



## Reviews

# Exotic pet suitability: Understanding some problems and using a labeling system to aid animal welfare, environment, and consumer protection



Clifford Warwick<sup>a,\*</sup>, Catrina Steedman<sup>a</sup>, Mike Jessop<sup>b</sup>, Phillip Arena<sup>c</sup>, Anthony Pilny<sup>d</sup>, Emma Nicholas<sup>e</sup>

<sup>a</sup> Emergent Disease Foundation, Tonbridge, Kent, UK

<sup>b</sup> Veterinary Expert, Swansea, UK

<sup>c</sup> Murdoch University, Mandurah, Western Australia, Australia

<sup>d</sup> Access Specialty Animal Hospital, Culver City, California, USA

<sup>e</sup> Notting Hill Veterinary Centre, London, UK

## ARTICLE INFO

## Article history:

Received 18 February 2018

Received in revised form

8 March 2018

Accepted 30 March 2018

Available online 10 April 2018

## Keywords:

exotic pet

suitability

labeling

consumer protection

animal welfare

public health and safety

## ABSTRACT

Exotic pets are essentially animals that are non-native to a region and/or nondomesticated. The trade in and keeping of exotic pets has been frequently criticized for the commonly inhumane and harmful practices that are associated with supply and keeping, including animal welfare, species conservation, invasiveness, and public health and safety. Relatedly, a growing issue is that of unwanted exotic pets handed to animal care centers due to their overly demanding requirements and the confiscation of animals suffering from abuse. Mis-selling exotic species as “easy to keep” or “beginner” animals is widely regarded to be a major common and problematic factor. Efforts, after pet acquisition, to educate sellers and keepers to improve animal welfare and public health issues have proven unproductive. We propose that a system is required that facilitates decision-making at the interface between sale and purchase sectors and that uses clear evidence-based labeling. We review current options for developing such a pet labeling scheme and recommend a novel approach based on the EMODE (“easy,” “moderate,” “difficult,” or “extreme”) pet suitability assessment tool to provide a preventative educational approach to alleviating the multifactorial issues of concern.

© 2018 The Authors. Published by Elsevier Inc. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

## Introduction

Exotic pets are commonly considered to be animals that are either non-native to a region or nondomesticated. However, issues such as local collection and keeping of many indigenous species and varying degrees of wild animal domestication infer that definition may prove to be less precise in some cases. Pet keeping (including wild animals) has a long history dating back at least 17,000 years. Historically, acquiring “pets” involved taking local wildlife in various benign or destructive ways, for example, via food inducements or killing of parents and quasiadoption of their offspring (Serpell, 2015). Despite concomitant harm during acquisition of some of these early pets, these

animals were largely at liberty to roam between their natural habitat and human “captivity” (Serpell, 2015), and probably often in accordance with natural affiliative behaviors (Warwick, 2015a). Notwithstanding certain undesirable or tragic strategies in primitive pet collection, it has been argued that modern pet sourcing and husbandry are more welfare-negative than ancient methods due to the gross deprivation of freedoms inherent to caged life (Warwick, 2015a).

Inarguably, today there is greater understanding in all branches of science relevant to both free-roaming and captive wild animals. In addition, there are local, national, and global legislative frameworks and approaches designed to avoid activities that are inhumane, ecologically unsustainable, and that threaten public health and safety, such as, the Convention on International Trade in Endangered Species of Wild Fauna and Flora, International Air Transport Association guidelines, World Organisation for Animal Health/Office des International Epizooties Code documents, and various animal welfare acts.

\* Address for reprint requests and correspondence: Clifford Warwick, Emergent Disease Foundation, Riverside House, River Lawn Road, Tonbridge, Kent TN9 1EP, UK. Tel: 0044 (0) 7757267369.

E-mail address: [cliffordwarwick@gmail.com](mailto:cliffordwarwick@gmail.com) (C. Warwick).

Regardless of the raft and diversity of “regulations” in operation, all concerns and problems associated with exotic pet trading in particular remain and indeed flourish (Toland, et al., 2012; Grant et al., 2017; Unger et al., 2017).

Modern and greater scientific understanding reveals that the biological needs of animals are significantly more complex than previously thought; thus, the more we learn about animals and their natural needs, the more difficult becomes the challenge to humanely provide for them in captivity (Mellor, 2016; Grant et al., 2017). Among many possible examples of these biological needs is recent recognition of play in fishes, frogs, and reptiles, which raises the challenge to provide novel stimulation (Burghardt, 2015). Also, spatial studies regarding free-living lizards and snakes demonstrate extensive home range activity, highlighting long-standing concerns over cage space provisions (Warwick et al., 2013). In addition, behavioral, physiological, and neurological research has enhanced identification and understanding of numerous states, including anxiety, fear, panic, frustration, anger, helplessness, loneliness, “boredom,” and depression (Mellor, 2016). All of these issues and more continue to “raise the bar” for meeting positive states and avoiding negative states. The trade in and keeping of exotic pets has been frequently criticized for the commonly inhumane and harmful practices that are associated with both commercial supply of animals as well as their poor and inadequate maintenance in the home. Issues of concern involve

