

Suffering Deep Down

An investigation into public aquaria in the UK



The Captive Animals' Protection Society www.captiveanimals.org

Introduction

Suffering Deep Down

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g Phone/Fax: +44 (0)845 330 3	3911
E-mail: info@captiveanimal	
Web: www.captiveanimals.c	org
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In recent years there has been a rise in the number of new aquaria built in Britain and other countries. As one aquarium designer commented: "There is a growing feeling that every world-class city needs a world-class aquarium".

New aquaria try to out-do each other by being the biggest, having the largest collection of a particular species, or providing exciting visitor attractions such as diving with sharks. Whereas many people no longer find it acceptable for mammals to be confined for our entertainment, fish and other aquatic animals hardly register in the public's minds. After all, fish are killed in their millions for consumption by humans or for 'sport'.

The Captive Animals' Protection Society (CAPS) has become increasingly alarmed at the growth in the aquaria industry and the possibility that it could lead to the return of dolphinariums to Britain. Further disturbed by the lack of published information about the aquarium trade and the welfare of fish in captivity, CAPS commissioned an independent scientific study on UK public aquaria. The study resulted in the publication of a comprehensive scientific report written by the independent animal welfare consultant Jordi Casamitjana, 'Aquatic Zoos: A critical study of UK public aquaria in the year 2004'.

This report summarises the main findings of the scientific report, as well as stating CAPS' conclusions on public aquaria.

The full report 'Aquatic Zoos: A critical study of UK public aquaria in the year 2004', as well as video clips from the investigation, is available on CD-ROM from CAPS or can be downloaded from our website.

The Captive Animals' Protection Society



The Investigation excipations

- ▶ 31 public aquaria were visited across Britain 55% of the total number
- ▶ There are an estimated 40,000 animals kept in UK public aquaria, over 20,000 of whom are vertebrates
- In this investigation about 12,000 vertebrates were seen

Methods

This study used two main methodological approaches: scientific research and investigative journalism.

The first one was based on developing general descriptive statistical analysis from data obtained through random sampling. The second one was based on covert visits to randomly selected public aquaria posing as a visitor in order to get information difficult to obtain if the aquarium was aware of being investigated.

Definition of a public aquarium

The definition of a public aquarium used in this investigation, mainly based on the definition of a zoological collection as expressed in the Zoo Licensing Act 1981 was:

"Any collection of captive animals in a particular site in UK territory in which one individual animal or more belongs to taxa not normally domesticated in the UK (according to the DEFRA's official criteria), that is open to the public seven or more days in 12 consecutive months, and that exhibits mainly fish and/or aquatic invertebrates"

Sampling and aquarium visits

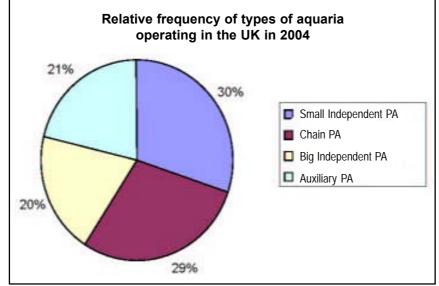
A list of all known public aquaria in the UK was compiled. At the time of beginning this study there were 56 known aquaria. 31 aquaria – 55% of the total number – were randomly selected with a computer and visited in this study.

All visits took place over a seven week period in Spring 2004.

Almost all the information during visits from which quantification was possible was recorded on video. All exhibits and their inhabitants were filmed and all talks given at aquaria were attended and recorded in their entirety.

Additional information was found by recording all the contents of the websites of the public aquaria visited, by reading the collections' leaflets and guidebooks, and by general bibliographic research.

