**Investigator profile**

Claire Louise* is a zoologist with a master’s degree in Applied Animal Behaviour from Edinburgh University, UK.

She was awarded the Douglas Houghton Memorial Award – a prestigious fellowship set up to enable individuals to further animal protection – which enabled her to continue her postgraduate studies.

Her master's thesis centred on the behaviour of sloth bears rescued from the streets of India where they had been exploited as “dancing bears”. She has studied a wide range of disciplines including animal evolution, behavioural ecology, animal nutrition and metabolism, veterinary medicine, cognition and consciousness and her research projects have included the mutilations of farmed animals and captivity-related stress and abnormalities.

Since her studies, she has carried out investigations into zoos and circuses in India, Thailand and, most recently, Spain. Claire is an animal rights campaigner and investigator who is working with Animal Equality to raise awareness on the plight of animals in the zoo, circus and other industries where animals are exploited for human entertainment.

* This is not the investigators full name.
Methodology

Eight zoos across the east, south and west of Spain were visited by Igualdad Animal as part of a nine-month investigation to obtain a snapshot of the lives of animals held captive in Spanish zoos. The zoos visited had been identified by Animal Equality supporters as being of concern and included municipally-owned and privately-owned facilities. The zoos visited were as follows:

- Barcelona Zoo
- Bioparc
- Castellar Zoo
- Cordoba Zoo
- Madrid Zoo
- Rio Safari Park
- Seville Zoo
- Zoobotanico Jerez

Barcelona Zoo, Bioparc, Madrid Zoo, and Zoobotanico Jerez are members of the European Association of Zoos and Aquaria (EAZA). Madrid Zoo, which is operated by a private corporation, is a member of the World Association of Zoos and Aquariums (WAZA), as is Barcelona Zoo, which is operated by the municipality.
A total of 226 terrestrial wild animal exhibits were surveyed, housing 271 individuals from 155 different species. During the investigation, Animal Equality also visited a reptile house and a zoo farm. Investigators recorded animal shows, interactive sessions and animal rides where possible.

Interviews were conducted with zoo staff, and full transcripts are available upon request.

Photographic and film evidence was collected to show the zoos in their entirety, and additional information was obtained from the industry’s websites, as well as the zoo’s own literature and websites. Investigators visited the zoos as members of the public who walked around the entire zoo to obtain an overall impression but only recorded in detail up to 30 randomly-selected wild, terrestrial animal exhibits at each facility.

Space, substrate, features, furnishings, privacy and signage were analysed at the exhibits. Animal Equality investigators filmed where possible areas where performing animals were housed.

An undercover investigator was also placed in Seville Zoo during May 2011 to obtain more detailed information and collect further film evidence.
Life inside the zoos

At each of the zoos visited, animals were living in wholly oppressive environments. Animal Equality found individuals housed in exhibits that were extremely small and, in some cases, severely restricting. Such small spaces prevent animals from engaging in natural movements and behaviours, which are essential for their well-being.

Some animals were housed in old-style cages and pits, and few were provided with sufficient shelter to mitigate temperature extremes, or privacy areas. A lack of privacy is often a major source of stress for animals confined in zoos. Animals were housed in exhibits containing concrete or a gunite-type material substrates, which is well-known to result in damage to joints and ligaments of feet and legs. A hard, unnatural substrate does not permit foraging – an activity that, in the wild, would often occupy a large proportion of the day for some individuals.

Overall, the zoos visited have made little effort to attempt to imitate the animals’ natural home. For example semi-aquatic mammals, such as hippopotami, which would naturally spend a great amount of their time in water, were provided with small, stagnant pools in which they were barely unable to submerge in, let alone swim. These pools were often the only water source available to the animals. Animals that would, for example, live in rainforests – such as monkeys, apes and lemurs – were seldom even provided with live vegetation.
Poor hygiene can cause some severe health problems for captive animals, as it can lead to the spread of disease. Animal Equality observed exhibits with an excessive accumulation of debris (including feed and faeces), particularly at Castellar Zoo, which can be harmful to animals if ingested. An exhibit at Madrid Zoo was so poorly drained it was waterlogged.

