



Taken for a ride

The conditions for elephants
used in tourism in Asia



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Preface

World Animal Protection has been moving the world to protect animals for more than 50 years. Currently working in over 50 countries and on 6 continents, it is a truly global organisation. Protecting the world's wildlife from exploitation and cruelty is central to its work.

The **Wildlife - not entertainers** campaign aims to end the suffering of hundreds of thousands of wild animals used and abused in the tourism entertainment industry. The strength of the campaign is in building a movement to protect wildlife. Travel companies and tourists are at the forefront of taking action for elephants, and other wild animals.

Moving the travel industry

In 2010, TUI Nederland became the first tour operator to stop all sales and promotion of venues offering elephant rides and shows, followed by others including Intrepid Travel who in 2013 was first to do so globally. By early 2017, over 160 travel companies made similar commitments after engaging with World Animal Protection. These companies now offer elephant-friendly tourism activities.

TripAdvisor announced in 2016 that it would end the sale of tickets for wildlife experiences where tourists come into direct contact with captive wild animals, including elephant riding. This decision came as a result of 550,000 people taking action with World Animal Protection to demand that TripAdvisor stops profiting from the world's cruellest wildlife attractions.

Yet these changes are only the start. There is much more to be done to save elephants and other wild animals from suffering in the name of entertainment. As always, effective partnerships will be key to our success.

Working partners for wildlife

World Animal Protection worked with local partners for more than 20 years to bring an end to bear dancing in Greece, Turkey and India and is at the final stage of phasing out bear baiting in Pakistan. Together with local organisations, include alternative livelihoods for local people are created so they no longer depend on bear dancing or baiting for an income.

Since 2005 World Animal Protection has also worked in Asia to improve the welfare of elephants. This includes supporting elephant owners in Nepal to learn about alternative, humane methods to work with their elephants. While this had positive impact on the treatment of those elephants it did not address the main welfare concerns surrounding the use of elephants in captivity.

In 2005 and 2006 funding was given to research into the welfare of elephants in India conducted by Compassion Unlimited Plus Action and Asian Nature Conservation Foundation. It had a great impact on the recognition of elephants' welfare in India. Between 2005-2008 support was also given to the elephant hospital of the Thai Elephant Conservation Center to provide medical care to working elephants.

A comprehensive research, conducted in 2010 by World Animal Protection and funded by The Intrepid Foundation, on the welfare of wild animals used for entertainment in Thailand gave invaluable information into the plight of captive elephants. During that year World Animal Protection also launched a public campaign with TUI Nederland to make Dutch tourists aware of the hidden cruelty behind elephant rides and shows. The research and experience gained since 2010 has greatly informed this report as well as the **Wildlife - not entertainers** campaign.

World Animal Protection commissioned Oxford University's Wildlife Conservation Research Unit (WildCRU) to produce an in-depth review of the global scale of the wildlife tourism industry [1]. The findings and recommendations of this report informed World Animal Protection's campaign approach to tackle the ten cruellest wildlife tourism attractions [92].

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Executive summary

This report documents the conditions endured by nearly 3,000 elephants used in tourist venues across Asia. 220 venues were surveyed between late 2014 and mid-2016, including all venues that could be identified in Thailand, Laos, Cambodia, Nepal and Sri Lanka, and a representative selection of venues in India.

It follows World Animal Protection's first survey in 2010 covering the conditions of elephants in entertainment in Thailand, called *Wildlife on a Tightrope* [4].

This latest research shows that three out of four of the 2,923 elephants surveyed are living in poor and unacceptable conditions. All of these were kept at venues offering elephant rides – one of the most popular tourist activities in these countries in Asia.

Of the countries visited, Thailand is home to about three-quarters of all elephants kept in captivity for entertainment in Asia.

There has been a 30% rise in the number of elephants at tourism venues in Thailand since 2010. In the most recent study, 357 more elephants in Thailand were found living in poor welfare conditions than five years ago.

This corresponds to a rise in the number of tourists to Thailand, and the rapidly developing elephant tourism entertainment industry which has very little in common with how elephants were traditionally kept. In fact, it sparks great concern about the rise in the exploitation of elephants, as well as people.

Several venues receive over 1,000 visitors a day. The elephants were continually required to give rides, perform and interact with tourists. These large venues are responsible for some of the poorest conditions cited in this research. Additionally, they commonly also provide poor living standards for the elephant handlers (mahouts).

Most elephants kept in poor conditions

Over 2,000 of the elephants surveyed were used for saddled rides or shows.

When not giving rides or performing, the elephants were typically chained day and night, most of the time to chains less than three metres long. They were also fed poor diets, given limited appropriate veterinary care and were frequently kept on concrete floors in stressful locations near loud music, roads or visitor groups. These conditions took no account of the elephants' intelligence, behaviours and needs. The scale of suffering at these venues is severe.

This treatment follows severe trauma that these elephants will have endured in their early years when they were separated from their mothers, and enduring a harsh training process that break their spirits and makes them submissive enough to give rides and perform.

Better conditions for some elephants

The research found a further 487 elephants across Asian tourist venues were kept at venues with better conditions. Although still inadequate, these venues usually had more knowledgeable and caring staff, mostly no saddled riding, shorter working hours, and more possibilities for social interaction between elephants. In many cases they also provided better working conditions for the mahouts.

Only 194 elephants at 13 venues were found to be living in high welfare captive conditions. At these venues there were no rides or performances. The elephants walked free during most of the day, were able to socialise with other elephants and were fed on natural vegetation at most of these venues. Tourists visiting these venues would observe elephants behaving naturally and direct interaction between visitors and elephants was usually prohibited or limited. Mahouts at these venues were commonly well respected for their responsibility and fully involved with the daily management of elephants and interaction with tourists.

Risks to health and lives

Despite better conditions within some of the venues there are still clear safety risks involved with close contact between visitors and elephants. Between 2010 and 2016 in Thailand alone, 17 fatalities and 21 serious injuries to people by captive elephants were reported in the media. And unreported incidences involving local elephant keepers are likely to make this figure much higher.

Creating change for elephants

In Thailand 173 more elephants are being kept at venues with significantly better welfare conditions compared to 2010. However, this is over-shadowed by the much larger increase of almost 500 elephants in venues with severely inadequate welfare conditions.

The situation for the existing captive elephants will only improve if a shift leads to fewer elephants suffering under poor conditions and instead experience better welfare. Yet, this study evidences that this shift has not yet begun.

The growing number of elephants in a highly profit-driven industry and the increasing demand for elephant experiences also sparks conservation concerns. The high value of captive elephants and porous borders are drivers for the illegal poaching and laundering of wild-caught elephants into the captive elephant tourism industry.

The travel industry, governments, elephant owners and handlers, local communities, as well as individual travellers, are part of the solution. In particular, the travel industry proving the demand for higher welfare elephant venues is critical. World Animal Protection is committed to work collaboratively to end the suffering of captive elephants in tourism along with other wild animals exploited for entertainment.

