Review of investigations on the exotic pets online trade

Review
February 2023
# How previous investigations on online trade inform the state of play of the exotic pet trade in the EU

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This review aims to provide an overview of past studies and investigations conducted to analyse the online exotic pet trade in the EU. It focuses on investigations conducted to determine the number and species of live animals traded from, into and within the EU through digital means. It must be noted that a number of overarching studies encompass both live animals and products derived from wild animals such as ivory.

This review does not include studies related to measuring the attractiveness or trends of exotic pets based on social media, YouTube videos or Google searches\(^1\). Very importantly, it also does not cover online tools that can be used by law enforcement to identify illegal trade\(^2\). Finally, the review does not cover previous reports from online databases, as analysed in some studies\(^3\).

**Table 1: List of online exotic pet trade investigations assessed in the review**

<table>
<thead>
<tr>
<th>Study</th>
<th>Year</th>
<th>Scope</th>
<th>EU Countries investigated</th>
<th>Platforms investigated</th>
</tr>
</thead>
<tbody>
<tr>
<td>[1]</td>
<td>2020</td>
<td>Global</td>
<td>Germany</td>
<td>5 online platforms and 10 Facebook groups</td>
</tr>
<tr>
<td>[2]</td>
<td>2019</td>
<td>Species or taxa specific</td>
<td>Global (results in Austria, Belgium, Czech Republic, Germany, Denmark, Spain, France, Hungary, Italy, Netherlands, Poland, Sweden, Slovenia, Slovakia)</td>
<td>online surveys on 5 European online platforms and 5 Facebook groups (both open and closed)</td>
</tr>
<tr>
<td>[3]</td>
<td>2020</td>
<td>Protected species</td>
<td>Belgium, Netherlands</td>
<td>50 online platforms</td>
</tr>
<tr>
<td>[4]</td>
<td>2015</td>
<td>Species or taxa specific</td>
<td>Germany</td>
<td>2 German platforms</td>
</tr>
</tbody>
</table>

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2. Debève, F. et al. (2020). Tackling wildlife cybercrime in the EU: how technology can help. TRAFFIC and WWF.
3. See e.g. Auliya, M et al. (2016). Trade in live reptiles, its impact on wild populations, and the role of the European market. Biological Conservation, 204:103-119. [https://doi.org/10.1016/j.biocon.2016.05.017](https://doi.org/10.1016/j.biocon.2016.05.017)
<table>
<thead>
<tr>
<th>Year</th>
<th>Type</th>
<th>Country/Region</th>
<th>Language</th>
<th>Websites/Platforms</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>Global</td>
<td>Belgium, France, Germany, Netherlands, Poland</td>
<td>280 websites</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>Protected species</td>
<td>France, Germany</td>
<td>106 online marketplaces and 4 social media platforms</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>Species or taxa specific</td>
<td>Global (results in Germany, Czech Republic, Netherlands, France, Slovenia, Portugal, Luxembourg, Sweden, Belgium, Spain)</td>
<td>111 Facebook advertisements and 55 online fora</td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>Species or taxa specific</td>
<td>Local</td>
<td>151 websites in five languages</td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>Species or taxa specific</td>
<td>Global (results in Germany, Netherlands, Poland, Spain, Austria Belgium, Greece, Czech Republic)</td>
<td>90 websites</td>
<td></td>
</tr>
</tbody>
</table>

**Results**

**Evolution of trade overtime**

The main source of information on the trend of the illegal online trade is offered by IFAW regular surveys in 2008 [5], 2014 [6] and 2017 [7]. These reports, like others analysed in this review, did not focus on Europe to give a broader picture of the online trade worldwide but gave significant results on EU countries, especially Germany and France. Findings from 2008 focused on CITES Appendix I species and found 1,416 listings of exotic birds, among which 38 were offered in the EU. It must be noted that the investigations only covered up to 5% of the total advertisements in the EU countries covered. Interestingly, this study highlights that results in Europe are aligned with global trade [5]. Investigations from 2014 were broader and also included species from CITES Appendix II and 54% of the posts advertised live animals. 2,877 ads concerning live animals were identified in 5 EU countries on 385 websites, corresponding to 8,543 specimens [6]. The last survey
dated from 2017 and again broadened the scope to include CITES Appendix III and non-CITES listed species, and found that 80% of the 5,381 advertisements involved live animals for 11,772 specimens. It also assessed social media platforms that became increasingly popular for trade. The study reveals that 6,811 specimens were traded in Germany and France, which is slightly higher than the previous survey [7].