The vast majority of exhibits were essentially featureless and barren. These exhibits did not have species-specific furniture and the animals living in them were sensory-deprived and under-stimulated. These animals had no choices or control over their environment which had led to them becoming mentally disturbed. Animals often had little opportunity to keep physically active, which can lead to illnesses.

Animal Equality observed social animals living in solitary confinement, such as the striped hyena at Seville Zoo. Animals who were housed in groups were often living in extreme close confinement with others, it resulting in aggressive encounters and consequential injuries.

Raptors are chained in direct sunlight adjacent to the performance area at Madrid Zoo.
The baboon island exhibit at Madrid Zoo with a substrate that was littered with debris (e.g. plastic, paper). Investigators observed animals chewing and manipulating items that visitors had thrown or dropped into the exhibit. Animal feeding was likely to be a common occurrence at this exhibit as the animals were begging in areas with high visitor density.
Where possible, animal shows, interactive sessions and animal rides were recorded. Investigators also studied information boards at the zoos, and information available on the internet.

The duration of these events was recorded, and also the time spent by the trainers informing visitors about the natural attributes (e.g. habitat use, biology) of the animals was noted.

Out of the eight zoos visited by Animal Equality, six offered one or more type of exploitative show or close encounter experience with animals. These were Barcelona Zoo, Castellar Zoo, Cordoba Zoo, Madrid Zoo, Rio Safari Park and Seville Zoo. These included ‘petting’ sessions with domestic animals, sea lion, parrot, dolphin and elephant performances, ‘free flights’, photograph sessions with animals and the handling of a snake.

Madrid Zoo currently displays dolphins who have been caught in the wild, as did Barcelona Zoo until early 2011 when the individual died. Igualdad Animal’s investigation reveals a disturbing pattern of animals being bred and sold by Madrid Zoo to other captive dolphin facilities, seemingly to replace individuals who have died.

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**Animals as ‘performers’**

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Dolphins get depressed, sick, and die young in zoos and marine parks because of the artificial conditions of a tank.
Animal Equality documented the deep abrasions on the rostrums of dolphins at Madrid Zoo, likely to be a consequence of trainers standing on the animals’ faces during training sessions and performances, or the animals hitting their faces against tank walls. The dolphins at Madrid Zoo currently have to perform up to three times a day, and the dolphins at Barcelona Zoo five times a day.

Animal Equality attended shows at the zoos in which animals were made to look like clowns, and all of the shows involved animals carrying out potentially damaging and stressful behaviours. The elephant (‘Babaty’) and sea lions at Rio Safari Park performed circus-style tricks such as ‘dancing’ and playing musical instruments. ‘Babaty’s trainer held an ankus close-to-hand throughout.

The ankus is a tool with a sharp steel hook on one end that is employed in the handling and training of elephants. It is used to inflict damage on elephants – animals that, despite appearances, have extremely sensitive skin. The trainer was observed embedding the hook into the soft tissue behind the ears of the animal whilst tourists sat on her back.

When the animals are out of public view, they are kept in appallingly cramped, barren, sensory-deprived environments. In fact, the situation for these performing animals appeared worse than that of the animals on constant display.

At Madrid Zoo and Seville Zoo, when not performing, birds were chained in direct sunlight to the ground, or confined in cages so small that they were unable to stretch their wings, let alone fly. Investigators observed damaged rostrums which are likely to be a direct consequence of trainers standing on the dolphins faces, or their contact with tank walls. During the show, investigators also observed an angry female trainer holding one of the dolphins head down outside of the water with her foot.
At Barcelona Zoo, the dolphins swam around the edges of a 62 ft. tank that is fenced off from public view.

Seville Zoo openly operates not only as a zoo, but also as a supply centre for companies wanting to use animals in advertising. Zoo staff even told investigators that this side of the business pays for the animals’ upkeep.

At Seville Zoo, Igualdad Animal found confined in small cages tiger and lion cubs, some of whom were still with their mothers. The cubs are hand-reared so they are habituated to humans and spend the majority of the rest of their lives confined in small cages. It is possible that the zoo sells the animals when they become too large to handle.