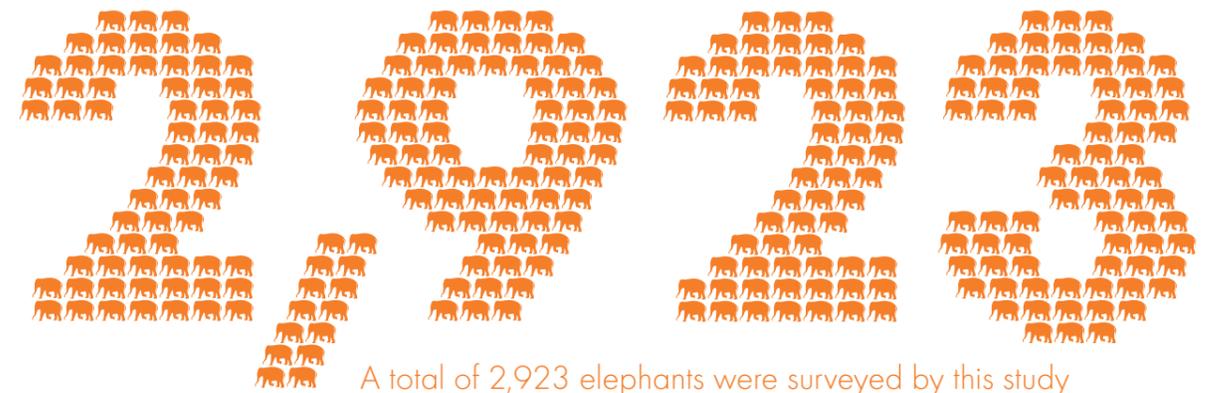
Recommendations for an elephant-friendly travel industry

Pathways clearly need to be created to provide better care for the existing elephants, while phasing out exploitative practices.

This study documents some positive developments for elephants in Asia that could act as a guiding beacon for the positive transformation of elephant venues. To enable such wider and sustainable change to end the suffering of elephants this report makes the following recommendations:

- Enable and encourage replication high-welfare, elephant-friendly venues.
- Channel tourist demand away from the worst activities, such as elephant shows and rides, to more humane alternatives.
- Devise a set of elephant-friendly tourism standards.
- Improve conditions for captive elephants not kept in elephant-friendly venues.
- Stop elephants being poached from the wild for the tourist industry.
- Ensure a loophole-free registration process for captive elephants.
- Limit captive breeding to facilities with genuine conservation value.
- Respect local cultures and address the needs of the mahouts and other elephant-dependent people by developing alternative livelihoods with them.

Elephants are wildlife; not entertainers



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Over a period of just 5 years there has been a 30% rise in the number of elephants at tourism venues in Thailand.

Introduction

World Animal Protection defines wildlife entertainment as the use of wild animals primarily for the entertainment of people, in ways that cause harm, stress or discomfort to the animals, or by displaying them in demeaning ways. At such venues wild animals are kept in inadequate living conditions that cause continuous suffering, and will experience pain as part of the training methods. For example, orang-utans are trained to re-enact kick-boxing matches, tiger cubs made to pose with tourists for selfies, and of course elephants are forced to give rides and perform shows.

Across the world wild animals are being taken from the wild, or bred in captivity, to be used for entertainment in the tourism industry.

Wildlife tourist attractions, including wildlife entertainment, have been identified as a prime tourist motivator, are considered a highly profitable market, and as a market are predicted to grow in the coming decades [1,2]. A survey in 2014, commissioned by World Animal Protection, of 13,000 people identified the love of animals as a prime motivator for visiting such venues.

However, little accurate data is available on the global scale of the industry for specific species, the welfare conditions of the animals and the impact of this industry on the conservation status of wild populations. A study by the Wildlife Conservation Research Unit of Oxford University commissioned by World Animal Protection, has found that out of 24 types of wildlife tourist attractions 14 (involving 120,000-340,000 animals) had negative conservation impacts and 18 (involving 230,000-550,000 animals) had negative welfare impacts [1]. Despite these figures very few tourists gave negative feedback on these attractions due to conservation or welfare concerns. The study concluded that wildlife tourist attractions have substantial negative effects that are unrecognised by or concealed from the vast majority of tourists, suggesting an urgent need for tourist education and regulation of wildlife tourist attractions worldwide.

Wildlife entertainment is one of the particularly worrying types of wildlife tourist attractions. Animals taken from the wild (often young removed from their mothers) are forced to endure cruel and intensive training to make them perform and interact with people for visitors' entertainment.

Global efforts are necessary to address the welfare and conservation concerns inherent in this industry, leading to a phase-out of wildlife entertainment.

The World Animal Protection **Wildlife - not entertainers** global campaign is based on the vision that wild animals belong in the wild - not in entertainment. A major component of the campaign encourages people to be animal-friendly tourists, and asks travel companies to replace sales and advertisement of wildlife entertainment with activities that don't involve suffering of animals. Since 2010 over 160 travel companies have joined World Animal Protection by committing to end all sales and promotion of venues offering elephant rides and shows. Instead they offer more humane alternatives, such as visits to genuine elephant sanctuaries to support captive elephants in need or responsible viewing of elephants in the wild.

Although the proliferation of wildlife entertainment tourism is a global trend, it is most evident in Asia, where millions of tourists flock each year. Upon arrival in Thailand, Asia's 2nd most popular tourist destination [3], tourists are bombarded with advertising for wildlife entertainment attractions: ride an elephant, be a mahout for a day, see elephant shows, take selfies cuddling tigers.

The first study on venues accessible to tourists and housing wild animals trained for entertainment across Thailand was conducted by World Animal Protection in 2010 [4]. The scale of the wildlife tourism industry and the welfare of captive wild animals was assessed at 118 venues (representing approximately 95% of all venues in Thailand at that time). Captive animals across these venues included 1,688 elephants, 614 tigers and 317 macaques. The majority of venues were using elephants for elephant rides or shows. Overall, 90% of the tiger and macaque venues and 80% of the elephant venues were rated as severely inadequate for welfare conditions for the animals - most of which were housed there for life.

Of the elephant venues, 15% provided a slightly better but still 'inadequate' quality of husbandry conditions than the majority. The main points of concern for these species were extreme physical restraint by chaining or containing animals in small cages, limited opportunity for social interaction with other individuals of their species, participation in stressful and in some cases extremely demanding show activities, non-existent or insufficient veterinary care and inadequate nutrition.

World Animal Protection concluded in 2010 that "strong concerns must be raised regarding the situation for wildlife used in entertainment venues in Thailand. Not only is the animals' welfare often severely compromised but negative impacts on the conservation of these species are likely through maintaining a demand for wild animals." [4,5]

Elephants were kept at 106 of the 118 assessed venues, making them the most highly represented species in entertainment, with elephant riding the most common tourism activity.

In this report World Animal Protection provides an important update to the recognition of the plight of captive Asian elephants in the tourism industry. Expanding our work from 2010 across further countries and updating our data in Thailand, **this report now contains the results of one of the most comprehensive studies on the welfare conditions for captive elephants in the tourism industry.** The results will help expert stakeholders of the travel industry, governments and elephant experts, as well as regular travellers to make informed decisions to protect elephants as part of World Animal Protection's campaign Wildlife. Not Entertainers.

