

Pets in the EU: scale, protocols and online apprehension

By Sapience, September-November 2022

1. Background

Sapience is a Brussels-based independent research and consultancy agency and spin-off of the Vrije Universiteit Brussel (VUB), specialised in psychological and behavioural research. The Sapience team has extensive expertise in employing different research methods to understand, predict, and influence human behaviour.

In September 2022, Sapience was asked by Eurogroup for Animals and Stitching AAP (Animal Advocacy and Protection) to carry out EU-wide research to gather both quantitative and qualitative information concerning the entry, the trade, and the keeping of exotic pets in the EU, with the aim of exploring different research areas.

2. Scope of the research

This research has been designed to represent a snapshot of the current situation in the EU. It is not intended as a comprehensive, definitive view of the full European situation, rather to paint a picture of the likely situation across the EU based upon initial investigations. It is therefore recommended that a dedicated EU wide approach is taken to monitor the themes investigated.

The research had the objective to gain an understanding of:

1. The number of exotic animals imported, traded, and kept in the EU¹
2. The major differences in terms of import and keeping laws and procedures among selected EU countries
3. The major challenges to the welfare of the exotic pets traded and kept within the EU

This research provides Eurogroup for Animals and Stitching AAP with insights that can be used to better understand the exotic pet trade, and to put forward policy recommendations.

In the execution of the current research, we referred to a very broad definition of exotic pets that includes all animals that are kept as pets and that are not dogs or cats, as there is no uniform definition of exotic pets in legislation in the EU. Exotic pets therefore include birds and parrots, reptiles and amphibians (lizards, snakes, turtles, etc.), small mammals (rabbits, ferrets, rats, rodents, etc.), ornamental fish, as well as wild mammals (primates, big cats, foxes, etc.).

In the present Report, the information collected is analysed and reported. The reporting is organised around the three research areas above.

¹ In the present document, “import” refers to the animals entering the EU from an extra-EU country, while “trade” refers to the animals entering an EU country from another EU country.

3. Overview of the methodology

The methodology and the sampling strategy was defined in agreement with Eurogroup for Animals prior to the start of the research and is fully reported in Annex 1.

To deliver towards the project scope and provide Eurogroup for Animals with insights on the agreed research areas, four categories of stakeholders were approached:

1. Veterinary centres (clinics, hospitals, laboratories) specialised in providing healthcare services to exotic animals
2. Rescue centres
3. Border Control Posts (BCPs) designated to the inspection of live animals at the EU entry points
4. Online vendors of exotic pets

The veterinary centres as well as the rescue centres were approached via comprehensive, semi-structured qualitative phone interviews, while the online vendors of exotic pets were approached with mystery interviews.

The BCPs were approached with qualitative phone interviews. The research focused on different EU Member States (MSs). For the interviews with veterinary and rescue centres, we focused on France, Ireland, and Italy. The interviews with online vendors had no geographical limitation. Table 1 reports an overview of the methods used as well as of the MSs included in the study.

For each of the addressed research areas, primary data collection was complemented with online desk research.

Table 1. Overview of the research methods and included EU countries.

Who	Type of interview	EU MSs included
Veterinary Centres	Phone interviews (N = 12)	FR, IE, IT
Rescue Centres	Phone interviews (N = 3)	FR, IE, IT
BCPs	Phone interviews (N = 6)	FR, IT,
Online vendors of exotic pets	Mystery interviews (N = 18)	EU-wide

4. Results

4.1. Number of exotic animals imported, traded, and kept in the EU

It is impossible to obtain the precise number of the exotic pets that are currently imported, traded, and kept in the EU. This is due in part to a lack of accessible official data concerning exotic pets in the EU, in part to the existence of cross-border movements (intra-EU) that are

not notified to the competent authorities and that are therefore not tracked – see section 4.2 and Annex 3 “Research insights from mystery interviews with online vendors of exotic pets”. However, it was possible to estimate the magnitude of the phenomenon by collecting different indirect indicators. To address the first research area, we gathered insights about (i) the number of animals that were imported in the selected EU countries, (ii) the number of visits conducted on exotic pets by veterinary doctors every year in selected EU countries, and (iii) the number of veterinary doctors specialised in exotic pets in the EU territory.

4.1.1. Import and trade of live animals in the selected EU countries

The official reports published by the *Ministère de l’Agriculture et de la Souveraineté Alimentaire* (France) and by the *Ministero della Salute* (Italy) on the activities of the French and Italian BCP provide information about the imports, the inspections, and the rejections in the respective countries².

Le *Rapport d’activité du SIVEP - 2017* shows that in 2017 alone, 3,902 consignments of live animals were imported from extra-EU countries into France and inspected by the BCP³. However, the report provides no information about the actual numbers and types of live animals imported in the country.

Conversely, the reports of the Italian BCPs for the years 2019, 2020, and 2021 describe in detail the activity of each designated BCP in the Italian territory and include the number of imports and inspections for the different types of live animals - see Table 2 for an overview. These reports reveal that the number of consignments of live animals imported in Italy were 2,638 in 2019, 2,122 in 2020, and 2,459 in 2021. The report also indicates the specific amount of live animals for each type of animal. In total, more than 2.5 million ornamental fish, almost 1 million reptiles, and more than 50 thousand mammals have been legally imported to Italy from extra-EU countries since 2019. However, the report does not specify the intended purpose of the imported live animals, and therefore it is not possible to establish what proportion of the imported animals will be kept as pets.

² No reports on the activity of the BCP were found for Ireland.

³ Report available at:

<https://agriculture.gouv.fr/importation-de-produits-animaux-danimaux-vivants-daliments-pour-animaux-et-de-vegetaux>

Table 2. Number of animals imported in Italy from outside the EU, either directly through an Italian BCP or indirectly via a BCP of other EU countries.

