Guidelines for Acquisition

Our vision: *"The public aquarium community to lead by example ensuring all our animals are acquired from sources that adhere to the highest standard with regards to welfare, sustainability, and improving our environmental impact."*

Why do we need guidelines?

These guidelines were produced to help us to become more informed about the sourcing of our animals and the answers received should enable you to make a more considered acquisition.

Public aquariums globally host up to 450 million visitors each year and therefore have a responsibility to educate the public on welfare, sustainability and the environmental matters relating to sourcing of their animals.

There are many sources from which animals can be acquired for the public aquarium. Due to the complexity of supply chains and a large number of suppliers, it can be difficult for an aquarium curator to be aware of the impact of their acquisition. It is the responsibility of the public aquarium to ensure due diligence is applied on all acquisitions. Therefore the questions below will assist you to make the appropriate choice.

The following 21 questions cover initial considerations, traceability, welfare, sustainability, environmental impact and documentation.

Contents

Initial considerations

1. Why do you want to acquire this particular animal? What is its purpose in your institutional collection plan (ICP) or regional collection plan (RCP)? E.g. education/research/conservation/ biological control.

Every curator in a modern aquarium should make acquisition decisions based on valid reasons for having each species in their collection. It is not considered acceptable for public institutions to keep wild animals in captivity without a clear purpose. By asking these "why" and "what" questions before proceeding with an acquisition, a curator validates their collection and by documenting their reasons for each acquisition they can provide evidence that can help to avoid criticisms and negative backlash.

2. After researching the requirements for this species, is this animal appropriate for your facility?

Collection planning requires advanced decision making that carefully scrutinises a facility's ability to keep the animal with high standards of care throughout its life. It is not acceptable for a curator to acquire a species for which they have little understanding of its requirements. It is also unacceptable to acquire species that will have a shortened lifespan in captivity or that have needs that cannot be well met in an aquarium setting throughout its full lifetime. If assurances cannot be made in this regard then a responsible public aquarium curator will not acquire the animal.

The curator and corresponding teams should be adequately trained or well informed on the specific husbandry techniques for every species within their collection prior to the animal's acquisition. Training could be sourced from other aquaria currently housing the species and/or the supplier of the species, for example.

Any legal restrictions should be investigated before the acquisition of each species, these could be in relation to its invasive potential or whether they could transmit diseases.

3. Do you have a good collaborative relationship with your supplier that will facilitate a successful acquisition?

Good suppliers understand the needs of public aquariums and our requirement to ensure sustainability, good welfare, traceability and having a positive environmental impact. These suppliers will work hard to ensure our needs are met but we have a responsibility to clearly state to all suppliers why we must adhere to high standards. Additionally suppliers will have useful information on the habitat animals were collected from and the previous husbandry they have received which in turn will improve the curator´s quarantine and exhibit plans.

By developing good relationships and working with them to continually improve in each of these areas we stand the best chance of developing and promoting high standards. It is important to provide honest and constructive feedback to suppliers in order to improve standards.

High quality animals that have been responsibly sourced may incur increased costs. The aquarium community should be willing to pay more for these animals to encourage the sustainability of responsible supply chains.

Traceability

4. Can your supplier confirm *where* your animal will originate from? E.g. the specific location where it is caught/bred.

*Knowing the origin of **where** a particular animal has either been collected or bred can provide curators with the knowledge required to make an ethical acquisition. This can be important for a number of reasons, for example, some countries have stronger protection laws than others with regulated trade whereas others work on a free for all basis. When guests visiting our attractions ask us **where** the fish are from we have a responsibility to be able to answer that question with confidence.*

5. Can your supplier confirm *how* your animal will get to you from its point of origin? E.g. know the full supply chain.

*Traceability in the supply chain gives curators the confidence and knowledge about **how** an animal gets from its point of origin to the aquarium. Requesting transparency from reputable suppliers allow every curator a better understanding of the environmental and social impact of the acquisition.*

Welfare

6. What are the methods used to collect/breed your animal?

Knowing the methods a supplier uses to collect/breed fish, enables curators to select the option which demonstrates good practice. Some methods can have a negative effect on the health of the target and non-targeted animals and/or the local environment both in the short and long-term.

7. What are the methods used to handle your animal?

Handling can cause physical damage and stress to the fish and may result in ongoing health issues. Understanding the methods used allow the curator to make a more informed ethical choice and to be prepared for any medical issues. Public aquaria display their animals as ambassadors and should again select for the highest welfare standards.

8. What are the methods used to pack your animal in preparation for transport?

The packing methods used can significantly impact the health and stress levels of the animal. It can also sometimes be used to track and identify both the route the animals have taken and their origin. Specific packing methods can be discussed with suppliers to further reduce risk. An example of this would be increasing water and oxygen volumes which will increase transport cost and package/container size but may improve water quality.