- The study estimates that there are over 40,000 animals kept in UK public aquaria (over 20,000 of them being vertebrates). 99% of all animals in UK public aquaria are fish and aquatic invertebrates. In this investigation about 12,000 vertebrates were seen
- Most of the species were marine rather than freshwater, and there are almost as many exotic species (those not native to the British Isles or surrounding seas) as local ones. This appears to be an increase in the display of exotic species in the past few years
- Unless otherwise stated, statistics in this report relating to UK public aquaria refer to 100% of all UK public aquaria since a representative random sample was used in this study



Types of Aquaria

Chain Public Aquarium (CHPA)
Public aquarium belonging to a
chain company/organisation that
owns two or more public aquaria,
all of them having as their main
activity the keeping and exhibition
of captive live fish and/or aquatic
invertebrates

Big Independent Public Aquarium (BIPA)

Public aquarium not belonging to any chain company/organisation that owns two or more public aquaria, being its main activity the keeping and exhibition of captive live fish and/or aquatic invertebrates, and keeping either 30 aquatic exhibits or more, or at least one aquatic exhibit consisting of a tank bigger than 200 cubic metres in volume

Small Independent Public Aquarium (SIPA)

Public aquarium not belonging to any chain company/organisation that owns two or more public aquaria, being its main activity the keeping and exhibition of captive live fish and/or aquatic invertebrates, and keeping less than 30 aquatic exhibits none of which consists of a tank bigger than 200 cubic metres in volume

Auxiliary Aquarium (APA)

Public aquarium not belonging to any chain company/organisation that owns two or more public aquaria, and having as its main activity any practice other than the keeping and exhibition of captive live fish and/or aquatic invertebrates

Using the total population list of 56 public aquaria we found that all types of public aquaria are more or less equally represented, with a slight majority for 'Small Independent Public Aquaria' and 'Chain Public Aquaria' – which together represent 59% of the aquaria. Half of the aquaria are 'big'.

Abnormal Behaviour **zeroimpaet productions**

The study found:

- ▶ The vast majority (90%) of UK public aquaria keep animals that show stereotypic behaviour
- ▶ In at least 16% of UK public aquaria 'spiralling', arguably one of the most severe forms of stereotypic behaviour in fish, can be observed
- ▶ A third of the stereotypic behaviour observed in this study constitutes 'Surface Breaking Behaviour' (SBB), which can be seen in 71% of the UK public aquaria, mainly in rays and sharks
- Almost one third of individual rays of the genus *Raja* seen in this study were observed performing 'Surface Breaking Behaviour' (SBB)

Examples of stereotypic behaviours identified in UK public aquaria during this study include:

Pacing: Continuous walking/ swimming to and fro, following the same path, when performed with no apparent special response to a <u>transparent</u> boundary (i.e. glass)

Circling: A form of pacing where the animal continues around a circular path with no points easily singled out of where it ends or begins

Head bobbing & swinging: Staying stationary and continuously moving the head up and down, or swinging it left and right, when performed with no apparent special response to a transparent boundary

Interaction with Transparent
Boundaries (ITB): Continuously
walk/swim onto the glass or
reflecting walls of
an enclosure,
either attempting to

an enclosure, either attempting to climb on them, go through them, or responding to a reflection from them

Surface Breaking Behaviour (SBB): Whilst swimming repeatedly lifting the front of the

body so that the

snout or front of the head is raised above the level of the water, when performed with no apparent special response to a transparent boundary

Spiralling: Continuously spinning through the water either around a central point or around an imaginary axis moving in a spiral course

Stereotypic flashing: Repeatedly turning on one side and rubbing one flank on the substrate or on any other surface

Animals in captivity frequently exhibit abnormal behaviour – behaviours that are not known to be a feature of the natural/wild behavioural repertoire of the species.

Stressed or ill fish can manifest their health problems in many ways, but changes in their normal behaviour tend to be the first sign that something is not quite right.

The causes of these behaviours may vary, but some of them are symptoms of specific diseases in specific species. This study concentrated on stereotypic behaviour, repetitive behaviour that performs no obvious function. Stereotypic behaviour is one of the most important indicators of long-term welfare problems.