Type of live animals	2019	2020	2021	Total 2019-2021
Mammals (excluding equine and bovine animals, swine, sheep, goats, and primates)	17,799	11,866	23,390	53,055
Ornamental fish	1,035,867	695,218	818,144	2,549,229
Reptiles (including snakes and sea turtles)	339,387	298,502	313,961	951,850
Other terrestrial animals (not mammals, birds, or reptiles)	335,658,619	291,143,760	403,826,821	1,030,629,200
Other animals (excluding animals of agricultural and zootechnical interest)	11,368	4,826	21,967	38,161

In addition to the imports from extra-EU countries, the *Ministero della Salute* (Italy) also released data related to the intra-EU trade of live animals for 2019. This data shows a total of 66,834 consignments (0.25% increase with respect to 2018) entering the Italian territory. While most of these consignments refer to animals of agricultural and zoo-technical interest (e.g., equids, cattle, swine, sheep, goats, poultry), 2,623 consignments, equal to 947,329 animals, refer to “Other live animals”, for which species-specific details are not provided. Based on complementary information collected in the current research - i.e., mystery interviews with online sellers - it should be understood that the official intra-EU trade notified to the competent authorities does not represent the 100% of the total trade. For instance, out of the 18 mystery shopper interviews that we conducted with online sellers of exotic animals, none of them mentioned the notification to the competent authorities. While the small sample size of the current research does not allow to draw conclusions that are statistically relevant, it provides evidence of cross-border trade that is not traced.

4.1.2. Number of veterinary visits to exotic pets

The interviews with veterinary doctors specialised in exotic animals provided a proxy of the number of visits of exotic pets per year in the selected countries. The number of visits depends on several factors, including the career stage of the veterinary doctor (i.e. early career stages are associated with less visits per year), the size of the veterinary centre (i.e. a 1-doctor clinic can provide less visits than a comprehensive veterinary service with a team of specialised veterinarians), as well as the type of veterinary centre (i.e. veterinary schools tend to have less visits per year than private veterinary clinics).

Overall, the interviews revealed that a veterinary doctor specialised in exotic animals typically conducts between 750 and 1,500 visits of exotic pets per year, while veterinary clinics and hospitals providing healthcare services for exotic animals conduct between 2,500 and 12,500 visits of exotic pets per year. These estimates are consistent among the selected countries.

It is likely that these estimates are a gross underestimation of the actual size of exotic pet ownership for three main reasons:

- A proportion of exotic pet owners may not refer to veterinary services due to economic factors (e.g., high costs of veterinary services), low accessibility (e.g., absence of specialised veterinary services in the area), or lack of knowledge (e.g., pet owners do not recognize the symptoms and/or healthcare needs). For instance, recent research conducted in Ireland estimated that that 34% of exotic pet owners never sought veterinary services⁴.
- The estimates refer to the number of visits and not the number of exotic pets visited. While veterinary visits in the clinic are typically conducted on one single animal at a time, visits to breeding farms involve more than one animal per visit.
- Owners of exotic pets may not refer exclusively to veterinary doctors that specialise on exotic animals. It is possible that a proportion of visits of exotic pets is carried out by veterinary doctors that do not have a specialisation on exotic animals, who were not included in this investigation.

4.1.3. Number of veterinary doctors specialised in exotic animals

According to the information collected, the total number of veterinary specialised in exotic animals varies dramatically across EU Member States. For instance, the recruiting for the qualitative interviews was particularly challenging in Ireland because of the low number of veterinary doctors who can treat exotic pets. Even though veterinary centres advertise on their website healthcare services to exotic pets, many of those centres do not have veterinarians for exotic pets in their team. The fact that the number of veterinarians for exotic pets in Ireland is rather limited was confirmed by one of the four interviewed veterinary doctors.

In Italy, on the contrary, the *Società Italiana di Veterinari per gli Animali Esotici (SIVAE)* represents the largest association of veterinary specialists for the diagnosis and the treatment of exotic and wild animals in the country (and reportedly in Europe), and it currently counts 822 members. A survey carried out in 2021 by the SIVAE on a subsample of its members, reveals that exotic pets represent more than half of the total number of visits for around 36% of veterinary specialists who are members of the SIVAE⁵. However, at present it is difficult to analyse the market given the lack of official and comparable data across the EU member states.

We also analysed the data published by the European Board of Veterinary Specialists (EBVS), which is the umbrella organisation for veterinary specialties within Europe, and that is registered with the Chamber of Commerce of the Netherlands. The EBVS includes 27 veterinary specialist Colleges, comprising more than 38 distinct specialties with more than 4000 veterinarians active as a European Veterinary Specialist. One of the EBVS Colleges is the European College of Zoological Medicine (ECZM) which encompasses the veterinary treatment, healthcare and preventative medicine of avian species, small mammals, all reptilian and amphibian species, as well as wildlife and zoo health management. The ECZM is therefore the reference College for the veterinary specialties linked to the treatment of exotic pets.

⁴ Goins, M., & Hanlon, A. J. (2021). Exotic pets in Ireland: 1. Prevalence of ownership and access to veterinary services. *Irish veterinary journal*, 74(1), 1-7.

⁵ The information about the number of SIVAE members and the survey was provided by the President of the SIVAE upon our request.

Figure 1 shows an elaboration of the original data about the number of veterinary specialists for each EBVS College⁶, and compares the number of veterinary specialists in the ECZM College with all the other Colleges (average) for the years 1996-2016. The graph shows that since 2009, the number of practitioners that chooses a speciality linked to exotic animals grows at a faster rate than the other specialties. In addition, the graph also reveals that since 2014, the number of veterinary practitioners specialising in exotic animals is above the EBVS College average.

The finding that the number of veterinary doctors that specialise in exotic animals grew in the 2009-2016 period is likely a response to increased demand. However, based on the current data it is not possible to draw conclusions on what are the drivers of this growth. For instance, the increased demand could be linked to an increased number of exotic pets in the EU, an increased owners' awareness about exotic pets' welfare issues leading to the search for specialised veterinary services, or a combination of both factors. In addition, the data from the EBVS provide only a partial view of the phenomenon, because not all veterinary doctors that specialise in exotic animals are associated with the EBVS.

