territorial defence. Although fatal cases are rare, the risk of serious injury and death in keeping dangerous and venomous species in overseas jurisdictions is not inconsiderable.<sup>25</sup> The ubiquitous threat remains the close proximity between the exotic pet, their handler and/or other animals (domestic or not), which induces a high risk of bodily fluids and droplets exchange, forming the core of pathogen transmission.

While research into this issue has been conducted overseas, little research has been undertaken in Hong Kong, despite the city's sizeable exotic pet trade.

### **Animal Welfare**

Maintaining appropriate environmental conditions in the breeding, transport and sale of exotic animals is difficult to achieve, especially without robust regulations and when large numbers are involved. Traded animals are typically held in conditions ranging from suboptimal to poor.<sup>26</sup> Many stages of the supply chain cause considerable physiological and psychological stress for the animals involved, leading them to succumb to diseases, suffer avoidable injuries and/or die.<sup>27</sup> Researchers report that pre-trade mortalities of Endangered African grey parrots for example, are between one- to two-thirds.<sup>28</sup> Yet it remains uncertain how many may die in transit or even within the city, as there are no data available on bird mortality rates in Hong Kong.

While good captive animal management is paramount to the quality of life and health of the animal, in Hong Kong even basic reasonable standards of care for exotic pets are often not met, and husbandry-related issues and nutritional deficiencies are commonly observed by Hong Kong's exotic veterinary practices<sup>29</sup>. Informed by a veterinary survey, market observations and discussions with veterinary surgeons, nurses and support staff<sup>30</sup>, one of the most concerning factors in exotic pet keeping in Hong Kong is that it is common for exotic pets to be kept in homes or pet shops where even the most basic husbandry requirements such appropriate food and living environment are not fulfilled.

At local markets, some animals are sold at such low prices that, if they become sick, they are left to die (only to be replaced) rather than provided with treatment as the veterinary cost of care is considered prohibitive. This phenomenon is well described by the term "Trash Pets."<sup>31</sup>

Animals that are sick, injured or deformed are also reported to be sold at discounted prices or offered free for adoption. Potential welfare issues of pet shops and markets include traders not providing appropriate standards of housing and space, adequate social dynamics (companionship for social species or space and territories for solitary species), environmental enrichment and veterinary care, amongst others.<sup>32</sup>

Even when exotic animals are recovered from illicit operations or smuggling attempts, their aftercare remains a challenge for both government and Animal Welfare Organisations (AWOs) to ensure. Local infrastructure is insufficient, under-capacity and underfunded. Greater resources are needed to address these shortcomings.

## **Regulations Lag Behind the Trade**

The scale of Hong Kong's exotic pet trade has far surpassed what it was at the time of the initial drafting of both international and local laws designed to regulate it. In 2006, when Hong Kong's Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586) was enacted and its predecessor (Cap. 187) repealed, the exotic pet trade was a fraction of its current size.<sup>33</sup> Lawmakers then explicitly called for deregulation to reduce the administrative burden on traders. The resulting rollback of requirements has more than likely been a significant factor in the proliferation of the trade since. In 2006, Hong Kong imported 85,000 live CITES-regulated reptiles, mammals, birds and amphibians.<sup>34</sup> In 2019, the number had increased five-fold to 454,000.

Notably, Hong Kong's animal trading and welfare laws have been reviewed by legal scholars and academics several times in recent decades. Nevertheless, the same weaknesses and loopholes that have repeatedly been identified in relation to the trade in exotic animals and have effectively worsened as the demand for exotic animals has grown. This is despite amendments of laws regulating the import of exotic pets under Cap. 139 Public Health (Animals and Birds) Ordinance in 2017. These amendments addressed regulatory weaknesses and gaps in the pet dog trade, but the same issues which motivated those policy changes were not addressed in relation to the exotic pet trade.