The study shows that at least 90% of the UK public aquaria studied keep animals that show abnormal behaviour. More than one third (39%) of the UK public aquaria showed more than 10 cases, and 16% showed more than 20 cases. Hundreds of individual animals showing stereotypic behaviour were identified.

All these values only represent the minimum occurrence, since the method used could easily miss cases not detected if the fish was not performing stereotypic behaviour when seen initially.

24% of all the animals that showed stereotypies were rays and 15% were sharks.

Pufferfish (including porcupinefish) are the type of fish most commonly observed performing pacing or 'Interaction with Transparent Boundaries' (ITB). Almost all cases of abnormal behaviour observed were in fish, and one case of ITB was

found in a horseshoe crab and three ITB cases in terrapins.



Dogfish displaying Surface Breaking Behaviour



Feeding rays from above encourages Surface Breaking Behaviour

↓ Pufferfish displaying ITB



Relative frequency of types of abnormal behaviour found in UK public aquaria in 2004

1%

2%

18%

SBB

TB

pacing
phashing
pricing
spiraling
other

Health Problems

- ► The majority (74%) of the UK public aquaria show evidence of physical health problems in the animals they keep. Most of the cases of lacerations were seen in sharks and rays
- In many UK public aquaria seahorses suffer a noticeable number of health problems, and fatalities among the cephalopod (octopus, squid, cuttlefish and nautilus) population seem quite high
- Cases where the health problems seem to be caused by husbandry techniques, such as the mixing of species in an exhibit, feeding methods, the regulation of the water chemistry or the interactions with visitors, occur in many UK public aquaria

Health problems discovered in UK public aquaria during this study include lacerations, wounds, scars, eye disease, deformity, infection, abnormal swimming and growths, even death.

The majority of the cases of lacerations were seen in sharks and rays, in particular those kept in open tanks where the public can touch them. It was clear that at least some of these injuries were caused directly by people having physical contact with the animals. Other injuries may have been caused by the use of crushed cockleshell as a substrate in tanks. Crushed cockleshell is the third most common substrate seen in UK public aquaria exhibits. The unnatural sharpness of the shells can cause sores and lacerations, particularly on the underside of fish such as rays or any type of flatfish. These animals would normally lie buried in sand in their natural habitat, but in a tank using crushed cockleshell their only options are to use the abrasive substrate or not be buried at all. Both options can cause injuries or suffering.

Although most of the health problems of captive fish go unnoticed by the general public, there have been some high profile incidents reported in the press. In 1998 four sandbar sharks died soon after arrival at the National Marine Aquarium in Plymouth, probably due to hypothermia after their flight to the aquarium was delayed. In 2001, ozone problems in the main aquarium tank of the same establishment killed another four sandbar sharks.

↑ Ray covered in cockleshell ↑ Tope with damage to ← Bluemouth dying in tank Relative frequency of types of evidence of possible physical ill health found in animals kept in UK public aquaria in 2004 ↓ Ray with lesion on nose 1% ■ lacerations ■ infections □ injuries □ scars eye diseases ■ wounds death deformity ■ other abnor swim growth

Tope, a British shark, does not seem to fare well in captivity. Most of the tope seen during this study either showed signs of abnormal behaviour or had wounds or scars that were probably caused by continuously crashing against objects or the tanks walls.

Allowing visitors to handle or touch the animals is also a source of health problems. A member of staff at one aquarium visited told the investigator "we had to move starfish from the touchpool because people kept poking them and they just died".

The investigator found evidence of one starfish having lost an arm after been touched by so many visitors and crabs losing their claws for similar reasons.

In one very disturbing case, the investigator witnessed a crab, infected with parasites, removed from the water by aquarium staff to be shown to the public despite the obvious swelling of the animal's abdominal area. The staff member was aware of its disease and its fatal consequences.