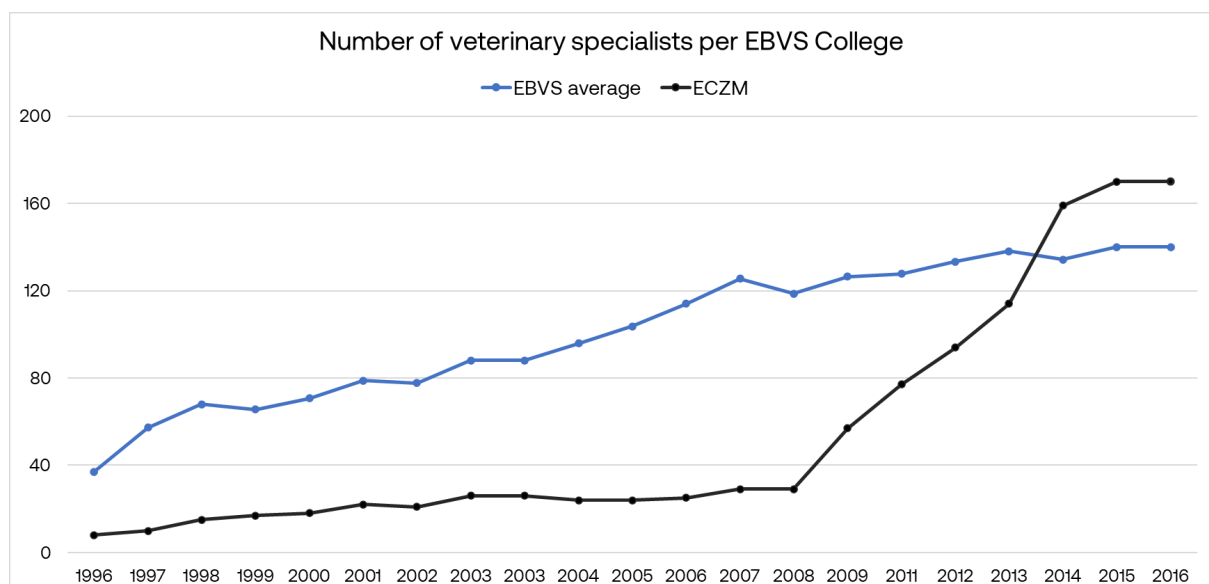


Figure 1. Number of veterinary specialists of the ECZM College (focused on avian species, reptiles and amphibians, small mammals, wildlife, and zoo health) compared to the other Colleges of the EBVS (average), from 1996 to 2016. [source: [EBVS](#)]

4.1.4. Overview of the inspection procedures at the BCPs

Overall, we identified three levels of controls on the import of exotic animals in the EU. One level concerns the identification of the animals and the analysis of the documentation from a regulatory point of view. This activity focuses mainly on documentation and does not necessarily include a visual inspection of the animals (e.g., Is the animal listed in CITES? Is the animal listed as a dangerous species? Is the animal listed in the positive or negative list

⁶ Original data available at:
<https://ebvs.eu/publications/public/number-of-specialists-per-college-1996-2015>

of the entry country?). This phase determines if the species is allowed to be imported in the country.

A second level of control concerns the veterinary inspection. This involves both an evaluation of the documentation prepared by a veterinarian in the country of origin certifying that the animals meant to be exported meet the health requirements, and the visual inspection of the animals upon arrival in the destination country. This level of control focuses on health-related aspects of the animals, and if the animals must go through additional procedures (e.g., laboratory analyses, quarantine, supervised periods, etc.).

A third level of control concerns the commercial and the transportation involved in the import inside the EU, which is typically performed by the customs.

4.2. Major challenges to the welfare of the exotic pets kept and traded in the EU?

To explore the main challenges concerning the welfare of the exotic pets that are kept and traded in the EU, we gathered evidence from different sources. On the one hand, we asked veterinarians and rescue centres to share their perception of the overall quality of the husbandry concerning exotic animals, and to evaluate the link between the quality of the husbandry and the pathologies of the animals visited in the context of their veterinary practice. On the other hand, we conducted mystery interviews with online sellers of exotic animals to investigate the level of consideration of animal welfare issues in this context.

4.2.1. Veterinarians' perception of the quality of exotic pet husbandry

The veterinary doctors that were interviewed report a high variability in the level of knowledge that owners possess regarding the management of the exotic, as well as in the quality of the husbandry, which can be attributed to several factors. The section below reports an analysis of the information collected via the interviews conducted with specialised veterinarians.

A first factor is the type of exotic pet owners, which can be roughly divided into three main clusters: official breeders, exotic pets' enthusiasts, and non-expert casual owners. Official breeders and exotic pets' enthusiasts are described by the veterinary doctors as very knowledgeable about exotic pets, and most often capable of providing good husbandry and adequate healthcare. Conversely, casual owners are not experts and do not always possess the level of knowledge that is required to provide good husbandry. For instance, one of the interviewed doctors reported that the first session with exotic pet owners is typically dedicated to informing and educating them about animal management and proper husbandry. To contrast the lack of knowledge and support owners of exotic pets, the SIVAE published detailed recommendations and guidelines to improve the awareness and the knowledge around exotic animals and improve the quality of the husbandry⁷.

According to almost all veterinarians interviewed, one problem that is regularly reported is that non-expert casual exotic pet owners often acquire information about how to keep their exotic pets directly by pet shops, who provide general guidelines and recommendations

⁷ A list of recommendations and guidelines is available at this link: <https://www.sivae.it/servizi-per-i-soci/documenti.html>.

about the diet, the ideal temperature, and the other needs of the animal. Veterinarians report that pet shops often do not provide clear, accurate, and correct guidelines for proper husbandry, yet they are perceived by the owners as trustable experts. This often leads to misinformation and to poor husbandry according to most of the veterinary doctors that were interviewed. However, all the veterinary doctors that we interviewed report that the overall level of husbandry is improving, and that exotic pets' owners are becoming more aware of animal welfare issues and of the recommended guidelines. It should be noted, however, that this observation can only describe the owners who bring their exotic pets to the veterinary services, but not the owners who are unwilling or incapable to properly care for their exotic pet.

4.2.2. Challenges for the husbandry of specific exotic species

The high variability in the husbandry depends also on the specific needs of the exotic animals - i.e., diet, temperature, environment, sociality, etc. Some of the animals that are widely kept as exotic pets - especially reptiles and birds - are reportedly very difficult to keep because of their special needs. For instance, some veterinary doctors describe Chameleons as an extremely fragile species that is notoriously difficult to keep in captivity⁸. Other veterinarians report that parrots, and avian species more generally, can develop abnormal behaviour when kept in captivity, especially if their environment does not provide physical, social, and psychological enrichment⁹. Two veterinarians in particular observe that since many of the exotic pets are prey in nature, they tend to hide their pain and their symptoms¹⁰, making it difficult to spot early signs of distress in these animals. In general reptiles, and parrots are reported by veterinarians to be more difficult to keep in captivity because it is more difficult to spot early signs of distress in these animals (e.g., compared to dogs or cats). Difficulties can also relate to specific nutrition needs. For instance, one veterinarian reported that an imbalanced diet is often a common cause of illness of the Coconut lorikeet (*Trichoglossus haematodus*), a species of parrot that in the wild feeds on nectar and pollen¹¹.