Image: Inadequate conditions at a typical elephant riding venue in Thailand. All elephants are chained on short chains, stand on concrete and will be used for saddled rides throughout the day.



Background information

Asian elephants: species information and population

Asian elephants are considered endangered by the International Union for Conservation of Nature (IUCN) and are on Appendix I of the Convention on International Trade in Endangered Species (CITES), heavily restricting international trade of animals and animal parts. Constant human encroachment into the elephant's habitat and poaching for ivory or wild animals has been causing a rapid decline of the Asian elephant population over recent decades. Estimates of the total population range between 38,000 and 52,000 elephants [6,7]. There are three commonly recognised sub-species: the Indian elephant (*Elephas maximus indicus*) on the Asian mainland, the Ceylon elephant (*E. m. maximus*) on Sri Lanka, and the Sumatran elephant (*E. m. sumatranus*) on the Indonesian island of Sumatra [8]. Populations of wild elephants vary across 13 countries (or range states) with estimates of less than 200 in each of Bangladesh, Bhutan, China, Nepal and Vietnam and less than 1,000 for Cambodia and Laos [6]. The population of elephants in the wild in Thailand is estimated to be between 2,500 and 3,200 [9,10] and India has by far the largest population of elephants in the wild with an estimated 23,900–32,000 elephants [7]. In addition to wild populations, there is a significant population of captive elephants. The captive elephant population is estimated to constitute one-quarter to one-third of all remaining Asian elephants [11,12], with this ratio likely to be increasing. In 2003, 14,500 to 16,000 Asian elephants were assumed to live in captive or semi-wild conditions, typically used for logging, village work, tourism, or temple purposes [13].

Captive elephants are primarily sourced from the wild although in some countries captive breeding has been practiced with some success. Commercial gain has been identified as a prime motivator of acquiring elephants [12]. The report 'An assessment of the live elephant trade in Thailand' by the wildlife trade monitoring network TRAFFIC found that between April 2011 and March 2013 there were approximately 79–81 wild elephants illegally captured for sale to the Thai tourism industry [9]. Most of the animals came from Myanmar where the capture of elephants is considered a serious threat to the future survival of that country's wild population of around 4,000–5,000 Asian elephants. The report concluded that 'Wild live elephants are being illegally captured to supply the lucrative tourism industry in Thailand and urgent changes to the country's legislation and elephant registration procedures are needed to stop the trafficking.'

Biology and behaviour

Together with their African counterparts, Asian elephants are the largest land-based mammal alive. Adults can weigh between 3,000 and 5,000kg and reach a body length of over 6m. Elephants are long lived, reaching a lifespan of about 70 years in the wild, although the lifespan in captivity is generally considered shorter [14]. Pregnant females have a gestation period of around 20 months. After birth, they take care of their offspring for the first four to five years and continue to supervise them for several years after that.

Elephants are some of the most socially developed mammals in the world and as such are capable of arranging themselves into a complex social structure. They form multi-tiered herds of mother/young family units, bonded family units (that stay together), and 2–4 bonded family units that coordinate their behaviour in a herd [7]. **Elephants can hence form herds of up to 20 females and juveniles** – even herd sizes of over one hundred individuals have been reported [15]. Contrary to their African cousins, Asian elephants do not seem to be as hierarchically structured and may not necessarily have a matriarch leader [16]. Individuals in herds constantly display a range of social behaviours including touch and vocalisation. Cooperative behaviour including sharing the care of offspring has also been recorded in herds. Adult males travel alone, joining a female group for periods or forming temporary male groups. Asian elephants roam home ranges of between 15 and 30 square kilometres, depending on availability of food, water and shelter. Each day elephants can travel up to 10km in thick forest and spend around 12–18 hours per day feeding on grasses and browsing on tree bark, roots, leaves and small stems (depending on availability and season), consuming between 150 and 300kg of food. Elephants are always close to a source of fresh water because they need to drink at least once a day. They also typically bathe in water each day and commonly swim. Other common activities are mud and dust bathing, rubbing on trees, and exploring their environment using their trunk [17].

Asian elephants are highly intelligent and have a substantial cognitive ability [7]. **Emotions, such as 'grief' at the loss of a family members, and development of post-traumatic stress disorder in reaction to traumatic incidences have been evidenced** [18–20]

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The myth of the domesticated elephant

'Domesticated' is a term often used to describe elephants in captivity, as distinct from their wild counterparts. Tourists are exposed to this term in advertising and throughout their experiences at elephant entertainment venues through educational materials and communication with guides and mahouts. Also many native Thai people refer to elephants as domesticated animals, arguing the case due to the long history of keeping elephants in captivity. The term is even commonly used in scientific literature, a platform relied upon for accuracy, as well as in less formal publications, which further reinforce this commonly held misconception. **Elephants have never undergone the process of 'domestication': a socio-biological process.** Although discussions are on-going on how to define domestication exactly, it is stated by most animal experts that domestication can only take place through human-guided, selective breeding for estimated no less than a dozen generations [21–23]. In each generation, the offspring that carry the desired traits (e.g. strength, fur, size, behaviour) is selected for further breeding. The term always refers to a whole population and by definition an individual animal can never be domesticated in its lifespan. A domesticated species is significantly different from its wild cousin in its instincts and anatomy, while emphasising traits that are felt desirable by humans. While domesticated animals still often display a range of natural behaviours, they differ in the intensity of stimuli required to trigger a certain behaviour change, making them easier to handle than their wild counterparts.

Throughout the 3,000-year history of human–elephant relationship, the vast majority of elephants used by man

have been captured from the wild. Hence, the long history of humans using elephants is not a valid argument to label elephants as domesticated. Even today, the majority of adult elephants originate from the wild, while the others are typically first or second generation captive-bred, with breeding not done selectively – yet selective breeding is a prerequisite in the biological process of domestication. The majority of captive Asian elephants that are being used for tourist rides today will thus still have been captured directly from the wild, although the exact number is difficult to validate with only incomplete databases available to verify the origin [24]. Various authors define the case of captive elephants as a classical example of animal taming and training, not domestication [25].

While elephants are not domesticated, their time in captivity and the close interaction with their human keeper does imprint on the behaviour of individuals. Some authors suggest introducing additional terminology between the outliers of 'domesticated' and 'wild', such as 'tamed' or 'captive wild animals' [21]. While 'tamed' is commonly felt to be vague and potentially misleading considering the persisting dangerousness of the animals, the word 'captive' may imply that the animal has been captured from the wild directly, which is not the case for elephants that have been born in captivity [26].

Acknowledging these discussions and lacking a better alternative, it is still felt that the term 'captive wild animals' most closely reflects elephants in entertainment. This label also allows for stricter regulations of the use of these animals, recognising that their complex needs are identical to their truly wild relatives.