In another case the investigator witnessed a couple of horseshoe crabs that were seen upsidedown in a tank trying, unsuccessfully, to turn themselves over. This was witnessed by concerned members of the public who informed aquarium staff. Two hours and twenty minutes later, nobody had helped the crabs who continued to struggle in vain to get upright.

23%

Conservation

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The study found:

- ▶ 98.2% of the animals kept in UK public aquaria do not belong to species classed as threatened by the IUCN (World Conservation Union)
- ▶ 96.8% of the species kept in UK public aquaria are not classed as threatened by the IUCN
- ▶ 99.9% of the species kept in UK public aquaria are not part of any co-ordinated conservation European Captive Breeding Programme
- ▶ The UK public aquaria investigated are not involved with conservation reintroductions of animals into the wild
- ▶ At the very least, 45% of the UK public aquaria release animals back to the wild for reasons other than conservation, which could be considered illegal
- ▶ 79% of the estimated animals present in UK public aquaria are wild-caught in origin
- ▶ 89% of the estimated marine animals present in UK public aquaria are wild-caught in origin
- ▶ In 45% of the UK public aquaria investigated 90% or more of the individual animals are of wild-caught origin, while in 87% of the aquaria half or more of their animals are wild-caught

Threatened animals on aquarium restaurant menus

In 2000, the European
Association of Zoos and
Aquaria (EAZA) launched its
Bushmeat Campaign. The term
'bushmeat' applies to all wildlife
species, including threatened
and endangered, used for
meat. Commercial hunting for
the meat of wild animals has
become the most significant
immediate threat to the future
of wildlife in Africa and around
the world.

There are several species of fish that are commercially traded for human consumption in the UK yet are threatened with extinction in parts of their range. There would no doubt be an outcry if an African zoo joined the EAZA bushmeat campaign while selling bushmeat in its restaurant, but what about UK aquaria selling threatened species of fish?

From the 13 public aquaria where the restaurant menu was checked during this study 85% of them offered as food to visitors fish and/or aquatic invertebrates that are commonly seen in public aquaria displays. The aquarium animals found on the menus included: cod, haddock, common prawn, Norway lobster, pink salmon, common mussel and edible crab. In 62% of the public aquaria these animals belonged to threatened species.

It comes as a surprise to many that the vast majority of animals in public aquaria have been taken from the wild. This study estimates that in 45% of the UK public aquaria 90% or more of their individual animals are of wild-caught origin, while in 87% of the UK public aquaria half or more of their animals are wild-caught. In fact, no collection studied keeps less than 20% wild-caught animals, and 16% of the public aquaria had only wild-caught animals.

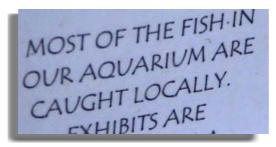
The percentage of marine animals in UK public aquaria estimated to be wild-born is 89%.

With these figures it is difficult to believe that the UK public aquaria do not contribute in any way to the decimation of species in the wild.

Many wild-caught individuals are donated free to aquaria because they are by-catches of the fishing industry. Other species, such as reef fish and sharks have not bred successfully in captivity yet so those aquaria wanting to display them have to take them from the wild. Some aquaria claim to receive wild-caught animals only from 'sustainable sources', but there is no such a thing as a sustainable reef, since all tropical reefs are threatened.

Biodiversity Action Plans (BAP) are designed to protect the most endangered species in the UK, including fish. None of the BAP for any fish or aquatic invertebrate has captive breeding as part of their strategy. Instead, one of the most common strategies is the protection of specific habitats or the carefully controlled translocation of animals from one place to another.

During this study no evidence of *in situ* conservation activities (such as habitat protection) run by the public aquaria visited aimed directly at protecting threatened species of British fish and aquatic invertebrates was found. Despite this, 61% of the UK public aquaria use the 'conservation' term in their publicity and/or displays, and in 35% the word 'conservation' features predominantly.



Aquarium sign stating animals are wild-caught

Menu at one aquarium selling endangered fish →



While a major threat to aquatic species in their natural habitat comes from commercial fisheries, the public aquaria trade must take its share of the blame.