4.2.3. Link between pathologies of exotic animals and poor husbandry

When asked if there is a link between the pathologies treated in the exotic animals and the quality of the husbandry, veterinary doctors provide variable answers. Five of the interviewed doctors report that most of the pathologies are linked to poor husbandry, with two veterinarians declaring that up to 90% of the pathologies observed in their everyday veterinary practice are linked to poor husbandry.

The most common reported causes include environmental factors (e.g., temperature, size of the cage, opportunities of exploration, opportunities for physical activities of the animals and so forth) and nutritional deficiencies. This lack of proper husbandry is reportedly due to a

⁸ For information see for instance: McGeough, R. (2016). *Furcifer pardalis* (Panther Chameleon)—A brief species description and details on captive husbandry. *Biology, Engineering, Medicine and Science Reports*, 2(2), 27-38.

⁹ For information, see for instance: Rodriguez-Lopez, R. (2016). Environmental enrichment for parrot species: Are we squawking up the wrong tree?. *Applied Animal Behaviour Science*, 180, 1-10.

¹⁰ For information, see for instance: Dwyer, C. M. (2004). How has the risk of predation shaped the behavioural responses of sheep to fear and distress?. *Animal Welfare*, 13(3), 269-281.

¹¹ See for instance: Prijono, S. N., Rachmatika, R., & Maharani, S. (2021). Feed intake of selected vegetables and fruits by coconut lorikeet (*Trichoglossus haematodus*) in a colony system. *Biodiversitas Journal of Biological Diversity*, 22(11).

lack of knowledge by the owners, rather than to an intentional lack of interest in the welfare of the animal. Intentional animal mistreatment is reported to be extremely rare. Again, it should be noted that veterinarians are only exposed to pet owners who are willing to refer to veterinary services. This report is therefore silent about the husbandry of pet owners who are unwilling or incapable of providing access to veterinary treatment to their exotic pets.

4.2.4. Animal welfare in online trade

The mystery interviews with the online vendors revealed that sellers do not always share the guidelines about the basic needs of the animal and do not always take the necessary precautions to guarantee animal welfare during transport (see Annex 4).

Out of 18 mystery shopper interviews, only 5 vendors spontaneously provided accurate guidelines about basic needs of the animal, like the diet, the ideal environment, the risks for the humans, and so forth. The remaining 13 either provided only very general information (e.g., recommended diet, temperature, environment, etc) or ensured that more detailed information would have been provided upon the consignment. Also, animal wellbeing during transportation was not always taken into consideration by the vendors - see Annex 4 “Examples 5-7”.

5. Main conclusions

- It is very difficult to get official data on the number of exotic animals imported, traded, and kept in the EU. This is mainly due to the lack of accessible species-specific statistics on the intra-EU trade and extra-EU import.
- Using both direct and indirect parameters (i.e., official import data, and interview with veterinarians), the current research revealed that such a trade involves at least millions of animals for the countries selected.
- The interviews with the BCPs show that due to differences in the import rules, non-harmonized species are allowed to enter only in some of the EU countries investigated.
- Veterinarians report a high variability in quality of husbandry provided by the pet owners (i.e., breeders, enthusiasts, casual). This is reported by some veterinarians to be one of the reasons for which veterinarian interventions are requested.
- 17 out of the 18 online sellers interviewed did not mention the existence of restrictions in the movement of the exotic pets across the EU countries. Therefore, it is probable that the intra-EU trade of exotic pets, is taking place without any check or notification to the competent authorities.
- The investigation of the online market revealed that it is easy to purchase animals that are illegal in the country of the buyer, showing that part of this market is essentially illicit.
- The online trade shows the existence of an animal welfare issue concerning a lack of proper species-specific guidance by the vendors and a lack of animal welfare consideration for transport.

Annex I - Overview of the methodology

The current study involved the following research phases: selection of the relevant stakeholders, selection of the EU countries, selection of the research methods, development of the research material, fieldwork and data collection, interpretation of the results and reporting.

In the following, we will outline how the different research phases were implemented in the current research.

Selection of the relevant stakeholders

The first step was the identification of the relevant stakeholders that could provide and share insights about the import, trade, and keeping of exotic pets. A preliminary list was developed to include all the stakeholders that could potentially be included in the study.

The preliminary list included: the staff operating in the designated BCPs for the inspection of live animals in the EU, the online sellers of exotic pets, the owners of exotic pet shops, the exhibitors and sellers at exotic pet markets and fairs, exotic animal breeders, exotic pet keepers, healthcare providers for exotic animals (specialised veterinary doctors, clinics, and hospitals), and rescue centres and sanctuaries.

A subset of this preliminary list of stakeholders was eventually selected for inclusion in the study. The selection was based on different factors, namely the type of information provided by the stakeholders in connection with the relevant research areas and their accessibility.

In Table A1 we report the stakeholders that were eventually selected for inclusion in the study, the type of information they could provide, and the key indicators in relation to the research areas.

Table A1. List of the stakeholders that were included in the current research, type of information that they could provide in relation to the research areas, and key indicators.

Stakeholders selected for inclusion in the study	Main type of information in relation to the research areas	Key indicators
Border Control Posts (BCP)	Number of exotic pets in the EU Import laws in the EU	- Number and type of animals imported in the EU - Differences in the regulation of selected EU countries
Online sellers of exotic pets	Trade and keeping laws in the EU Challenges to the welfare	- Consideration for trade and keeping laws in the EU - Husbandry guidelines (feed, temperature, social needs, etc.) - Consideration for animal welfare during transport
Veterinary centres specialised in exotic pets and rescue centres	Number of exotic pets in the EU Keeping laws in the EU Challenges to welfare	- Number of visits to exotic pets - Number of exotic pets' specialists - Perception of the quality of husbandry provided by pet owners - Prevalence of pathologies linked to bad husbandry

Selection of the EU countries

Since the research aimed at providing insights about exotic pets at the EU level, different countries were taken into consideration for inclusion in the current study.

The research mainly focused on France, Ireland, and Italy. France and Italy represent countries with a significant pet trade^{12, 13, 14}, they have significant borders to other EU countries with differing pet trade and keeping legislation, and they have points of entry via sea and air. Moreover, Italy has an enforced negative list¹⁵ which is longer than that of France¹⁶. Ireland is estimated to have a large number of pets¹⁷, and additionally only borders Northern Ireland, making points of entry by sea and air potentially more significant. Ireland has regulations in place that are less strict than France and Italy, and that only includes restrictions on capturing or killing a short list of protected wild animals, for which a licence is required (Wildlife Act 1976).