Image: Wild elephant herd grazing in a national park in Sri Lanka



Tourist perceptions of captive elephants

In addition to the term domesticated being inaccurate, this commonly held misconception of elephants can hinder conservation efforts, as well as efforts to ensure better welfare of captive elephants. Visitors are more likely to accept chaining of animals for long periods, confining them to small spaces, and people closely handling and training them, if these animals are domesticated animals rather than wild animals. The term 'domesticated' implies to the visitor that the animal has lost its wild instincts and has adapted successfully to a life in human companionship, similar to other domesticated species like dogs, cats and horses. In the case of elephants, nothing could be further from the truth, but the usual visitor experience of elephants in tourism tries to paint a skewed picture of a captive elephant's life.

Image left: An elephant at his shelter after giving rides in India. Tied up at 3 legs on stone in a dark shed, this is usually not visible to the tourists that take an elephant ride here.

Image top right: Tools used by mahouts to control and guide elephants in Nepal.

Image bottom right: A mahout washing his young bull elephant in Thailand.



The few minutes a tourist spends with an elephant during a ride do not reveal the true life of the elephant nor what it will have endured in the past to be in the vicinity of tourists and provide rides. Show activities like the popular elephant painting may seem like harmless and not necessarily painful activities, but still require extremely intensive training of the elephant to obey to the directions of the mahout during the performance. While it is easy to understand that elephant painting or playing football is not a natural activity for elephants, the venues rely on the 'cute', exotic and novel factors of these activities. The brief interaction with the elephant when riding on its back allows the tourist to appreciate its bulk and beauty, distracting the thoughts from recognising the daily boredom and physical hardship of the relentless cycle of tourist treks, and the lack of freedom they are allowed at other times. It can also be difficult for an untrained person to identify signs of distress or discomfort in elephants. **Apart from the typical stereotypical swaying, not all distressed elephants will display distress at all times.** Body language of elephants can be difficult to interpret and is not comparable to domesticated animals we are familiar with.

Messaging communicated through tour guides and mahouts also does often not help to reveal the realities of the elephant's life in captivity, painting an inaccurate and often romanticised picture. **This reinforces the perception of elephants as well cared for pets, adding to the enjoyment for the visitor and further fuels support for this industry**

Training and handling of elephants

Visitors often see elephants as docile and harmless animals – contrary to that, elephants are recognised by elephant keepers and mahouts as one of the most dangerous animals to handle. The wild nature of captive elephants is evidenced by the efforts required by elephant keepers to handle and control elephants, sometimes risking their own lives.

A wild elephant would never let a human ride on its back, nor would it submit to performing unnatural behaviours in shows. The process of humans gaining control over the elephant starts early on in their life in captivity and is often referred to as 'breaking-in', 'crush' or 'Phajaan'. All wild caught and captive bred elephants undergo such cruel training in their early years if they are to be used for activities such as riding and shows, but also where visitors may closely interact with the animals. This process has been handed down from generation to generation throughout the history of captive elephants and remains an extremely cruel process. Depending on the region, slightly different variations of this breaking-in process might be employed, but essentially they are all based on the principle of establishing dominance over the elephant. Typically the calf is separated from its mother at an early age. In the case of an elephant from the wild anecdotal reports indicate that the protective families of the calf may be killed in the process [9]. It will then be restrained by chains or ropes and prevented from moving unless commanded to by the trainer or mahout. Often it does not have the space to sit down. Next in that process that can take from several days to over a week, the elephant is forced to accept a human riding on its neck and to react to given signals. In many cases, severe pain is inflicted to speed up the process, including stabbing with hooks or other tools to establish dominance over the elephant. Well-known footage of this procedure being inflicted on newly captured elephants, shows severe abuse and extreme stress and pain for the animal. Elephant managers in Thailand have disputed these reports, claiming that these methods are not common practice and outlawed. Even if these particularly disturbing incidents are hopefully the rare exception, any breaking-in process remains an intensely stressful event for wild-caught but also captive-born animals. Depending on the experience of the handlers involved and the personality of the individual elephant it can take anywhere from a few days to over a week before the elephant is 'broken'. Although this is a relatively short period of time compared to the lifespan of the elephant, the trauma leaves deep scars both physically and psychologically, as it would for any other highly developed animal. The process of 'breaking in' and the training methods employed have a significant negative impact on an elephant's physical and psychological welfare. Recent research has linked the process of 'breaking in' (as well as other traumatic events, such as the capture from the wild and separation from the mother) to the development of post-traumatic stress disorders (PTSD) in African and Asian elephants, similar to those that humans develop after comparable traumatic situations [18, 19]. Symptoms associated with such severe trauma include stereotypic behaviours, self-mutilation, severe anxiety, infanticide and inter and intra species violence. In a recent study published in 2016, 74% of examined captive Asian elephants showed symptoms of PTSD [20].

All wild caught and captive bred elephants undergo such cruel training in early years if they are to be used for activities such as riding and shows

In many cases, severe pain is inflicted to speed up the process, including stabbing with hooks or other tools to establish dominance over the elephant

Recent research has linked the process of 'breaking in' (as well as other traumatic events, such as the capture from the wild and separation from the mother) to the development of Post-traumatic Stress Disorders (PTSD)

After the initial 'breaking-in' training, confinement and restricted movement is ongoing throughout their life in captivity. Traditionally captive elephants are cared for by mahouts. Over centuries mahouts have gathered and passed on vast knowledge about elephant keeping. In many cases, the mahout-elephant relationship can be very close, due to the mutual dependency on each other and mahouts would take reasonably good care of their animals to protect their livelihood and often also out of genuine compassion for their elephant [27]. Many older and traditional mahouts can be very gentle and genuinely respect their elephant as a living being and not only as a commodity. However, in recent times, commercial exploitation has taken its toll on the mahout-elephant relationship.

A shift that started in the 1990s appears to have led to an increasing number of younger generations of elephant handlers that do not come from a traditional mahout background, but primarily are attracted for the employment. They are often uninformed about an elephant's needs and tend to employ cruelty as a measure of discipline more frequently than an experienced mahout would have in the past. Employing handlers with no connection to the mahout tradition also leads to a high turnover of mahouts, which contributes to the stress-level of the elephant due to repeatedly adjusting to a new person's character.



Adding to the difficulties of the mahout-elephant relationship are the often unacceptable living conditions and low wages for the mahouts in many of the elephant camps.

To reduce the risks of injury to humans and property, the elephants need to be kept under extreme restraint when not being used. This has a significant negative impact on the animal's welfare. As introduced, elephants are highly social with complex hierarchies within herds. However, in captivity, elephants are reduced to being submissive to their human handlers. In the case of the typical elephant camp, the elephant keepers constantly express their dominance over the elephant - sometimes by inflicting direct pain, such as by using bull hooks inappropriately and by restraining the animals constantly. The elephant has no choice but to submit to the mahout's commands at all times, relying completely on the mahout's ability to recognise some of the essential needs of the elephant and signs of distress.