Conservation

Coral reefs around the world are being devastated because of the private aquarium/curio industry and the public aquaria trade. Currently, 15-30 million tropical marine fish and hundreds of thousands of invertebrates are collected from at least 45 countries around the world.

It is estimated that over 95% of marine species for the aquarium trade are collected from the wild. Of the 1,000 or so fish species used by marine hobbyists, only about 25 are cultured in sufficient quantities for commercial purposes. Chemicals such as cyanide are still used to stun fish for capture, resulting in heavy mortality in both target species and other inhabitants of the coral reef.

A recent study in Indonesia showed that between 49-80% of individual animals died on the long journey from the collector to the exporter. 70% of all reef fish imported into the UK are dead within a year from stress and disease, and 10% die in transit before even reaching their destination.

Public aquaria are covered by the same legislation as any other type of zoos, and are therefore required by law to participate in conservation.

It is difficult for a public aquarium to justify keeping animals in the name of conservation if they keep an endangered species without breeding them, or breed them in an uncontrolled way.

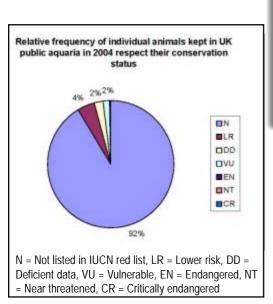
Of all the species found in the sample of 31 aquaria, only one – the Humboldt penguin – belongs to a European Endangered Species Programme.

This means that a staggering 99.9% of the taxa kept in the UK public aquaria studied are not part of any co-ordinated conservation European Captive Breeding Programme, although some public aquaria may be involved in breeding some of their stock with conservation ideas in mind.

While there may not have been any cases of UK public aquaria reintroducing animals into their natural habitats as part of a conservation programme, there appear to be regular releases of animals for other reasons. The IUCN guidelines for reintroduction clearly state that the availability of surplus stock is not a reason to release animals into the wild. Such releases may not only be damaging to the environment and the welfare of the released animal, but they may be in breach of the zoo licensing regulations.

In all the 31 aquaria investigated information was available in 61% of cases as to whether they were involved in releasing animals. Of those, 74% confirmed that they do release animals back to the wild (mostly back to the sea).

So, at the very least, 45% of the UK public aquaria release animals back to the wild for reasons other than conservation, some on a regular basis.



REGULAR BASIS.
WHEN WE CLOSE IN
WHEN WE CLOSE IN
OCTOBER, ALL OF OUR
OCTOBER, ALL OF OUR
FISH, CRABS, PLANTS
FISH, CRABS, PLANTS
etc. ARE RETURNED TO
THE SEA!

1 Aquarium sign stating animals are released to the sea

Barren enclosure for seahorses at one aquarium →

The Seahorse 'conservation' flagship

Since May 2004 the international trade in seahorses has been regulated through the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), although four countries have effectively withdrawn from CITES for the purposes of seahorse trading. This means that in real terms, despite seahorses being threatened with extinction, their exploitation for commercial reasons continues, and in some countries it still takes place without regulation.

In 2001 the total global consumption of seahorses was at least 25 million individuals. The majority are thought to be used in traditional Asian medicine. The pet trade takes an estimated one million seahorses annually from the wild, and less than 1,000 survive more than six months, very often suffering a slow and possibly painful death. The public aquaria industry was also obtaining its seahorses from the wild until very recently (some confess to still keeping wildcaught seahorses).

Seahorse conservation projects run by, or in conjunction with, the zoo industry generally, and public aquaria in particular, appear not to be seeking an end to the trade in seahorses, but the management of the trade instead. Other projects are mainly aimed at breeding and supplying seahorses to other aquaria.