The use of animals for human entertainment not only means a life of deprivation for the animals, but often also being subjected to barbaric training practices, reliant on physical domination and fear.

At Seville Zoo visitors are encouraged into the adult tiger and lion exhibit to have their photograph taken whilst sitting on the animals. Investigators filmed the trainer being bitten by the lion, yet this did not stop the photo session from commencing in the same exhibit with the tiger shortly afterwards.
Psychologically disturbed animals

Mental illness is common in zoo animals. Frustrated, unhappy and disturbed animals often perform stereotypic behaviours, which are compulsive, repetitive, unvarying, functionless movements, and a sure sign that something is very wrong. Animal Equality assumed these movements to be stereotypic if they were performed by an animal in at least 5 cycles.

Stereotypic behaviours are clear indicators that an animal is suffering as most occur when animals have failed to cope with, or remove themselves from, stressful situations.

Over half the animals carrying out abnormal and stereotypic behaviours were housed at two of the zoos, Barcelona Zoo and Seville Zoo. 26% of individuals observed carrying out these behaviours were living at each of these zoos.

‘Locomotory’ stereotypes (i.e. repetitive routes of locomotion), accounted for the largest proportion (55%) observed. Pacing, a locomotor stereotypy whereby an animal moves repeatedly back and forth in a straight line, was the most common category of behaviour observed (44% of the total).

Captive carnivores are particularly prone to pacing. This stereotypy was most commonly observed at Seville Zoo. It was also commonly observed at Castellar Zoo, Barcelona Zoo and Cordoba Zoo by big cats, also bears, a rhesus macaque and a cape raccoon. Begging was the second most common category of behaviour observed (13% of the total). This behaviour was performed mainly by bears at Madrid Zoo.
Also observed by Animal Equality were animals over grooming, circling, swaying, performing ‘loop the loop’, pacing in a ‘figure of eight’ pattern, horn rubbing, and lunging an object against a glass barrier.

Mammals were not the only group of animals observed performing these disturbed behaviours, reptiles at Madrid Zoo were also found to be attempting to escape their environment and performing a stereotype called ‘Interaction with Transparent Boundaries’.
A neurotic Tufted capuchin at Seville Zoo who was performing a behaviour not identified anywhere else during the Animal Equality investigation. The animal was observed picking up a stone and continually lunging it towards the glass barrier. A depressing sight.
The health and well-being of individual animals was assessed by collection of photographic evidence of what appeared to be differences from the norm, and seeking the expert opinion of two wildlife veterinarians, Samantha Lindley, BVSc MRCVS and Simon Adams MsRCVS. Assessing health in a captive wild animal is not always straightforward however, particularly when the time available to spend with the animal is so limited.

Extensive knowledge and experience of the species concerned is required to pick up some of the more subtle health problems and the zoos’ health and husbandry records were not available for Animal Equality. The results of this part of the study therefore are likely to only represent the ‘tip of the iceberg’.

Investigators were unable to count individuals with hair loss, for example, as the problem was so widespread. And so the proportion of exhibits housing animals with poor health indicators was calculated.

Animal Equality found a disturbing number of exhibits housing animals with obvious indicators of poor health. It is alarming that these individuals were on display, instead of receiving treatment away from public view.

The two veterinary experts summarised their opinion on photographs of the parrots, bears and primates: “The photos strongly indicate chronic poor husbandry and that the animal’s well-being is not being addressed”. Also that, “images of other animals are strongly suggestive of the same”.