Given the cross-national nature of the online trade of exotic pets, the research on the online vendors was not limited to the selected countries but it expanded at the EU level.

Selection of the research methods

After selecting the relevant stakeholders and the EU countries to include in the study, the appropriate research methods were selected. The stakeholders differed in terms of their accessibility, willingness to share information, as well as the type of insights they could provide, and therefore a comprehensive approach was employed that included different research strategies and methods. Specifically, we decided to gather information with qualitative interviews and with mystery interviews. The research process was supported by an online search of relevant information related to the research areas.

Qualitative interviews

Qualitative interviews were designed to cover specific talking points that were related to the relevant research areas. Given the exploratory nature of the current study, semi-structured interview guides were developed to provide interviewees with some guidance about the talking points, but at the same time to allow for a flexible and open-ended responding.

The interviews were conducted by telephone because the study included different countries and the different stakeholders had a broad geographical distribution.

Qualitative interviews were used to approach the veterinary centres as well as the rescue centres to gather insights from veterinary doctors providing healthcare services to exotic pets.

Phone interviews were also used to approach the BCPs.

¹² See The European Pet Food Industry, FEDIAF, Facts & Figures 2021, Brussels, available at: https://www.animalshealth.es/fileuploads/user/PDF/2022/06/FEDIAF_2021_Facts_and_Figures.pdf

¹³ Shiraishi H., Escot L., Kecse-Nagy K. and Ringuet S. (2020). The role of France in wildlife trade: An analysis of CITES trade and seizure data. WWF and TRAFFIC joint report, https://www.traffic.org/site/assets/files/13537/wwf-traffic_report_bd_2021-03.pdf

¹⁴ 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.201605.017>

¹⁵ The list of forbidden species for Italy is available at: https://www.mise.gov.it/images/stories/commercio_internazionale/cites/dm19_04_1996.pdf.

¹⁶ The keeping rules for non-domestic animals in France are available here: https://www.legifrance.gouv.fr/loda/article_lc/LEGIARTI000043119695

¹⁷ See footnote 4.

Mystery interviews

Qualitative interviews are ideal for in-depth exploration of specific topics, but they are not effective when the interviewees are reluctant or unable to share their knowledge or opinion about a specific topic. In addition, it is well established that qualitative interviews are vulnerable to different response biases, like social desirability (i.e., the interviewees answer questions in a way that will be viewed favourably by others and that is in line with social expectations) and strategic responding (i.e., the interviewees intentionally omit or manipulate their answers to avoid sharing sensitive information they may feel uncomfortable with)¹⁸.

In the context of the current study, these limitations were particularly relevant given the research areas and the topics being investigated. The risk of socially desirable and strategic responses was expected to be particularly high when interviewing the online vendors of exotic pets (e.g., unwillingness to be interviewed, over-reporting of good husbandry, under-reporting of unethical or illegal practices, etc.).

A mystery interview approach was thus used to approach the online vendors of exotic pets. Mystery interviews bypass the limitations of traditional qualitative interviews by using an observational research approach. In a mystery interview, the interviewer acts as a normal customer and evaluates and reports on pre-defined criteria while observing actual behaviour rather than relying on subjective self-reports.

Mystery interviews with the online vendors of exotic allowed us to circumvent the limitations of a traditional interviewing approach with these stakeholders (e.g., unwillingness to share information, social desirability, strategic responding), to assess how the online sale process actually took place, and to evaluate it with respect to the key indicators - see Table A1.

Development of the research material

Shortlists of BCPs, Veterinary centres, Rescue centres, and online platforms for exotic pets' sales

A long list of the BCPs to include in the study was developed based on the lists and the contact details of designated veterinary BCPs for each EU MS provided by the European Commission¹⁹. Only BCPs authorised to the veterinary inspection of live animals were considered for inclusion in the study. A total of 9 BCPs could potentially be included in the study, based on the selection criteria.

Veterinary centres were identified based on a preliminary online search. Only veterinary centres offering healthcare services to exotic animals in the selected countries - see Table 1 - were considered for inclusion in the study. Eventually, 12 veterinary centres, including veterinary clinics and veterinary hospitals were eventually selected for inclusion in the study. Also rescue centres were identified based on a preliminary online search. A total of 3 rescue centres were identified and shortlisted for the selected countries - see Table 1.

Finally, a preliminary online search was conducted to identify platforms for the online sale of exotic pets, resulting in a longlist of 21 platforms. These platforms vary in terms of different parameters, such as what animals are being sold (e.g., some platforms are species-specific, while other platforms offer ads for all species) or whether the content is accessible to all

¹⁸ Nancarrow, C., Brace, I., & Wright, L. T. (2001). "Tell me lies, tell me sweet little lies": Dealing with socially desirable responses in market research. *The Marketing Review*, 2(1), 55-69.

¹⁹ The list and the contact details of the BCPs in the EU MSs is available at this link: https://food.ec.europa.eu/animals/veterinary-border-control/contact-details-bcps-veterinary_en#EU

users or only verified members. The list of platforms included in the study can be made available upon request.

Interview guides for qualitative interviews

Table A2 shows an overview of the interview guide that was used to interview veterinary doctors operating in the veterinary centres. Given the exploratory nature of the research, the questions were open-ended to allow for a flexible exploration of the talking points. The interviews with the rescue centres were based on an adaptation of this interview guide - i.e., irrelevant questions were removed or adjusted. All interviews were conducted in the language of the selected country - i.e., English, French, and Italian.

Table A2. Overview of the talking points, objectives, and sample questions of the qualitative interviews with the veterinary doctors.