9. Are you familiar with the facilities in which your animal will be held at each stage of the supply chain?

You should understand the entire journey the fish has undergone to be able to look at the suitability of the acquisition. The fish may have had a long transport with numerous handling and packing events by the time it reaches your aquarium. The quality of husbandry and care the fish has received throughout the journey should also be considered.

10. Are you aware of any issues with this species pre, during and post transport? E.g. survival rates, health issues, specific quarantine procedures, acclimatization and feeding.

The stress of capture, handling, treating and packing could considerably impact the health of an animal depending on the species.

If there are species that are affected much more than others, suppliers and curators need to research the issues and consider alternative methods, sources or even species.

If your animal is captive bred the following needs to be considered:

11. Can you obtain your animal from an EAZA, EUAC or other recognised captive breeding programme (E.g. ESB `studbook´, Mon-P.)

Sourcing from recognised and managed breeding programmes can provide aquaria with responsibly bred animals from genetically healthy populations, where unwanted surplus is controlled and there is access to the full history of an individual animal. TAG members and programme coordinators can provide advice and support. Also captive bred animals are often more likely to survive well in captivity than their wild caught counterparts.

12. Can it be obtained from another reputable public aquarium?

Obtaining an animal that was bred at another reputable aquarium gives an institution confidence that the animal has had good welfare through-out its life in captivity and also means they have access to the animal's history and can return to the aquarium for advice should any problems arise. EUAC members can check the website for the latest available and wanted animals.

13. If you cannot source your animal from a recognised captive breeding programme, or another public aquarium can it be sourced through a reputable breeder?

Although there are many commercial breeders around the world it is important to have assurances that their facility practices sound population management, good barrier management, disease risk planning and good husbandry.

Sustainability

*If your animal is collected from the **wild** the following needs to be considered:*

14. Are there any initiatives your sourcing choice can support to help promote sustainable fish collection? E.g. Post Larval Capture and Culture (PCC).

PCC involves capturing highly abundant post-larvae in the open ocean removing the potential for natural predation. The identification and sorting of species allows them to be reared for restocking and commercial sale. This has an overall lower impact on wild populations than many other fishing methods.

15. Is your animal from a managed/regulated fishery and are there data available to support this? E.g. government, self-regulated, NGO.

Suppliers collecting from managed or regulated fisheries are likely to be more sustainable with minimal impact to populations and habitats. Suppliers that collect animals from managed fisheries should be able to supply certification/licenses on request that prove they are working in regulated local or national fishery/collection areas.

16. Are there any conservation concerns for this species? E.g. IUCN Red List (some species included on the Red List are threatened due to the aquarium trade).

Being aware of a species' conservation status and any local and global challenges faced in the wild is crucial when making a decision to acquire a specimen. If choosing to exhibit a threatened species in captivity it should be understood how that can help to highlight the threats to the species in the wild. Also establishing a population for managed captive breeding may be included as a conservation measure by IUCN.

17. Is there any evidence to suggest or indicate that the species you want to acquire is harvested via a destructive fishery?

It is not acceptable for public institutions to source animals from suppliers that use destructive fishery techniques such as dredging, use of poison, altering the habitat and dynamite fishing. Suppliers should be able to explain what methods they use to collect fish and how any bycatch is managed. To avoid contributing to a destructive fishery it is important to research the source. In addition consider visiting a supplier to see fishing practices first hand or obtain references from others within the aquarium community.

Environmental impact

18. Have you considered the carbon footprint in relation to your animal acquisition? E.g. the mode of transport, packaging and distance.

Measuring the impact of your transport using an online carbon calculator (such as www.carbonfootprint.com/calculator1.html) is a good way of evaluating different modes and lengths of transport; you can then explore ways of lessening and offsetting your impact. Applying the principle of reduce, reuse, recycle to your transport will further help to reduce your carbon footprint.

19. Does your supplier engage in any research or projects that have a conservation output?

The ecosystem the animals come from is important and the impact of removing animals should be considered. The supply chain can be complex, but suppliers often have links to the local environments from where they collect or purchase animals. Suppliers who have a responsible attitude to the local socio-economics, as well as to the animals should be preferred. Demonstrating involvement in research or conservation projects shows a long term commitment to ethical and sustainable fisheries.

20. Does your facility engage in any education, research or projects that have a positive influence on your chosen species or its environment?

As curators we follow the European Directive for The Keeping of Wild Animals in Zoos (1999/22/EC):

http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:l28069

Within this legislation it outlines the measures that zoos and aquariums should take when participating in research, education and conservation. It is important that we can demonstrate participation in projects which have a positive influence on species and the environment and are able to engage the public.