**Poor health and well-being**
“There is no excuse for overgrown (slipper) hooves. A lack of trimming and/or laminitis are the likely causes. Laminitis, which is a painful foot condition, causes the animal to rock back on its “heels” and therefore the claw is free to grow without being worn down”
— Samantha Lindley, BVSc MRCVS and Simon Adams MsRCVS
Spanish deer at Madrid Zoo. “Slipper hoof – poor foot care, inappropriate substrates, inappropriate nutrition, possible laminitis”
— Samantha Lindley, BVSc MRCVS and Simon Adams MsRCVS
Himalayan bear at Madrid Zoo. “This could be hypothyroid, or other hormonal imbalance, or nutritional deficiency but most likely mange”
— Samantha Lindley, BVSc MRCVS and Simon Adams MsRCVS
Young Olive baboon at Madrid Zoo. “Poor skin – leishmaniasis is a possibility”
— Samantha Lindley, BVSc MRCVS and Simon Adams MsRCVS
Zebra at Madrid Zoo. This injury is “possibly from excessive scratching and rubbing if ectoparasite and fly control is poor. The tail head injury may be a bit wound but more likely tail head rubbing from fly irritation; pin worm and/or sweet itch”
— Samantha Lindley, BVSc MRCVS and Simon Adams MsRCVS
European brown bear at Madrid Zoo. “Tick treatment is straightforward and consists of using pour-on preparations although it is just as important to use environment spraying to remove ticks from enclosure. This is evidence of very poor standards and zoo management”
— Samantha Lindley, BVSc MRCVS and Simon Adams MsRCVS
The most commonly observed indicator of poor health or well-being was hair or feather loss, which was likely to be the result of self-mutilation or over grooming by cage mates, and this amounted to 43% of the total. The second most commonly observed indicators were ‘contact injuries’ (e.g. fractures, breaks or wounds likely to be the result of contact with other animals, cage barriers or furniture), and these amounted to 25% of the total.

The zoo with the highest (28%) proportion of exhibits housing animals with indicators of poor health was Madrid Zoo, where animals were observed with fractured or broken wings or abnormalities likely to be stemming from inadequate nutrition. 19% of the exhibits housing animals with indicators of poor health were at Rio Safari Park. At this facility, parrots were commonly observed with feather loss. 17% of the exhibits were at Castellar Zoo, where primates were suffering hair loss.

Investigators observed also animals with weight and teeth abnormalities, foot problems and ecto-parasites. Some of the abnormalities were severe. Investigators observed raptors with fractured or broken wings, a bear who was clearly distressed from a tick infestation around the eye area, parasitic-diseased primates, deer and barbary sheep with severely overgrown hooves, and llamas with overgrown teeth.
At Madrid Zoo, Zoobotanico Jerez and Rio Safari Park, primates were suffering severe hair loss and bleeding, fresh wounds.

Investigators observed aggressive encounters between baboons and tigers which had resulted in wounded animals.

Fights and injuries are common in zoos and are a direct result of captivity where animals live in low-complexity environments they have little control over, have restricted space and are forced into close contact with conspecifics.

“Signs of lack of foot care and hard/unsuitable substrate”
— Samantha Lindley, BVSc
Zoos portray themselves as facilities where visitors can learn about the natural attributes of animals. To determine the zoos’ commitment to public education, Animal Equality measured the quantity and quality of signage and recorded whether the facilities offered guided tours or educational talks.

The following checklist for signage was used:

- Common name
- Scientific name
- Natural habitat
- Biological characteristics

It was revealed that whilst information signs were displayed on the vast majority of exhibits, this varied amongst the zoos. Rio Safari Park for example displayed information signs for only 77% of species held in the exhibits, whilst Carmona Zoo displayed information signs for 97% of species.

The physical condition of signs also varied amongst the zoos. The signage at Carmona Zoo and Seville Zoo was extremely weathered, dilapidated, sometimes illegible, and containing irrelevant information.
The behaviour of visitors

Investigators recorded the number of exhibits where members of the public were observed throwing or poking objects at animals, smoking, vocalising loudly and inappropriately, throwing litter, banging on glass barriers, feeding, touching and harassing the animals.

Visitors were observed carrying out at least one of these behaviours at 17% of the exhibits visited during the investigation. In total, 25% of these exhibits were at Castilla Zoo. At this zoo, visitors were actively encouraged to feed the animals (in fact, food was provided in plastic bags at the entrance to the zoo), and freely enter into exhibits to touch, feed and take photographs of the animals.

Animal feeding was the most frequently observed category of behaviour observed, and amounted to 26% of the total. Visitors were observed feeding the animals mainly at the camel, bear, macaque and baboon exhibits at Madrid Zoo. The response of the baboons and bears was to beg for more food.