Talking Point	Goals	Sample questions
Background	Collect background information and introduce the topic of exotic pets	<ul style="list-style-type: none"> - Do you work only in this veterinary centre/rescue centre or do you have other activities? E.g., your own private practice, you work for other veterinary centres/rescue centres, etc. - What type of animals do you see? Exotic, domestic, or both? - What are the exotic pets you see most frequently in your practice as a veterinary doctor? ...
Scale	Estimate the number of encounters with exotic pets (e.g., per week/month/year)	<ul style="list-style-type: none"> - How many exotic pets do you see per day/month/year, on average? - If you also see domestic pets, what is the proportion of exotic pets vs. domestic pets? - Do you know how many veterinary doctors specialised in exotic pets there are in your region? - Are you aware of resources where I can find data or reports about the number of exotic pets in your country? - Is there an association of veterinary doctors that is specific for the diagnosis and treatment of exotic pets? ...
Keeping laws	Understand the knowledge of owners regarding keeping laws in their country	<ul style="list-style-type: none"> - What documents are required in your country to own an exotic pet? - What are your legal obligations when you see an exotic pet? - Do you ask for the required documents? - Is there a list of exotic animals that are not allowed in your country? - Are there exotic pets that are not covered by any regulation in your country? If yes, which ones? E.g., Not in black/positive lists, not in CITES appendices, etc. ...
Animal welfare	Evaluate the perceived quality of the husbandry	<ul style="list-style-type: none"> - Overall, do you have the perception that owners have adequate knowledge of their exotic animals? (e.g., diet, temperature, environment, social needs, etc.) - Overall, do you have the perception that owners are able to provide the basic care to exotic pets? - Are there exotic species that are particularly difficult to keep? Why? - Are there species that are more difficult to treat than others? Why? - Is there a link between the pathologies you treat in your practice and the husbandry? - Can you provide an estimate of the percentage of exotic pets that are treated for a pathology linked to poor husbandry?

		...
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Mystery interviews

Mystery interviews were designed to report on the trade of exotic pets through dedicated online platforms.

The first step was the creation of a Google account with an alternate identity in order to obtain a valid email address - see Figure A1. This was instrumental to the communication with the online vendors, and to the creation of the accounts in the online platform for exotic pets. In addition to the Google account, a sim card was purchased to have a valid phone number with a Belgian prefix (+32). The sim card was used to communicate with the online vendors via phone calls or instant messaging applications.

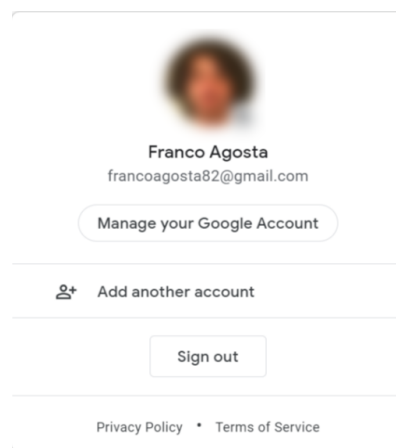


Figure A1. Incognito Google account and email address of the mystery shopper (profile photo redacted for publication).

Fieldwork and data collection

The fieldwork, including the preliminary desk research, the qualitative interviews, and the mystery interviews, lasted from 10/10/2022 to the 25/11/2022. To summarise:

- 12 qualitative interviews were conducted with veterinary centres in the selected countries – 4 interviews for each selected country
- 3 qualitative interviews were conducted with rescue centres – 1 interview for each selected country
- 18 mystery interviews with online vendors. The interviews with the online vendors were conducted via phone call, emails, or WhatsApp.

Interpretation of the results and reporting

The collected research material included all the documents found and downloaded during online research, the interview notes, the emails, and the WhatsApp conversations were analysed and interpreted. The main results are reported in the current document.

Annex 2 - List of animals that could be purchased from online sellers within the EU

Country buyer	Country seller	Animal	Forbidden as a pet in the country of the buyer?
BE	IT	Bearcat (<i>Arctictis binturong</i>)	Yes (not in positive list)
BE	SK	Corsac fox (<i>Vulpes corsac</i>)	Yes (not in positive list)
BE	LT	Fennec foxes (<i>Vulpes zerda</i>)	Yes (not in positive list)
IT	PL	Common marmoset (<i>Callithrix jacchus</i>)	Yes (in blacklist of dangerous species)
IT	CZ	Common marmoset (<i>Callithrix jacchus</i>)	Yes (in blacklist of dangerous species)
BE	NL	Banded mongoose (<i>Mungos mungo</i>)	Yes (not in positive list)
BE	IT	Meerkat (<i>Suricata suricatta</i>)	Yes (not in positive list)
IT	CZ	Two-toed sloth (<i>Choloepus didactylus</i>)	Not officially
BE	IT	Striped skunk (<i>Mephitis mephitis</i>)	Yes (not in positive list)
FR	BE	Hooded vulture (<i>Necrosyrtes monachus</i>)	Need capacity ²⁰
IT	PL	Serval cat (<i>Leptailurus serval</i>)	Yes (in blacklist of dangerous species)
BE	PT	Kinkajou (<i>Potos flavus</i>)	Yes (not in positive list)
BE	DE	Caracal cats (<i>Caracal caracal</i>)	Yes (not in positive list)
IT	DE	Reticulated python (<i>Malayopython reticulatus</i>)	Yes (in blacklist of dangerous species)
IT	LT	Porcupine (<i>Hystrix hystrix</i>)	Yes (in blacklist of dangerous species)
BE	DE	Nimlai (<i>Boselaphus tragocamelus</i>)	Yes (not in positive list)

²⁰ This vendor would not sell the Hooded vulture to private individuals but only to expert breeders and falconers.

Annex 3 - Research insights from mystery interviews with online vendors of exotic pets

The mystery interviews with online vendors revealed three important aspects of the online market of exotic pets.

First, the trade of exotic pets between different EU MSs can easily take place without any check or notification to the competent authorities. None of the online vendors approached via the mystery interviews mentioned the need to notify the trade to the competent authority, although all the trades implied cross-border movements between different MSs. This indicates that there is a proportion of the intra-EU trade of exotic animals that does not appear in the official trade data. However, it cannot be excluded that notifications to the competent authorities would have been transmitted at the time of the actual purchase of the animal.


Second, this investigation shows the existence of a trade that is essentially illegal. Out of the 18 online vendors approached, only 1 vendor mentioned a restriction concerning the regulation for trade and detention of non-domestic animals in the country of the buyer. In all the other cases, it was possible to buy an exotic animal that was illegal in the EU MS of the buyer – See Annex 4 “Examples 1-4”. This shows that these platforms provide relatively easy access to a market that escapes the official regulation for the trade and the detention of exotic pets. While the small sample size of the mystery interviews and the limited number of platforms approached do not allow to draw conclusions about the size of the phenomenon, it shows that at least part of the online trade has an illicit nature.