1. Animal welfare—many animals suffer at all points in the chain from point of capture/breeding to sales/housing (Laidlaw, 2005; Arena, et al., 2012; Toland, et al., 2012; Ashley, et al., 2014; Grant et al., 2017).
2. Species conservation and ecology—many species are threatened due to individuals being taken from the wild and many animals released in a new area can become invasive alien species (Auliya, 2003; Vilà et al., 2010; Henderson & Bomford, 2011; Keller et al., 2011; Langton et al., 2011; Böhm et al., 2013; Kubiak & Pellet, 2018). Similarly, as our understanding of ecologies and species conservation has developed, so too has recognition of both intrinsic eco-sensitivities and the “knock-on” effects for wider systems and its inter-relatedness to other issues—spanning the “eco-/One-Health” movement.
3. Public health (i.e., notably related to zoonoses) and safety—modern research and analysis indicates that these problems will co-persist with animal trading and keeping because microbial colonization and defensive behaviors (bites, scratches) are inseparable from keeping inherently wild species (Brown, 2004; Mermin et al., 2004; Chomel et al., 2007; Karesh et al., 2007; Jones et al., 2008; Brugere-Picoux & Chomel, 2009; Praud & Moutou, 2010; Abbott et al., 2012; Akhtar, 2012; Hale et al., 2012; Smith et al., 2012; Warwick & Steedman, 2012; Warwick et al., 2012; HPA, 2014; Smith et al., 2017). More recently, antimicrobial resistance associated with chemical prophylactics and veterinary overuse has also attracted significant concern (AVMA, 2015; Martins et al., 2015; CDC 2017a, 2017b; Leite-Unger et al., 2017).

While recognizing challenges in keeping exotic pets, some view certain species (e.g. amphibians and reptiles) to be “compatible” with modern human lifestyles and the desire to keep pets based on, for example, these animals being relatively quiet and the widespread availability of husbandry information (Burghardt, 2017). Certain animal trading and keeping advocates also acknowledge a range of problematic issues but regard these as resolvable using education and other minimalist intervention (Pasmans et al., 2017) although such positions have been countered for downplaying both the scale and severity of harm associated with exotic pet trading

and keeping and for proposing resolutions that remain evidentially unsustainable (Warwick et al., 2017).

In this article, we aim to summarize key challenges associated with the large scale of the exotic pet trade and the diversity of species involved as well as issues concerning the ways in which animals are promoted as pets. We also aim to discuss current possible options for managing how objective information on pet species suitability labeling and marketing may be provided, in particular, to better safeguard animal welfare and informed decision-making regarding potential pet acquisition.

## Background

### *Numbers of animals*

Recent analysis of one major wildlife consuming nation, the United States, found that over 11 billion specimens equating to 977 million kilograms of “wildlife” were imported into the United States (during the years 2000–2013), one-third of which was facilitated by the pet trade (Smith et al., 2017). Clear numbers of individuals in trade have not been established; however, globally billions of wild animals are traded annually as pets (Karesh et al., 2007; Smith et al., 2012). Incomplete formal record-keeping and endemic fraudulent activity frequently thwart efforts to clarify the scale of the global exotic pet industry (Laidlaw, 2005; Karesh, et al., 2007; Natusch & Lyons, 2012; Toland, et al., 2012; Traffic, 2012; Grant et al., 2017). It has been estimated that 25% of the global exotic pet trade is illegal (Karesh, et al., 2007), and key supply sectors (for example, for the amphibian and reptile industries) reportedly involves 44% illegal trade (Natusch & Lyons, 2012). In addition, animals marketed as captive bred, including species common in trade, may actually be wild-caught (Traffic, 2012).

Some data are available to indicate the breakdown of pet keeping in at least in 2 major consuming countries, the United Kingdom and the United States. In the United Kingdom, data indicate that 12 million households (44%) possess around 54 million domestic and exotic animals (PFMA, 2017). These animals include 30–40 million fish, 8.5 million dogs, 8 million cats, 0.7 million indoor birds, 0.9 million rabbits, 0.8 million guinea pigs/hamsters, and 0.7 million reptiles (PFMA, 2017). In the United States, data indicate that 84.6 million households (68%) possess around 393 million domestic and exotic animals comprising of 158 million fish, 89.7 million dogs, 94.2 million cats, 20.3 million birds, 14 million small animals, and 9.4 million reptiles (APPA, 2017). The trade in exotic pets involves both wild-caught and captive-bred animals. Various packaging and transportation methods are used to supply animals, which may be locally bred or remotely sourced.

### *Species diversity in trade and keeping*

It is often cited that more than 1000 species are involved in trade and keeping (CAWC, 2003); however, recent investigations suggest that the actual numbers are far greater. For example, Yan (2016) reported that 2000 marine fish species and 650 marine invertebrate species were involved, whereas Biondo (2017) cites 2000 coral reef fish species alone. The IUCN (2011) referred to studies (published in 2003 and 2007) stating freshwater species as the most popular ornamental sector with 4000 species. Birdlife International (2017) cited 4000 bird species being sold and kept. Fischer et al. (2015) estimated 291 pet mammal species by studying just 2 sales platforms in Germany, and The Netherlands Government (2016) estimated 280 mammal species were sold and kept in that country. In a study of 3 amphibian and reptile “expos” in Europe, Arena et al. (2012) found 178 species offered for sale. A limited online search for this report of only 5 animal trade

Download English Version:

<https://daneshyari.com/en/article/8484038>

Download Persian Version:

<https://daneshyari.com/article/8484038>

[Daneshyari.com](https://daneshyari.com)