Banging on glass barriers was the second most frequently observed category of behaviour, and this amounted to 23% of the total. Visitors were observed banging on the glass of the big cat and primate exhibits at Cordoba Zoo. The zoo had not installed stand-off barriers, which demonstrates a lack of consideration for the animals who are housed there.
Primates in particular become stressed when visitor density is high, investigators observed gorillas at Biopark and Barcelona Zoo charging the glass barriers of their exhibits. Investigators also observed primate exhibits which had broken glass barriers.

Animal Equality observed that visitors could have direct contact with animals at six of the zoos. Four of these zoos actively encouraged visitors to have direct contact with the animals and, where this was not the case, visitors and animals could have contact as a result of inadequate, or complete absence of, stand-off barriers. This was a widespread problem amongst the zoos, particularly at Biopark, which prides itself on being a modern-day facility that enables the public to get up close to animals. Direct contact with visitors can be very stressful for animals, and the spread of zoonotic diseases.

Animal Equality recorded the types of animals that visitors could have direct contact with and reverted to the UK’s ‘Secretary of State’s Standards of Modern Zoo Practice (SMZP)’ ‘Hazardous Animal Categorisation’. Alarmingly, Animal Equality found that 67% of animals who were observed to be in direct contact with visitors were categorised as ‘Greater Risk’, and the remainder as ‘Less Risk’. No animals observed to be in direct contact with visitors were categorised as ‘Least Risk’.
At Cordoba Zoo, there were glass barriers on the large cat exhibits. Visitors were observed banging and kicking the glass, whilst shouting at the animal.
Liz Tyson
Director, Captive Animal Protection Society (CAPS)

“The evidence collected by Animal Equality in Spanish zoos is difficult to watch, but we implore anyone who might be thinking of visiting a zoo while on holiday to watch it nonetheless.

The conditions shown are, at times, shocking; the treatment of some animals is apparently both abusive and neglectful; the suffering of the animals, whether from physical or psychological causes, is apparent throughout.

As with any other commercial operation – where there is demand, there will be supply. It is time for demands to be made to stop this suffering and there is a very easy way that each and every one of us can make a difference: by voting with our feet and choosing not to visit the zoo.”
Rob Laidlaw  
Cbiol MSB Executive Director, Zoocheck Canada  

“The results of the Animal Equality investigation into conditions in Spanish zoos reveal a multitude of systemic problems.

Inadequate housing, poor husbandry practices, injured and ill animals, ubiquitous abnormal behaviours and substandard educational programming are just a few of the issues encountered. Clearly, the state of zoos in Spain is not acceptable.

I hope the Animal Equality investigation prompts a wholesale re-evaluation and phase out of zoos in Spain.”

Marc Bekoff  
University of Colorado, Boulder, Colorado. former Professor of Ecology and Evolutionary Biology and Fellow of the Animal Behavior Society  

“Zoos are not natural homes for animals and we should all work to phase them out.”
Dr. Lorraine Docherty  
Chimpanzee rescue and rehabilitation specialist

“At Seville Zoo, Gina appears to be living on her own which is never acceptable.

Chimpanzees are highly sociable animals and living in groups is essential for their psychological well-being. Gina appears to be living in a barren and un-stimulating environment without even the basic comfort of bedding to get her off the concrete floor.

The enclosure is very bare and it’s construction shabby at best. At Zoobotanico Jerez, again there is a lack of bedding material for comfort for the chimps and the enclosure is bare, lacking areas where the chimpanzees can rest comfortably.

At Biopark, the rocks in the chimp exhibit provide little benefit to the chimpanzees and it appears that they only provide the tiny amount of shade available to them.

At Rio Safari Park, this exhibit is quite typical of many zoos, the painted walls are aesthetically pleasing for the public but they offer very little benefit to the chimps. A concern is that it appears that the chimps cannot get away from the viewing public so they are on constant view which will cause unnecessary stress. In addition there is no vertical complexity which will encourage species appropriate behaviours such as brachiating.”
“Elephants are intelligent and socially complex animals, and need autonomy, a network of their own species and lots of space to thrive.