More recent investigations published in 2020 give insights on the number of species traded, highlighting that it increased worldwide until 2008 and has remained stable since [11]. Pro Wildlife published two reports, in 2015 [4] and 2020 [1]. In 2015, the investigations concluded that 291 species and over 10,120 individuals of exotic mammals, especially rodents followed by carnivores, primates and marsupials, had been advertised on two major platforms over a period of five years (2010-2014) [4]. In 2020, the investigations covered additional platforms and showed that 3,961 individual mammals had been offered for sale, a fewer number that could be explained by the shorter period of the investigations, but revealed that 38 additional species were identified [1].

Species

IFAW surveys reveal that exotic birds were the most common live illegally traded taxa in 2008, with 1,416 listings in total, among which only 38 were offered in the EU. Reptiles then clearly became the most popular taxa. Indeed, the results from 2014 are different from the previous survey as it shows that reptiles are the most traded category of taxa with 2,509 listings accounting for nearly 50% of the 5,160 ads of live animals analysed. Of these, 80% of advertisements involved turtles [6]. This was confirmed by the 2017 survey where 55% of specimens identified were reptiles, 45% of which were turtles and tortoises including legally captive-bred species such as Hermann’s, Marginated and Spur-thighed tortoises [7]. It is interesting to note that 35% of all reptile species have been documented in the online trade [3].

Birds are the second largest category of taxa traded. In 2014, exotic birds made 73% of the total assessed bird advertisements, with 69% involving parrots. The same study highlights that Russian websites accounted for 40% of the big cat trade [6]. However, only limited information is available with regards to mammals. This may be explained by the low number of mammal species and specimens traded online compared to reptiles and birds.
However, it should be noted that this division of the taxa traded differs from country to country, including within the EU. Indeed, a study focused on Belgium and the Netherlands found 91 listings in 2019, 49 were for birds, totalling at least 93 specimens, and 42 for reptiles, totalling 94 specimens [3]. Investigations conducted in Italy also report that birds are the main species traded with 446 listings identified compared to 205 for reptiles [9]. These numbers tend to indicate, in light of IFAW reports, that Germany and France are the main markets for reptile species.

It must be noted that only one study targeted on reptile species truly details the specific species of reptiles traded [11]. It is however possible to get partial information on key popular species traded in the different countries. For instance, small lizard species, such as Anolis and Sphaerodactylus species are particularly popular in Germany [12].

**Link with exotic pet fairs**

The studies analysed clearly establish a link between the exotic pet fairs in Europe and the online trade [8]. As an illustration, most lizard advertisements in Europe refer to Hamm (Germany) or Houten (the Netherlands), both cities where the largest exotic pet trade fairs in the EU are hosted [2]. Another study emphasised that many advertisements in fact list reptile species that will be sold at the Hamm fair. Very importantly, these posts were often not only in German but also in English, suggesting that sellers were targeting foreign buyers [3][12]. Also mentioned are delivery methods as sellers prefer hand to hand delivery at the fairs [3]. In this context, the number of online advertisements on German platforms increases significantly during the weeks prior to the Hamm fair [1].

**Geographical scope**

As already mentioned, a number of the studies of this review do not focus on Europe but on online trade in general with results in EU countries.

One country, Germany, is particularly mentioned for its key role in the online trade, especially with regards to reptiles in both general [2][12] and country specific [1][4] investigations. Along with France, it is one of the two constant focuses of IFAW investigations [5][6][7]. A study detailing the online trade of African snakes reveals that these snakes are found in equal numbers in the US and Germany, while they are also sold in significantly lesser quantities in Czech Republic, the Netherlands and France, and
The studies from this review give an extensive overview of the online websites and platforms where animals are exchanged. A list of websites and social media groups investigated can be found for Romania [10], Germany [1][4][5][6][7][8], France [5][6][7], Belgium [3][6], the Netherlands [3][6] and Poland [6]. One of the studies even started with Google searches with the local version of the Google server leading to 151 searchable reptile websites [11].

It is important to specify that the investigations were not conducted on the dark web (also called deep web) where illegal products are traded.

Social media platforms have been considered in the investigations. The IFAW 2017 report highlights that 6.2% of the trade was conducted on social media with Facebook hosting 165 advertisements and 110 for Instagram [7]. Most studies indeed focus on Facebook as the main social media platform for wildlife trade. Within Facebook, it is essential to distinguish between pages and groups, whether closed or open. Closed groups require the decision of a person to gain access and complicate controls [7]. One study found
that most advertisements, 60%, could be found on Facebook groups with the 40% remaining being on public pages [3].