An animal's suitability as a pet varies depending on the species' characteristics and needs but has not been adequately considered in Hong Kong's laws. The presence of unsuitable species in the pet trade has resulted in serious animal welfare issues as well as public health, safety, and conservation challenges. Factors that need to be considered include longevity, size of the animal as well as behaviour. Popular reptiles in trade can weigh up to 90kg<sup>35</sup> and grow to 200cm in length<sup>36</sup>, live up to 100 years<sup>37</sup>, and be notoriously aggressive<sup>38</sup>. Ensuring the welfare of such animals can be especially challenging e.g., provision of sufficient space and/or care for decades. Long-lived species may well outlast their owners contributing to the problem of abandonment.

Hong Kong's exotic animal trade is thus environmentally unsustainable, and the millions of animals involved are vulnerable to harmful and cruel practices. Death and disease are a risk along the entire supply chain. Traceability mechanisms, environmental safeguards, monitoring and surveillance of species imported and in trade as well as animal health and keeping conditions need review and improvement. Without this, risks of zoonotic and epizootic diseases will persist. Birds are the only taxonomic group of exotics which is monitored relatively strictly because of historic outbreaks of avian influenza. Other taxa are subject to much less oversight despite trade representing a latent threat.<sup>39</sup>

# **Supporting Policy Enhancements to achieve a more Holistic Approach**

China's 14th Five-Year Plan (FYP) emphasises the importance of conserving the natural environment and developing sustainably. It stresses the imperative to strengthen animal epidemic prevention, build the nation's biodiversity protection network, modernise animal husbandry, strengthen controls on invasive species and reduce consumption of wild animals.<sup>40</sup> It is our position that Hong Kong as a Special Administrative Region and a leading trade hub and gateway to China, has the impetus to adopt similar goals.

The COVID-19 pandemic has shone a spotlight on the exotic animal trade, presenting an opportune time to review update and consolidate legislation, and enhance Hong Kong's one health approach to managing the trade. The aim of such enhancements is to minimise risks to public and animal health, ensure animal welfare and importantly, protect local and global biodiversity. Such enhancements are in some instances overarching in nature (i.e., relevant to multiple ordinances) thus benefiting multiple aspects of the trade, and in others are specific to a particular ordinance, regulation or policy.

Our position is that in addition to a full regulatory view and risk analyses, overall enhancements that would be of value include, but are not limited to:

- Review and amendment of the definition of exotic animals to ensure consistency across ordinances as appropriate.
- Introduction of a 'positive list' of exotics comprising approved species that can be traded as pets, based on clear and transparent screening rationale including but not limited to assessments of sustainability, disease risk, suitability, potential invasion threat, legality to export and welfare concerns.
- Return the Possession License system
  to issuing licenses for individual species
  (rather than keeping premises or
  consignments), a validity period of two
  years and the inclusion of captive-bred
  Appendix II species.
- Review and revision of ATL Codes of Standards and Additional Conditions to include both minimum standards and higher standards of animal husbandry for all taxa.<sup>41</sup>

- Introduction of additional licensing conditions for exotic animal breeders, modelled on those for dog breeders and traders.
- Requirement that all Private Pet Owners must have a permit if they wish to sell their exotics, modelled on the requirements introduced to the dog trade in 2017.
- Implementation of traceability mechanisms such as microchipping.
- Introduction of schemes to positively incentivise the trade to improve practices.
- Prohibition of "animal release" e.g., "mercy release," and associated/related activities except for specific conservation purposes in accordance with a permit.

Hong Kong is a vibrant trade hub recognised internationally, providing both a local market for exotic pets and a gateway to other key demand centres. As such, enhancing the standards of the trade within Hong Kong would have co-benefits, radiating across neighbouring jurisdictions and far-flung trade partners alike.

# **Endnotes**

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- Recognising that a new Reptile COP will be introduced in 2023, improvements are still necessary (see Appendix I in Inglis, S.J., Wong, E.T.C., le Clue, S. & Whitfort, A.S. (2022) Wild, Threatened, Farmed: Hong Kong's Invisible Pets. ADM Capital Foundation: Hong Kong SAR.)