The zoos mentioned may try to satisfy the interest of uncritical visitors, but they are certainly not covering the interests of their elephants. What visitors are seeing in tiny, unimaginative exhibits are animals suffering tremendously. The elephants are kept in conditions that are abusive and destructive for body and soul.

The day will come when people will realize that elephants in such zoos are telling little about what elephants really are - and a lot about those responsible for keeping them there. This report is extra inspiration for those of us that believe we must find sanctuaries for suffering elephants in Europe. The best way to educate the public about elephants and their protection is through animal-free, interactive exhibits - the next generation zoo.”
Samantha Lindley, MRCVS BVSc and Simon Adams
Veterinary Advisors

“The images of the psittacines, bears and primates at the zoos visited during the investigation strongly indicate chronic poor husbandry and that the animals' well-being is not being addressed, whilst the others are strongly suggestive of the same.”

Dr. Mel Richardson
Captive Wild Animal and Veterinary Consultant

“I have more than 42 years’ experience caring for captive wild animals, from zookeeper to veterinarian. I have administered to wild animals in almost every conceivable venue: animal dealers, wild animal drive-through parks, zoos, circuses, movie and commercial animals, sanctuaries in even in the wild. My opinions below are based on my experience and the information provided to me by Animal Equality. I must commend Animal Equality for such an exhaustive investigation.

I can agree wholeheartedly with Animal Equality’s conclusions as stated in their report summary. The investigative report clearly demonstrates that, “these individuals are denied their freedom and housed in inappropriate environments.” The information provided to me establishes the lack of knowledge or education the owners and managers of these facilities possess.

I observed wild animals being housed in inadequate facilities and exhibiting all of the symptoms of psychological stress.
I observed animals suffering from the ravages of captivity with none of their normal social, behavioral or environmental needs being met. I observed ignorant so-called zoo trainers putting the public’s lives at risk exposing them to adult lions and tigers.

In conclusion Animal Equality’s investigation clearly demonstrates Institutionalized Suffering in Spanish Zoos and these practices should be abolished.”

Albert López
Former Head Trainer of marine mammals in Barcelona Zoo

"Dolphins in exhibits often swim with their eyes closed due to irritation that is produced by:

- Excess chlorine (note: humans get red and sore eyes when we swim in chlorinated water, however dolphins have to endure and suffer this all day, for 365 days a year).

- Excess of reduction potential (also known as redox potential). To treat the water in the pools, ‘ozone’ is used, which is a strong oxidizing agent. The parameter used to determine the amount of dissolved ozone is the redox potential (mV potential is a result of the oxidation and reduction reactions). In the dolphin exhibits where I have worked with this system in place, there has been a direct correlation between a high redox potential (> 300 mV) and a high discomfort in the dolphins, accompanied by redness in the eyes of the animals.

But yes, the water was clean and shiny… just as the public likes."
Barry Kent MacKay
Canadian Representative, Born Free USA

"The Spanish zoos I have visited, and pictures of Spanish zoos I have seen feature a plethora of ways in which birds should not be treated.

Inappropriate cage wire, lack of shelter, badly chosen foods, lack of protection from throngs of people, stereotypical behaviour… all those things are present, no doubt as a result of lack of knowledge.

But all the regulations in the world won't allow us to justify imprisoning birds in the first place. I think zoos tend to simplify things down to just the bird, isolated from all that contributes to its natural existence."
CONCLUSION

The Animal Equality investigation provides a snapshot of the situation for many animals in Spanish zoos. These individuals are denied their freedom and housed in inappropriate environments. The frequently observed abnormal and stereotypic behaviour performed by animals is strongly indicative of widespread psychological suffering in zoos, and the high proportion of animals with indicators of poor health or well-being raises the question of the availability of husbandry expertise, health care and veterinary attention at the zoos.

Animal Equality is opposed to the holding of animals in captivity for entertainment purposes or under the guise of ‘education’.

We urge people not to visit zoos or any other facilities that exploit animals for human gain.
CAGED LIVES

AN ANIMALEquality UNDERCOVER INVESTIGATION INTO SPANISH ZOOS

Website: SpanishZoos.org
SEPTEMBER 2011