Mahouts, particularly those with little experience, often reject the idea of giving their elephant more freedom due to fear of them losing control over their elephant once it experiences the freedom of choice and independency, and potentially putting themselves in danger. With some exceptions, mahouts generally don't practice these procedures out of ill-will or disrespect to the elephant, but the elephant camp environment leaves little other choice to ensure their own safety and that of visitors and property.

Alternative training methods

In the last 10 years some efforts by various groups have been made to replace the cruel training methods with alternatives, such as positive-reinforcement training or a combination of limited aversive training with positive-reinforcement [28]. Similar training methods are common and successfully used in zoos and wildlife facilities to train animals to cooperate in basic procedures, such as medical examinations. In almost all cases the trainer and animal handler will work with the animal through a protective wall or fence, ensuring animal and human safety, should the animal decide not to collaborate.

To reduce the risks of injury to humans and property, the elephants need to be kept under extreme restraint when not being used.

Image: Extremely short chains to restrain an elephant at a tourism venue in Thailand

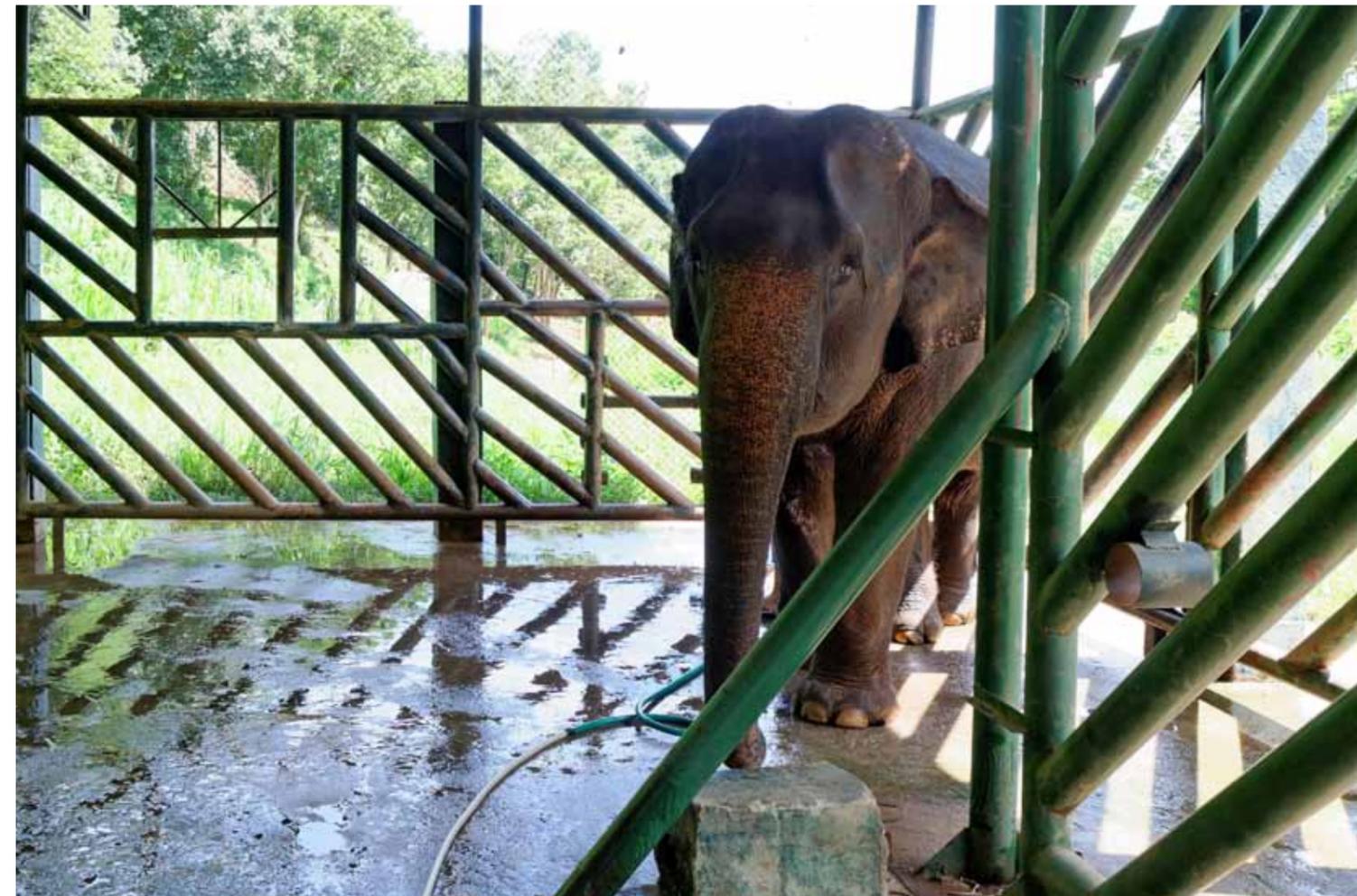
While in principle introducing these methods to elephants must be seen as a positive step, it all depends on what they are being applied for. Positive reinforcement training has been developed in protected contact environments - captive environments where the animals and the keepers are always protected by a safety barrier from each other. The training aims to provide improvements to the daily management and care of wild animals in zoos and sanctuaries, for example when moving animals from one enclosure to the other or for medical procedures. In these cases positive reinforcement training is often an essential and very beneficial tool when managing captive elephants. Such training always relies on the voluntary cooperation of the elephant and it can help to ensure the best possible welfare for the elephant while keeping staff safe [29-31]. However, applying these methods to replace the conventional 'breaking-in' training for the purpose of using elephants for activities such as close visitor contact, elephant rides and shows is highly questionable.

Serious safety concerns exist when purely depending on the cooperative will of an elephant during stressful, demanding situations, such as rides and shows, or any situation with these wild animals in close and unprotected vicinity of tourists and handlers. Using

elephants that are trained purely cooperatively may leave their handlers powerless in emergency situations when elephants get out of control or when fatigue, stress and deprivation of freedom lead to unpredictable behaviour. This can lead to serious injuries to people and damage to property. Additionally, such training will also require a high level of skill not only from trainers but also the mahouts. This poses challenges in today's situation with a high-turnover of unskilled mahouts, especially in Thailand.

Additional concerns exist that even if an elephant owner agrees to use a softer training method, a conventional cruel training may be added once the softer training is completed. There is a risk that the industry will falsely claim to use humane methods when training and using elephants for shows, rides, or other direct contact with visitors, while still practicing the traditional, cruel methods. Positive reinforcement training can enhance a captive elephant's life to some degree at such venues that allow for direct contact, but to ensure handlers, visitors and property are protected cruel methods will always be needed in order to control elephants in stressful situations. However, **positive reinforcement training is essential in sanctuaries and facilities that can manage elephants without direct contact.**

Image: Elephant in a shelter that is used for positive reinforcement training.