Animal Contact

The study found:

- ▶ In the majority (at least 61%) of the UK public aquaria there is physical contact between animals and visitors, regardless of whether or not that contact is authorised
- ▶ Although 52% of the UK public aquaria have 'ray pools', only in 35% of the public aquaria is the touching of the animals/water explicitly forbidden through signs or talks, whilst in 16% of the public aquaria it is explicitly allowed
- ▶ In 55% of the UK public aquaria that keep rays, lacerations were found on them, and the only public aquarium where the majority (67%) of its visible rays of the genus *Raja* (the common British rays) showed lacerations was in fact one of the public aquaria that authorises visitor physical contact with rays
- ▶ 90% of the UK public aquaria with ten or more visitors during the investigation visits showed incidents of visitor 'misconduct' at one point during the visits.
- ► The ratio of incidents of visitor misconduct in UK public aquaria that go unchallenged by staff members is at least 277 to 1

Zoonotic Diseases

Zoonotic diseases are those that are transmitted between vertebrate animals and people. They can be transmitted by direct contact with animals, contact with body fluids or with an infected surface or water.

Any place where such contact takes place can create a risk of zoonoses. Public aquaria, where wild-caught species (stressed from capture and transportation) from various parts of the world are kept, sometimes in mixed species exhibits, potentially create the ideal situation for zoonotic diseases to spread.

There are many recorded cases of humans getting ill from contact with fish or contact with water. Zoonotic diseases in public aquaria can spread through scratches, bites, handling fish food, diving with infected animals, etc.

As with zoos in general, a person becoming ill several days after a visit to an aquarium may not connect their illness with the contact they had with animals. This may not only make treatment of their illness more difficult but does nothing to prevent other people becoming ill in a similar way.

(Left) Aquarium staff holding a shark out of the water for visitors to touch →

(Right) Ray pools are designed to encourage visitors to physically touch animals →

'Hands-on' activities are common, and popular, in zoos. These can create welfare and health problems for the animals and visitors.

77% of the UK public aquaria have exhibits where the visitors can physically touch either the water or the animals in them easily, regardless of whether or not it is permitted. On several occasions during the study the investigator witnessed aquarium staff ignoring visitors who touched animals or water without authorisation; only in one case did a member of staff reprimand a visitor.

Touchpools are specifically designed so that people can touch or pick up the animals contained. Aquaria may claim that such contact should be under supervised conditions. But as staff may only be at the pool at selected times throughout the day, and there is nothing to prevent visitors touching the animals, it is not surprising that unauthorised contact continues.

Animal-visitor interaction can cause distress to the animals as well as health risks to the public.



↑ Visitor dropping crab from a height into water





Over half of UK public aquaria investigated have ray pools, which are shallow open tanks where rays, small sharks, and other fish (normally flatfish, bass or grey mullet) are kept.

Animal Contact

At aquaria that explicitly prohibited public contact with rays, the investigator asked aquarium staff why contact was not allowed. By far the most common response was that the animal's skin can be burned when touched, producing lacerations. In 55% of the UK public aquaria that keep rays, lacerations were observed, and the only public aquarium where the majority (67%) of its visible *Raja* rays (the common British rays) showed lacerations was in fact one of the public aquaria that authorises physical contact.

Yet still, in 16% of the UK public aquaria, public contact with rays is encouraged. In one of these aquaria the contact goes as far as members of staff literally lifting up rays and sharks at the very edge of the water and passing them around so visitors can have a feel.

In more than half of the public aquaria investigated (55%) 'unauthorised contact' was recorded, and in at least 68% of the aquaria visitors behaved in a way contrary to rules set by the aquarium they were in. Out of all 277 incidents of misconduct recorded (including unsupervised contact with animals and water, throwing objects into pools, tapping glass tanks) only in one did the investigator witness aquarium staff challenging the visitor. Unauthorised physical interactions with animals were the most common type of misconduct.

The opportunity to dive/swim with sharks is offered at several UK public aquaria. Some of these events help perpetuate the myth that sharks are naturally ferocious, using publicity statements such as "prepare to be petrified. Take a Shark Dive and you'll be swimming with nature's most feared predator".

