

# Chains of Commerce: A Comprehensive Review of Animal Welfare Impacts in the International Wildlife Trade

by

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*Animals* **2025**, *15*(7), 971; <https://doi.org/10.3390/ani15070971>

**Submission received: 24 February 2025 / Revised: 17 March 2025 / Accepted: 21 March 2025 / Published: 27 March 2025**

(This article belongs to the Section **Animal Welfare**)

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## Simple Summary

The commercial wildlife trade involves billions of animals annually consumed for various purposes, including food, fashion, entertainment, traditional medicine, and pets. Species affected range from mammals such as lions to insects such as crickets. In this review, we present ten case studies to highlight the animal welfare impacts of the commercial wildlife trade: (1) Ball pythons captured and farmed to serve as pets; (2) Zebrafish captive bred to serve as pets; (3) African Grey Parrots taken from the wild for the pet industry; (4) Sharks de-finned for traditional medicine; (5) Pangolins hunted for traditional medicine; (6) Crickets farmed for food and feed; (7) Frogs wild-caught for the frog-leg trade; (8) Crocodylians killed for their skins; (9) Lions farmed and killed for tourism; and (10) Elephants held captive for tourist rides. These case studies demonstrate that the average welfare experience of a wild animal being traded is negative and that most animals routinely experience negative states such as extreme hunger and thirst, pain, fear, and chronic stress. Therefore, we posit a new approach that seeks to mitigate these negative impacts by reducing and redirecting consumer demand away from the consumptive use of wildlife practices and towards sustainable, non-consumptive “wildlife friendly” alternatives.

## **Abstract**

The commercial wildlife trade involves billions of animals each year, consumed for various purposes, including food, fashion, entertainment, traditional medicine, and pets. The experiences of the animals involved vary widely, with negative welfare states being commonplace. To highlight the broad scope of animal welfare impacts across the commercial wildlife trade, we present ten case studies featuring a range of species traded globally for different purposes: (1) Ball pythons captured and farmed to serve as pets; (2) Zebrafish captive bred to serve as pets; (3) African Grey Parrots taken from the wild for the pet industry; (4) Sharks de-finned for traditional medicine; (5) Pangolins hunted for traditional medicine; (6) Crickets farmed for food and feed; (7) Frogs wild-caught for the frog-leg trade; (8) Crocodylians killed for their skins; (9) Lions farmed and killed for tourism; and (10) Elephants held captive for tourism. The case studies demonstrate that wild animals commercially traded can suffer from negative welfare states ranging from chronic stress and depression to frustration and extreme hunger. The individuals involved range from hundreds to billions, and their suffering can last a lifetime. Given the welfare issues identified and the growing recognition and scientific evidence for animal sentience, we propose reducing and redirecting consumer demand for these consumptive wildlife practices that negatively impact animals.

## **Keywords:**

**animal sentience; animal welfare; demand redirection; behaviour change initiatives; wildlife trade**



### 3.3. African Grey Parrots Captured for the Pet Trade

African grey parrots (*Psittacus erithacus*) are traded for food, medicine, and the international pet trade, the latter being the most significant in terms of the number of animals involved [70,71]. In 2016, when Grey parrots were listed in CITES Appendix II, over 1.3 million wild-caught Grey parrots had been exported from 18 range States since 1975 [59,72]. This makes the Grey parrot the most traded of all CITES-listed birds, representing 11% of all reported parrots in the wildlife trade [59,72]. Due to concerns over the rapid decline in wild populations and the facilitating role of trade, Grey parrots were listed in Appendix I of CITES in 2017, preventing wild-caught individuals from being traded commercially. However, whilst captive-bred parrots now dominate the trade [73], illegal trafficking continues, with individuals often concealed in exports of other unprotected parrot species [74], resulting in considerable welfare implications (see [Figure 3](#)) [71,74,75].

**Figure 3.** African grey parrots during international transport for the pet trade. Credit: Anonymous.

Methods of trapping parrots in the wild range from taking chicks from nest cavities to mass trapping using nets or glue traps (compromising Domains 1–5) [76]. The latter includes the glue-and-stick method, where broomsticks or branches coated with plant sap trap birds' wings as they land to roost or feed [75]. Fishing nets are also used to entangle birds at roosting or feeding sites, where the birds are chased into the nets [75]. These methods will likely cause extensive suffering to the birds across all Domains [75].

Mortality rates due to these trapping methods are likely to be impossible to quantify with precision due to the variation in methods used, the experience of the hunters, and the illegal nature of the activity, and estimates can range from 30 to 66% [71,75,76,77,78,79]. Transportation may result in more mortalities, with one study reporting 9–14% mortality rates between the forest and the trappers' homes [75]. These high mortality rates are often the result of hunters taking chicks who are too young to survive independently, but the stress and physical trauma of the capture process, and the overcrowding, physiological stress, lack of food, water, and veterinary care throughout transportation also play a role (compromising Domains 1–5) [71,75]. In fact, analyses of social-media listings of African Grey parrots suggest that basic animal welfare standards were frequently breached during transportation and in holding facilities, with parrots being kept in overly crowded conditions, with no perches, and infrequent or no provision of food and water for days or even weeks (compromising Domains 1–5) [72].

Therefore, the trade in African Grey parrots adversely compromises the welfare of parrots across the Domains, leading to a range of negative affective states, including hunger, thirst, pain, fear, distress, sickness, frustration, stress, and exhaustion (see [Table 1](#) and [Table S3](#)).