Being proactive in exceeding the terms of the legislation is good for the industry and also helps to counteract any negative comment or criticism for keeping the animal in captivity.

Documentation

21. Does the supplier conform to all regional, national and international laws and legislation? Can they provide documents to support this? E.g. TRACES, CITES, IATA regulations, collecting permits, certification and licences.

The public aquarium community must ensure that it adheres to the law when acquiring animals. The illegal wildlife trade is a serious international issue and knowingly or unknowingly acquiring animals without the correct permits or licenses could damage the public aquarium community's reputation. It is very important to ensure all necessary paperwork has been issued before the actual transport to prevent any unnecessary delays e.g. at customs because of missing papers, incorrectly identified animals or inappropriate packing.

The details of each acquisition should be recorded by the Curator including the supplier, any mortalities, packing methods, water parameters and the condition of the fish. These records can be used to analyse the success of an acquisition.

It may not be possible to answer all of these questions yet but it should help suppliers to understand the good practices the EUAC community value and wish to promote.

Definitions

ICP (Institutional Collection Plan): Is a written document usually prepared by the curator that outlines the reason for each species being in the institution's collection. In many countries it is a requirement by law for public animal collections to have a collection plan. The Institutional Collection Plan document may also include a list of species under consideration for acquisition as well as the supporting information gathered during the pre-acquisition research period. The ICP may also include a record of where animals came from, plans for future disposition of stock, supplier details and breeding records. The ICP is a good place to document the institution's educational messages related to a species and any research or conservation activities the institution may be involved with for a particular species.

RCP (Regional Collection Plan): Contains species for which collaboration between multiple institutions is considered necessary or valuable. Species on the RCP will benefit from shared efforts in the areas of *conservation*, *research* or *education*. For example, a species in the *conservation* category may require several different breeding groups to form a metapopulation to safeguard against extinction. A species in the *research* category may be the subject of a research project that requires multiple replicates at more than one facility. A species in the *education* category may be part of a regional campaign to teach a wide visitor audience about it.

Each species on the RCP has been chosen after analysis by the Taxon Advisory Group (TAG) and agreement that it falls under at least one of the above three categories and would benefit from collaboration by more than one institution. Species included on the RCP have their populations tracked by a designated coordinator and are managed under one of the agreed programmes, such as, EEP, ESB or Monitoring programme.

Supply Chain: Is a network of processes involved in moving a product or commodity from the supplier to the customer. In terms of animal supply chains these can be defined as short or long chain supply and short supply chains can give more clarity on provenance and can be better for animal welfare.

Managed/regulated fishery: Managed fisheries aim to ensure a supply of animals is continuously available and that wild populations are not depleted below ecologically effective levels.

Recognised captive breeding programme: A full list of current European breeding programmes can be found on:

www.euac.org

www.eaza.net

ESB: An EAZA ESB (European StudBook) is less intensive than the EEP (European Endangered species Programme). The studbook keeper who is responsible for a certain ESB collects all the data on births, deaths, transfers, etc., from all the EAZA zoos and aquariums that keep the species in question. These data are entered in special computer software programmes, which allow the studbook keeper to carry out analyses of the population of that species. EAZA zoos may ask the studbook keepers for recommendations on breeding or transfers. By collecting and analysing all the relevant information on the species, the studbook keeper can judge if it is doing well in EAZA zoos and aquariums, or if maybe a more rigid management is needed to maintain a healthy population over the long term. (Source: EAZA website)

Mon-P: An EAZA Mon-P (Monitoring by person) programme consists of a yearly written inventory that documents the current population of a species within European aquaria. It is used as a less intensive population management tool than an ESB to give an overview of births, deaths and transfers without individual animals being entered into any specific computer software such as SPARKS. However, an analysis is done on the problems occurring with this species such as health issues, husbandry issues and genetics. A Mon-P coordinator acts as a central point for questions on that particular species and helps coordinate the dispersion of offspring so that the population can be monitored.

Carbon footprint: Is a measure of the total amount of carbon dioxide released into the atmosphere caused directly or indirectly by a person, organisation, event, activity or product.

TRACES: is the European Commission's multilingual online management tool for all sanitary requirements on **intra-EU trade** and **importation** of **animals, semen and embryo, food, feed** and **plants**.

CITES: The Convention on International Trade in Endangered Species of Wild Fauna and Flora is an international agreement between governments. Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival.

IATA: International Air Transport Association is a trade association of the world´s airlines. It has the aim to organise a standardised worldwide transport of people and goods in a safe and economical way and according to time schedule. It supports the cooperation of all businesses in the airline industry.

Appendix

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