Captive elephants and the risks for people

Regardless of the 'breaking in' and ongoing restraint and training of the elephants, anecdotal sources state that for every male elephant in captivity one human fatality will occur. It is unclear how many people each year are actually killed or severely injured through captive elephants but it is certainly higher than with any other captive wild animal used by humans. Examples of tourists being killed or severely injured by elephants include: a Scottish tourist killed by an elephant in front of his daughter in 2016; a Swiss woman who was trampled to death in 2011 (with four other tourists injured); a three-year-old child attacked by an elephant in a market (2009); a woman suffering spinal injuries from a street-begging elephant (in 2008), and in 2000 a UK resident girl was killed by a male elephant during an elephant show [32-36].

Between 2010 and 2016, 17 fatalities and 21 serious injuries caused by captive elephants in Thailand alone have been reported by media. Victims were international tourists, local bystanders, or mahouts. Mahouts clearly bear the highest risk and thus they are also the most frequent victims. The number of unreported incidents is high as camp managers and elephant owners are keen to keep such incidents out of the press and often succeed if no foreign tourists are involved.

17 fatalities and 21 serious injuries caused by captive elephants in Thailand alone have been reported by media.

Predominantly male elephants are involved in these incidences. During their 'musth' period, a naturally and periodically occurring phase of increased testosterone production, an elephant bull can become unpredictable and often extremely aggressive. Even the most progressive elephant institutions struggle with the management of those animals and end up having to chain them in isolation for the duration of their 'musth' period - which can be anything from a week in younger animals to up to two months in older elephants [37]. Elephants that turn aggressive and uncontrollable or start expressing severe stereotypic behaviour due to their captive environment are usually removed from the camps by either trading them off to other places or isolating them spatially. The Thai Elephant Conservation Center has established specialised teams that are experienced in dealing with critically aggressive animals. Whenever an elephant, usually a musth-bull, escapes its chains and injures or kills people, a team will rush to the site to control the situation, sedate the animal by remote injection and if required relocate the dangerous animal. This natural, musth-related behaviour of elephant bulls further reinforces their unsuitability for captive environments, especially when in direct contact with people.

In addition to the physical risk of injury by captive elephants, **public health concerns exist around the potential for people in close contact with elephants to contract tuberculosis.** The presence of tuberculosis in elephants

presents a less obvious but serious risk to the health of both the animals and their handlers. Tuberculosis in elephants has been well recognised for centuries [38]. It is a chronic disease that has been documented in captive Asian elephants worldwide including Thailand [39], Nepal [40] and in zoos in the US [41]. In Nepal tuberculosis in captive elephants was first identified in 2002. During 2002-2009 seven captive elephants died from the disease, and in 2011 25% (11 out of 44) tested elephants were positive for tuberculosis [40].

Tuberculosis has long been recognised as an emerging zoonotic disease, with two-way transmission of the disease between humans and elephants evidenced in 1998 [42]. Thus close contact between tuberculosis carrying elephants and humans within confined workplaces poses a serious infection risk. Molecular studies on four elephants with M. tuberculosis in Thailand indicated that the disease was most probably transmitted from humans [39]. **Active and latent tuberculosis has also been reported in 20% of captive elephants in Malaysia and 24% of their mahouts** with suggestion of two-way transmission of the disease [43]. It has been suggested that conditions for captive elephants in the tourism industry, including a lack of nutrition and overwork leading to a compromised immune system, are a contributing factor to the increase in cases of tuberculosis [44]. This information does raise serious questions about the public health risk of elephant attractions that allow for close contact between tourists and elephants. **Activities such as trunk kisses or trunk showers of tourists may facilitate a disease transmission.** It will be crucial for future studies to assess this risk and its impact on the health of tourists, but also on the elephants due to the higher exposure of visitors that may already carry tuberculosis.

The welfare of captive elephants

Throughout the elephants' time in captivity animal management procedures and husbandry conditions continue to have a detrimental effect on their welfare. Captive management has long been focused on the interests of the owner or venue not on the psychological or physiological needs of elephants [12]. This leaves them vulnerable to violence, abuse and deprivation, as illustrated by the training and management methods already outlined. Ensuring high standards of welfare for elephants in captivity has many challenges due to their physical size, complex social life, high level of intelligence, large home ranges, diverse diet, large behavioural repertoire, and natural habitat of tropical and subtropical climates and forests, making meeting their social and environmental needs in captivity difficult [45]. Captive conditions for elephants in entertainment vary greatly in the characteristics of the enclosures/holding facilities, nature and extent of restraint (ie amount of movement permitted and number of hours chained), diversity of diet, foraging opportunities, access to water for bathing and drinking, and social groupings.

There is wide-spread evidence that paints a clear picture of extremely poor welfare of elephants in captivity.

Although an individual animal's welfare can be challenging to measure, data on longevity, health, behaviour,

reproductive success, foraging opportunities, freedom of movement and freedom to interact with other individuals are indicators of physical and psychological welfare. The quality of social groupings of these highly social animals also has a tremendous impact on their welfare—elephants housed together are much more likely to be healthy [44]. Thus, involvement in entertainment introduces severe welfare concerns including the breaking of social bonds, required training procedures, severe confinement through chains or small pens, close contact with tourists, physical burden of taking tourists for rides, and performing harmful activities in shows. For example a 2007 study of 194 elephants from 18 tourist venues in Thailand found that 64% of elephants showed active lesions on their backs, suggesting that the then current practices of elephant riding led to injuries [46]. Care must be taken not to reduce the welfare concerns on **elephant rides to a single factor, such as the saddles, when the elephants' welfare is in principle compromised by the wider husbandry conditions and management practices** [27]. Several studies have highlighted the problematic overall situation for elephants in the entertainment industry.

In 2010, World Animal Protection's study of wildlife in entertainment in Thailand [4] collected data on a number of categories including: mobility/restraining methods; environmental characteristics (shelter, hygiene); social groupings; diet; animal management; intensity of involvement in entertainment activities; unnatural and stereotypic behaviours; and health of the animals. Using this data, venues were given a welfare rating out of 10, where 10 represented the best welfare situation. Of 1688 individual elephants in 106 venues, 50% of venues (representing 974 elephants) scored 4 or lower (representing severely inadequate welfare standards). Evidence included: being restrained on short chains throughout the day and through the night (except when used for rides or performing in a show); inadequate shelters and concrete floors or holding areas; permanent saddling; poor

diet; and very limited social opportunities. The study found 20 venues offered circus-like elephant shows where elephants were forced to display such unnatural behaviours as football shooting, head stands, tricycle riding and tight-rope walking. Forty-three venues in that study received a medium rating of 5-7, still 'inadequate' but offering the elephants some freedom of movement, some limited social interaction, and greater feeding opportunities during rest. Only 75 elephants were found in commendable (i.e. semi-wild) conditions. Not surprisingly it was found that the frequency of stereotypical behaviours decreased with an increase in the welfare conditions at the assessed venues [5].