Third, sellers do not always share the guidelines about the basic needs of the animal and do not always take the necessary precautions to guarantee animal welfare during transport. Out of 18 mystery shopper interviews, only 5 vendors provided accurate guidelines about basic needs of the animal spontaneously, like the diet, the ideal environment, the risks for the humans, and so forth. The remaining 13 either provided only very general information (e.g., recommended diet, temperature, environment, etc) or ensured that more detailed information would have been provided upon the consignment.

The section below shows extracts from the conversations with the online vendors of exotic pets. These extracts show a general lack of concern with regards to the restrictions for the intra-EU movement of exotic pets (Examples 1-4) or a lack of species-specific guidance for the keeping and the transport of the animals (Examples 5-7).

To preserve anonymity, personal details were redacted.

Example 1. Online advertisement (left) and extract from a mystery interview via email with an online vendor (right), concerning the trade of a Fennec Fox from Lithuania (vendor, red boxes) to Belgium (mystery buyer, blue boxes). Fennec foxes are not in the Belgian positive list.



E-mail: [redacted]

Hello [redacted] I saw your ads about the foxes on enimalia. I am interested in 2 foxes. i live in belgium, do you also organize the transport? and what is the price? thanks in advance, Franco

to me

Hi,
Where are you located?
I need to know so i can evaluate cost of delivery.

to [redacted]

Hello,

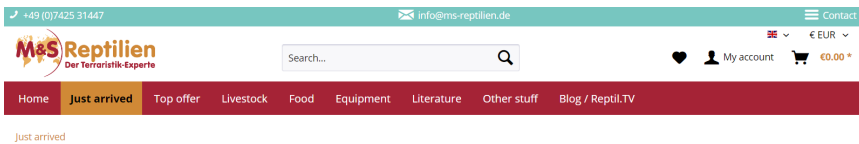
I live in Belgium, a small town near the city of Liège.

...

to me

Hello,
Phone number has been noted.
If you are not comfortable having them delivered to your home. I can register them for delivery at a drop off point or pick up at the agent office.
The delivery agents would call you once they get to Liege.
Yes sure they will travel by road and it makes it easier.

Example 2. Screenshots showing the steps to purchase a reticulated python from the German online platform <https://www.ms-reptilien.de/>. The top screenshot shows the original advertisement, the middle image shows the form for the input of the personal details and address, and the third image shows the payment options after the address has been specified. Reticulated pythons cannot be kept by private individuals in Italy (blacklist of dangerous animals). No animals were purchased in this investigation.



1.0 (Male) Mochino Motley Netzpython NZ' 20 Broghammerus (Python) reticulatus(Originalbild)



€429.00 * % **€539.00*** (20.41% Saved)

Prices incl. VAT plus shipping costs

easyCredit Finanzieren ab 20,00 € / Monat mit easyCredit-Ratenkauf! [Mehr Infos](#)

● Ready to ship today.
 Delivery time appr. 1-3 workdays

i Die Lieferung erfolgt immer vormittags zwischen 8 & 14 Uhr.

Gewünschtes Lieferdatum

Datum auswählen

1

▼

Add to shopping cart >

[Compare](#)
[Remember](#)
[Comment](#)

Order number: srpbr20-NR45

I'm already a customer.

Log in with your email address and password

[Forgot your password?](#)

Login >

PayPal Checkout

My benefits

- ✓ Express Shipping
- ✓ Save your user data and settings
- ✓ Overview of your orders incl. shipping informations
- ✓ Manage your newsletter subscription

I'm a new customer

Private customer

Mr

Franco

Agosta

☒ Don't create customer account

francoagosta82@gmail.com

+32491290251

Telefon: Zwingend erforderlich bei Tier- oder Frostfutter-Bestellungen!

Date of birth

10

11

1982

Your address

Via Cristoforo Colombo

36012

Asiago

Italien

☐ The shipping address does not match the billing address

The fields marked with * are required

DHL

DHL Preferred Delivery.

You can choose your preferred delivery options under 'Payment and Delivery'

Continue >

Next >

Change payment method

☐ easyCredit-Ratenkauf
Ganz entspannt in Raten zahlen.

easyCredit

☒ PayPal, Lastschrift oder Kreditkarte

PayPal

First time PayPal? Simply create your free account while paying and benefit from [buyer protection](#).

VISA Credit Card

☐ Prepayment

You simply pay in advance and the goods are conveniently and inexpensively delivered to your home upon receipt of payment.

Change shipping method

☒ Tierversand International

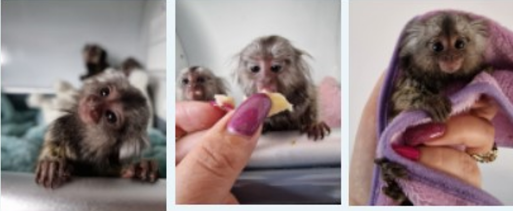
Sum:	€439.82*
Shipping costs:	€450.00*
Total amount:	€889.82
Total amount without VAT:	€729.36
Plus 22 % VAT:	€160.46

Next >

Example 3. Online advertisement (left) and extract from a mystery interview with an online vendor via WhatsApp (right), concerning the trade of a Marmoset monkey from Poland (vendor, white fields) to Italy (mystery buyer, green fields). Marmoset monkeys are in the Italian blacklist of dangerous species.

Offer Primates 07.11.22 Poland

For sale baby marmoset *callithrix jacchus*
More info whatsapp +48 [redacted]



Ok good, I live in Italy, which is far. The 1300 euro includes the transportation costs? 5:29 PM ✓✓

No 5:29 PM

I m from poland 5:29 PM

I dont send 5:29 PM

Need come if want 5:30 PM

Ah ok 5:30 PM ✓✓

Do I need to show documents at the border? 5:31 PM ✓✓

And sorry one questions: payment only cash right? 5:31 PM ✓✓

Yes payment cash when you come 5:31 PM

Ok perfect 5:32 PM ✓✓

No need show 5:32 PM

But i give papiers 5:32 PM

So is no problem 5:32 PM

Ok. I have to discuss and check with my wife (it's for her) 5:32 PM ✓✓

The papers are vaccination certificates? Or other papers? The papers are in English or from Poland? 11:36 AM ✓✓

No vaccination 11:37 AM

Never 11:37 AM

Pepers from government 11:38 AM

That was born in capivity 11:38 AM

This in polish 11:38 AM

Ok, but normally they should control 11:38 AM ✓✓

Should not control 11:38 AM

At the borders 11:39 AM ✓✓

And other that i sale you is all language 11:39 AM

Polish deutsch english 11:39 AM

Never no control 11:39 AM

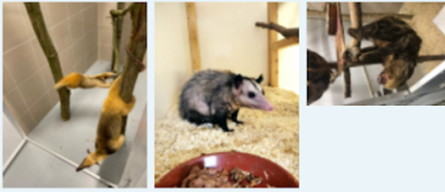
I sale monkey 10 years 11:39 AM

If control you must only show that no stolen from wild 11:40 AM

Example 4. Online advertisement (left) and extract from a mystery interview via WhatsApp with an online vendor (right), concerning the trade of a two-toed sloth from Czech Republic (vendor, white fields) to Italy (mystery buyer, green fields).