These diving activities are not aimed at experienced divers and serve no educational or conservation purpose. But they do make a lot of money for aquaria that offer the

opportunity.

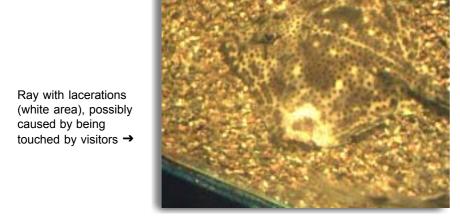
several visitors handling animals very roughly, both while staff were present and during unsupervised times.

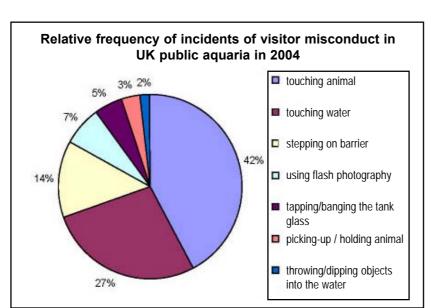
Staff at one aquarium laughe

The investigator witnessed

Staff at one aquarium laughed when an apprehensive visitor, encouraged by staff to pick up a crab, dropped the animal. On another occasion a group of visitors were throwing crabs into a touchpool without being stopped by staff.

An octopus which was kept in a very exposed enclosure with insufficient shelter and too much light was so distressed by some members of the public tapping the glass that the animal inked as a response. This behaviour is a natural defence mechanism that often happens when octopus are captured. When it happens in the closed system of an aquarium the ink may end up suffocating the octopus.







↑ So rough was the treatment of a starfish being handled in one touchpool that the animal actually lost some limbs

Education

The study found:

- ▶ 83% of the UK public aquarium visitors do not read the contents of live exhibit signs except perhaps the animals' names, and 95% of the visitors do not read the entirety of exhibit signs
- ▶ 41% of the individual animals seen in UK public aquaria have no signs identifying which species they belong to
- ▶ Less than half (45%) of the UK public aquaria offered talks or special events to the visiting public of spring 2004, less than half (45%) offered education packs, and almost a quarter (23%) of the UK public aquaria did not even have a website

Wildlife Documentaries versus Public Aquaria

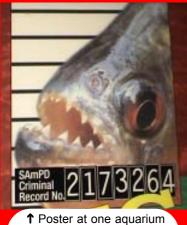
The BBC TV series 'The Blue Planet' provides a good example of the difference in educational value between public aquaria and natural history documentaries.

This series alone features about 300 different animal species in their natural aquatic habitats.

Of the public aquaria surveyed in this study, the one that displayed the most species had about 130 species, none in their natural habitat, most of them not doing what they normally do in the wild, and some of them doing things they certainly never would do 'in real life'.

UK public aquaria exhibit as an average about 25 species, less than ten times the species featured in the TV series.

One single documentary features more aquatic animals than any public aquaria in the UK, and in it you can find all the education messages (conservation, environment, ecology, biology, history, etc) that you would expect.



T Poster at one aquarium encouraging the myth of piranhas being 'criminal' human-eaters

On several occasions wrong information was given to the investigator who asked general questions to the aquaria staff. This included staff getting the species' names wrong. On other occasions wrong signs were displayed on tanks or the signs were placed in such a way that it was almost impossible to read them.

Some public aquaria keep different species in the same tanks even though those species would not come into contact with each other in their natural habitats. This may not always cause welfare problems but it certainly does not help the aquarium's supposed role in education.

Providing false or misleading information is perhaps worse than not providing any information at all. A good example of this is the way in which several UK public aquaria continue the myths of certain species, particularly sharks and piranha fish being savage attackers of humans.