This study conducted by TRAFFIC and WWF also gives other valuable insights on Facebook. Sellers use some code words such as “exchange” or “rehoming” and propose to communicate on other platforms such as WhatsApp to avoid revealing the transaction. The study also contains limited information on the profile of the sellers indicating that 60% of them were amateur collectors or breeders while 40% were professionals [3].

The study focused on Belgium and the Netherlands also interestingly revealed that, in these countries, 52% of advertisements were found on “specialist” websites, 26% on Facebook and 22% on the general classified advertisement websites with 75% of all advertisements being found on only five platforms [3].

### Knowledge gaps

### Monetary value

The monetary value of the animals traded has been considered in the three IFAW reports giving interesting insights. For instance, during the most recent survey in 2017, the total estimated monetary value of wildlife offered on German online platforms was 1,126,809 € for 6,329 specimens. It must be noted that these numbers also include animal products such as ivory but the majority of advertisements in Germany concerned live animals. The same report also informs on the situation in France where the monetary value of online wildlife trade is estimated at 709,279 € [7]. It is uncertain if these values refer to average costs for the animals advertised or the exact price at which they are offered. Pro Wildlife reports also provide detailed information on the prices at which mammals (rodents, carnivores, primates, marsupials and others) are offered in Germany, highlighting that the total value of the trade over 5 years based on prices at which the animals are offered equals 8,288,202 € [4].

However, these numbers can never reflect the ecosystem values provided by these individual animals and species in the wild. It must also be noted that current estimations of the monetary value taking into consideration all species are not available.
Impact of platforms’ policies

The impact of voluntary initiatives from the industry also remains uncertain. In 2018, 21 platforms including Google, eBay, and Facebook joined the Global Coalition to End Wildlife Trafficking Online, aiming to reduce this activity by 80% in 2020. These platforms adopted strict policies [7]. One study from 2020 highlights that the strict policies on eBay have been effective as the investigations did not find any advertisement of priority species on this platform. However, as noted in the section on platforms above, sellers still avoid detection on Facebook [3]. As there was no recent investigation conducted, it remains difficult to assess the benefits of these initiatives.

It is also important to mention that the Digital Services Act will be applicable to Very Large Online Platforms (platforms with more than 45 million active users in the EU) from the beginning of 2024. These platforms will have to strengthen checks to prove that the information provided by sellers is reliable and accurate, and assess and mitigate systemic risks (including dissemination of illegally traded animals content) to implement mitigation measures. It remains to be seen if these provisions are sufficient to curb the illegal online trade of live animals. It can be expected that sellers would simply move to smaller platforms with no obligation to implement these actions, or access the dark web.

Non-protected species

Most of the studies in this review focus on protected species, and in particular species listed on CITES appendices. This is the case of the three surveys conducted by IFAW [5][6][7] and the WWF/TRAFFIC report [3]. On the contrary, some studies solely focus on species that are not listed under CITES [8][10]. The most interesting findings come from a study confronting data from an online survey with CITES and LEMIS datasets. It demonstrates that nearly 80% of traded species are not covered by CITES. These include, for instance, newly discovered species that are soon traded. This study highlights that CITES concentrates highly valuable species from a monetary standpoint, ignoring marginal yet endangered species threatened by global trade [11].

Origin of the animals

The origin of the animals traded is one of the most important gaps that was also highlighted with regards to exotic pet markets. However, this question has been considered in all the investigations. For instance, a study focused on the lizard trade
provides that nearly 70% of online posts did not indicate the origin of the animals [2]. One study focused on the trade of the Romanian European Pond Turtle (Emys orbicularis) highlights that the online trade mainly originates from locally wild-caught individuals [10].

One study aiming to inform on trade routes of African snakes found that 2,269 African snakes from 42 species, coming mainly from three trading hubs: Togo, Egypt, and Tanzania, have been wild caught and advertised for sale, mainly in Europe, between 2013 and 2017 [8]. One global study found that nearly 90% of species and half of individual reptiles are wild caught. This study also emphasises the lack of requirements and adequate legislation as a major issue [11].

In the recent survey conducted in Belgium and the Netherlands, only 6 of the 49 bird advertisements specified that the specimens were captive-bred [3]. The investigations generally reveal that the majority of listings of CITES species do not refer to CITES permits or other documentation attesting the legality of the trade. For instance, it is the case for 38% of CITES species advertisements identified recently in Italy [9].
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Studies references