Other studies have also revealed poor welfare conditions for captive elephants. **In a study of wildlife tourist attractions globally, elephant parks and treks scored poorly on both the conservation and welfare scores.**

Animal welfare was estimated for various wildlife attractions according to the fulfilment of the widely recognised Five Freedoms (developed by the Farm Animal Welfare Council (FAWC 1979), with elephant venues fulfilling anywhere from 1-4 of these [1]. One of the most comprehensive studies on captive elephant welfare was conducted in India between 2005 and 2014 by Asian Nature Conservation Foundation and Compassion Unlimited Plus Action [12]. The study involved 1,545 elephants from different management regimes (i.e. temples, privately owned, zoos, forest camps) across 12 states. Chaining was common in all states, with the percentage of animals chained at 50-90%, and the duration 9-18 hours per day. Stereotypic behaviour was observed in 40% of privately owned elephants (which are often the ones used for rides and shows). Of significant concern is the finding that all of the states had elephants with health problems, ranging from 17-124 incidents per state. Issues for privately owned animals included: wounds; eye, foot and leg problems; abscesses; anaemia, gastro-intestinal issues, urinary and respiratory problems; and worms.



Image: Husbandry conditions for a bull elephant at a tourism venue in India.

Another report, compiled by Animal Nepal [44], details a 2014 survey into the welfare of 42 privately owned captive elephants in Sauraha, Chitwan National Park. The survey found that conditions were poor, with 82% of captive environments rated as 'unsuitable conditions', and no elephant environments scoring 'excellent conditions'. Of further concern: four elephants were blind, ten had wounds, and some were forced to work too young, as well as others too old, with some riding elephants over 60 years old. In addition, elephant owners displayed a lack of knowledge of basic elephant welfare standards during interviews.

All of these studies provided various recommendations to the governments, the elephant venues and the tourism industry, including:

- implementing better welfare and management standards
- better elephant registration systems and enforcement of these
- preventing the laundering of wild elephants into the captive elephant population
- encouraging humane tourism activities that avoid using elephants for rides, shows or direct contact
- enabling better veterinary care for elephants
- replacing negative control with positive reinforcement
- increasing opportunities for social interactions for elephants
- improving conditions for and training of mahouts
- facilitating a gradual phase-out of the use of elephants for tourism while improving conditions for the existing captive elephants.

All of this raises the question whether elephants can be kept adequately in captivity at all. Within the zoo community it is becoming increasingly recognised that elephants' needs can only be met by a few high profile institutions that have the funding and capacity to create adequate large-scale enclosures. Most major zoo associations recommend phasing out smaller elephant venues in favour of creating fewer but larger captive herds, allowing for more freedom and social interaction. Most animal experts agree that elephants cannot and should not be kept in captivity without very good reason.

As for most captive elephants a release back to the wild is not feasible, the welfare conditions of existing captive elephants must therefore be improved in conjunction with the phase-out of the cruel elephant entertainment practice.

Conservation value and captive breeding

Claims are often made that the population of captive elephants serves a conservation purpose by maintaining a captive population for when elephants in the wild become extinct. This argument is being made especially in countries where the captive population is supplemented heavily through captive breeding, as is seemingly the case in Thailand - the country that plays by far the largest role in captive elephant tourism, as this study found (see the results in 'Findings', page 30). Yet the commercialised character of the elephant tourism industry in Thailand raises concerns as

to the validity of this conservation claim. To investigate this claim it will be useful to explore discussions on the conservation value of captive breeding of wild animal species for commercial purposes - also referred to as 'wildlife farming', where similar claims of conservation benefits are often made. The captive elephant situation in Thailand today indeed seems to have characteristics that resemble examples of unsustainable practices of wildlife farming of endangered animals, such as tigers or some exotic pet species: a captive, non-domesticated sub-population of an endangered animal is bred in captivity to supply the demand for a high-value product. However, **the existence of this legal, high-value captive population risks opening up a market for wild animals by incentivising the laundering of wild animals into the legal captive population.**

There are only extremely rare examples of using an endangered animal in a highly commercialised industry that have led to a better protection or conservation of the species in the wild. Instead the odds are strongly in favour of it leading to adding to its decline in the wild. For now disregarding the ethical concerns of wildlife farming and the negative welfare implications, it has been argued that in order to serve a conservation purpose an industry farming wild animals needs to meet the following set of criteria [47,48]:

1. Legal products will form an adequate substitute for the illegal product.
2. Demand is met and does not increase.
3. Legal products will be more cost-efficient.
4. No re-stocking from the wild.
5. Laundering is absent.

If any of these criteria are not met, the industry cannot be considered as having a conservation value as the risks of sustaining demand for wild poaching or for perpetuating demand pose a threat to the animals in the wild. While it may be controversial to define the captive elephant tourism situation in Thailand as wildlife farming, it seems to be appropriate to apply the above criteria to investigate the conservation value of the industry.

1. In theory captive elephants may indeed form a substitute for wild-caught elephants, due to being earlier accustomed to people and thus able to be tamed and trained earlier with less effort. Disregarding persisting animal welfare concerns for now, criteria 1 is met.
2. Tourism in Thailand has been continuously increasing. In just five years, from 2010 to 2015, the tourism numbers have roughly doubled. A 2014 World Animal Protection survey of 1,700 tourists to Thailand concluded that 36% of interviewed tourists had already been on, or planned to do an elephant ride. With growing tourism numbers, the demand for rides is increasing as well, perpetuated by promoting rides as an essential attraction when visiting Thailand. Criteria 2 is not met.



Image: Orphaned wild elephant calves to be rehabilitated for release back into the wild in Sri Lanka

3. Raising an elephant in captivity and arranging the breeding of elephants including their transport is costly and would need to be compared to the costs of capturing a wild elephant and transporting it across the border. Without accurate figures on these aspects it is not clear whether criteria 3 is being met or not.
4. Wild elephants have been used to re-stock the captive population, although in recent years it is unclear to what extent. Criteria 4 is most likely not met, pending further data.
5. Laundering of elephants has been documented and evidenced [9]. While very commendable efforts are being made to make this more difficult in the future through improved registration systems and DNA sampling, there is unfortunately no bullet-proof system due to the ultimate dependency on people to implement those systems. Criteria 5 is not met.

This suggests that up to four criteria are not met, while only criteria 1 is being met. Accordingly, **the profit-driven elephant tourism industry appears to contribute to the decline of wild populations instead of protecting them.** A close evaluation of the conservation claims of the captive elephant tourism industry in Thailand is urgently needed.

To argue that the existing captive elephant population within the commercial elephant venues will serve as a species reservoir once wild elephants go extinct is a questionable argument. The above points highlight that there are severe risks that the existence of a commercial elephant tourism industry may actually be contributing to a decline in wild elephants, while severe welfare concerns about keeping elephants in captivity are continuously being raised.

Only a minority of projects linked with captive elephants in Thailand is actually directly contributing to wild elephant conservation, eg by reintroducing elephants back into the wild.

It is important to emphasise that there are many other conservation methods that do not involve commercial captive breeding that may be more effective in addressing the root causes of the threat to wild elephants, rather than just the symptoms.