Sand tiger sharks have been described by public aquarists as "possessing all the desirable appearance traits" to be displayed to the public, and it is these who often appear in aquaria publicity. Interestingly, several UK public aquaria have stated that sand tiger sharks should not be kept in captivity, whilst others not only keep them but publicise them on a big scale.







↑ Advertising board using 'fearsome' image of a sand tiger shark

← What educational value is available from seeing animals in such barren conditions? Top - octopus; Bottom - bib

Scientific research

The conservation requirement of European zoo legislation includes an option of participating in certain types of scientific research, and such research is now a common claim of zoos.

From the millions of scientific papers that can be searched using relevant scientific databases, the investigator only found seven references involving the public aquaria studied for a period covering the last 25 years. Taking into account the time scope of the databases and the size of the aquaria sample, this means that the UK public aquaria industry as a whole publish an average of one scientific article every 30 years.

Although some UK public aquaria claim to be involved in scientific research with universities, no scientific papers from this research have yet been made available to the scientific community.

Conclusions

The study commissioned by CAPS into the UK public aquaria trade makes disturbing reading. Not only do the aquaria fail in their self-made roles as centres of education, conservation and research – the three pillars of modern zoo legislation – but there are also clear and serious animal welfare problems that should, by themselves, result in their closure.

At a time when other sectors of the zoo industry claim to have reduced their

"On almost every front public aquaria seem to fail. Many animals suffer in public aquaria, both physically and mentally, and no conservation, education or research work can compensate for this.

However, in UK public aquaria, there seem to be minimal conservation activities, the education value is very poor and scientific research is almost non existent, so even the aquaria's own claims that could possibly justify the animals 'sacrifice' are totally unfounded.

Furthermore, in the context of the new UK zoo legislation, it appears that many of UK public aquaria no longer meet the new zoo licensing criteria that would allow them to stay open to the public."

Jordi Casamitjana, author of the scientific report on which this study is based.

reliance on wild-caught animals, public aquaria mostly appear to exist only because of the trade in animals removed from their natural environment. During capture and transportation many of these animals die. In some cases welfare problems in aquaria are so great that large numbers of animals die soon after being put on display, and are replaced by yet more wild-caught individuals.

This study also found that in many cases UK public aquaria may be in breach of regulations in relation to the non-conservation release of animals into the wild.

This report only touches briefly on some of the findings of the report 'Aquatic Zoos: A critical study of UK public aquaria', commissioned by CAPS, and the study itself has opened up further avenues for research.

The Captive Animals' Protection Society is fundamentally opposed to the captivity of animals for human

entertainment. Not only is it impossible to meet all of the needs of wild animals in captivity, but it is time to reassess our whole relationship with non-human animals and the self-centred belief that they are there for us to use as we please.

If we want to see, and learn about, animals we can do so in the animals' natural environments. If we want to protect species from endangerment we need to protect their habitats as well as prevent the individual animals being removed or killed by humans.

The evidence unearthed during this study has confirmed the ethical position long held by CAPS. By showing the extent and gravity to which the public aquaria industry is damaging the lives of many animals, calls for the abolition of public aquaria can now be made not only on ethical grounds, but also on practical ones.

CAPS does not campaign for reform. The purpose of this study is not to encourage public aquaria to take animals only from 'sustainable' sources or breed them in captivity, or even for them to 'improve' conditions for the animals they display, but to see an end to the keeping of animals in captivity for human entertainment. That means an end to zoos, including public aquaria.



Founded in 1957, the Captive Animals' Protection Society campaigns for an end to the captivity of wildlife and the use of animals in entertainment. Our key areas of work cover zoos, animal circuses and the exotic pet trade.

For further information on our work see our website www.captiveanimals.org or contact us for a free information pack.









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Thanks to 'zeroimpact productions' for use of images of aquatic animals in their natural habitats.





The Captive Animals' Protection Society
PO Box 573
Preston
PR1 9WW
England

Phone/Fax: +44 (0)845 330 3911 E-mail: info@captiveanimals.org Website: www.captiveanimals.org