Offer Other Mammals

Tamandua tetradactyla
Choloepus didactylus
Coendou prehensilis
2,2Didelphis marsupialis(Opossum)
More info Whatsapp +42



21 October 2022

Messages and calls are end-to-end encrypted. No one outside of this chat, not even WhatsApp, can read or listen to them. Tap to learn more.

Hello, my name is Franco and I am from Italy. I see your advertisement on Enimalia website about the sloth (*choloepus didactylus*). Is it still available? thanks in advance. Franco 17:56 ✓✓

Hello 19:17

Yes they are available but I import them only for order before 19:19

Ok, and what is the price? so I first order and then you import it? 20:12 ✓✓

and about transportation, do I come to Czech republic or do you send it? 20:13 ✓✓

You
Ok, and what is the price? so I first order and then you import it? 05:22

Yes price is 16000€/pair 05:22

You

and then you import it? 05:22

Yes price is 16000€/pair 05:22

You
and about transportation, do I come to Czech republic or do you send it? 05:22

After we will see but we can meet in Austria 05:22

Today

Ok, thank you. Can we have a short phone call this week? 11:28 ✓✓

i would like to ask some questions about the animals, like diet, danger, documents, etc. 11:29 ✓✓

You
Ok, thank you. Can we have a short phone call this week? 19:53

Yes sure 19:53

You
i would like to ask some questions about the animals, like diet, danger, documents, etc. 19:55



Animals are import from farm from Peru, they are young animals 2-3 years old and I sell them after 1 months in my quarantine 19:55

I write you diet no problem 19:55

Example 5. Online advertisement (left) and extract from the mystery interview via WhatsApp with an online vendor (right), concerning the trade of a pair of corsac foxes from Slovakia (vendor, white fields) to Belgium (mystery buyer, green fields).

Offer Carnivorans

Vulpes corsac good day, we offer for sale a breeding pair 2017 I will provide more information by email

Maybe i better come myself then, with van. But it's more than 15 hours drive 🤔

14:18 ✓✓

Which city is it in Slovakia?

14:18 ✓✓

So that I calculate route

14:19 ✓✓

From belgium

14:19 ✓✓

Trnava

14:19

It's shorter, only 13 hours

14:20 ✓✓

You think it is too long for the fox? 13 hours?

14:20 ✓✓

they are tough animals, we usually transported them for 24 hours

14:22

Example 6. Online advertisement (left) and extract from the mystery interview via WhatsApp with an online vendor (right), concerning the trade of a scarlet ibis from Germany (vendor, red boxes) to Belgium (mystery buyer, blue boxes).



Von: [redacted]
 Datum: 21. November 2022
 An: [redacted]
 Cc:
 Betreff: Re: Client email Enimalia.com
 Hello [redacted] yes Frankfurt is not too far from where I live, I live near Liège.
 I have experience with other animals, not with birds, but I can ask the transportation company I usually work with.
 I will come back to you. What cage do you normally use?
 thanks [redacted]

What do you mean by cage?
 For the transport?
 Then take a plastic box for cats.

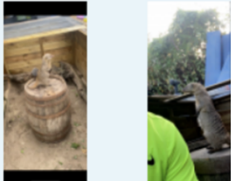
Example 7. Online advertisement (left) and extract from the mystery interview via WhatsApp with an online vendor (right), concerning the trade of a pair of banded mongooses from the Netherlands (vendor, white fields) to Belgium (mystery buyer, green fields).

Offer Other Mammals

hello i have a 3 year banded mongoose (Mungos mungo) couple. male and female. They once had a litter of 2 puppies. both are healthy! and eat well. they are tame.

I'm from Holland. it can be brought to Europe. the price is 350 for both. please whatsapp or viber

+31 [redacted]



You can ask me now 6:55 PM

No problem we waiting for the border haha 6:55 PM

Ok perfect haha 6:55 PM

Main question : what do they eat in general? Insects and small animals? 6:56 PM

And can you keep them in the house or only outside? 6:57 PM

They eat, all fruit, all meat, insects, cat food, 6:58 PM

You And can you keep them in the house or only outside? 6:58 PM

Yes i keep them outside 6:58 PM

With 6:58 PM

night cage 6:59 PM

Ok, clear 6:59 PM

And can i have just one or need to buy the couple? 6:59 PM

They eat a lot 7:00 PM

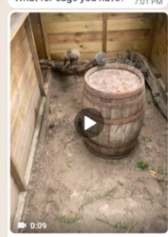
You And can i have just one or need to buy the couple? 7:00 PM

Couple because they life in the wild with more if you have one is not good 7:00 PM

They are easy to keep 7:01 PM

they are also calm and manageable 7:01 PM

What for cage you have? 7:01 PM



Sorry you hear me dogg hahah 7:02 PM

I still don't have anything. I have a big garden in the Ardennes region, but i need to build a cage 7:02 PM

Okayyy 7:03 PM

Yes 7:03 PM

You can look on youtube mongoose cage or meerkats cage 7:03 PM

I have lot of animals 7:03 PM

Lion Pkic You can look on youtube mongoose cage or meerkats cage 7:03 PM

I am looking indeed to have an idea 7:03 PM

Video (0:06) 7:05 PM

So they also eat dead animals, no need to feed them live animals? 7:05 PM

You So they also eat dead animals, no need to feed them live animals? 7:05 PM

No 90 procent i give them dead 7:05 PM

Also give them rijst 7:06 PM

Mussely 7:06 PM

They are easy eaters 7:06 PM

Ok, excellent 7:06 PM

Not like monkey they need fruit and special food 7:06 PM

I have to check if there are restrictions in Belgium. You are based in the Netherlands right? 7:07 PM

You I have to check if there are restrictions in Belgium. You are based in the Netherlands right? 7:07 PM

Netherlands yess 7:07 PM

They dont need anything 7:07 PM

But you look first 7:08 PM