The above concerns need to be taken into account when evaluating captive breeding efforts of elephants within a commercialised industry that does not adhere to scientific management of their breeding stock, nor follows a purpose of replenishing wild elephants through reintroduction efforts. As the next chapter outlines, the captive elephant population in Thailand has consistently increased since the logging ban in 1989 (page 40), which has also led to increasing competition for resources to care for these elephants and subsequently greater animal welfare concerns.

World Animal Protection recommends that venues which follow highest welfare standards in their management of elephants should prevent breeding in order to preserve resources for already existing elephants in need - unless the venues participate in validated conservation programmes that lead to the reintroduction of captive offspring into the wild. Progressive venues that find it hard to implement such policies may consider a compromise by ensuring that all elephant offspring will stay at the venue for the duration of their lives, benefitting from the vicinity of the family group. However, such venues should then also implement measures that allow the keeping of bull elephant offspring in an environment that will not rely on harmful, aversive training and ensures safety of staff and visitors.

What makes an Elephant-friendly venue?

It is important for all stakeholders to share a common understanding of what good practices in elephant management are. World Animal Protection has created guidelines [91] that outline criteria for elephant-friendly venues in order to improve the welfare for existing captive elephants and contribute towards a phase-out of elephant exploitation. As this study has found, a handful of venues across Asia strive to provide excellent welfare for their elephants and meet the guidelines at least partially. One key aspect of these venues is that they have moved away from too much interaction between visitors and elephants. **The riding or washing experiences are replaced by an observational experience of elephants being elephants.** By being able to observe elephants being just elephants visitors are also more likely to understand that these complex and magnificent animals are not made for captivity. These venues may offer such observation of captive elephants either in enclosures with semi-natural habitats, or by following a group of captive elephants on foot and from

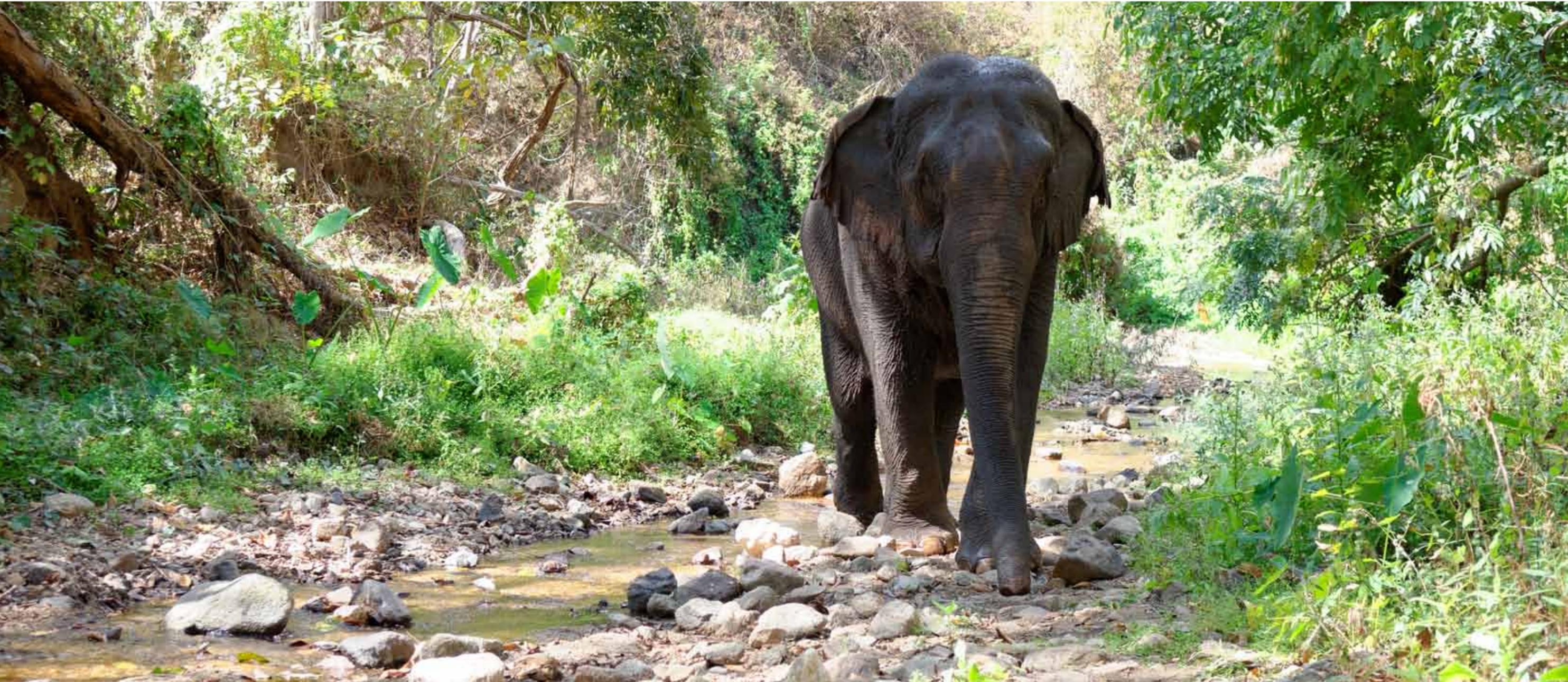
a safe distance through natural habitat. Of crucial importance is that the elephants are not forced to participate in any activity and are given the chance to express natural behaviour. However, **in most cases well-trained mahouts are required to supervise the elephants at all times to ensure the safety of the visitors and the elephants.** In recent years many of the most progressive venues have also started constructing pens or fenced enclosures where the elephants could be kept safely during the night, while still allowing them to move and express natural behaviours. Some remote venues that venture into actual forest do not have the convenience of enclosures but instead make use of the natural habitat by choosing resting spots in the evening that allow the elephants to forage throughout the night, even though this does at times require the elephants to be chained on long chains. Clearly this is not ideal, but it is a compromise that these venues chose to make in order to provide their elephants with an environment that is as close as possible to their natural habitat.

World Animal Protection's guidelines do not only recommend no direct interaction between visitors and elephants, but also include several points that ensure the venues are not sustaining the demand for more captive elephants. These criteria are complex and often very challenging to meet, especially if the country's legislation sees captive elephants as livestock and if high profit margins can be generated by elephants in conventional entertainment venues. Two of these important sustainability criteria are that elephants are not bred in captivity and that they are acquired in a way that does not lead to replacing this elephant with a new elephant by the former owners. Commonly, venues will either buy or rent their elephants – both approaches have their advantages and disadvantages. Renting elephants ensures that no large sum of money is exchanged that could be used by the elephant owner to buy a new elephant, but on the downside the elephant owners can and will remove their elephant from the venue if they feel there are benefits of using the elephant

elsewhere. Furthermore, the venue has significantly less control about how to manage the elephant and, for example, prevent it from breeding.

On the other hand, buying elephants ensures that the venue has permanent ownership and allows it to manage the elephant along the venue's policies, for instance no chaining at night and prevention of breeding. However, a severe risk exists in that the money that is exchanged for the elephant will often allow the former owner to acquire a new elephant and thus the circle continues. Breaking this circle is complicated and would require assurances from elephant owners to not invest in new elephants, which is challenging given the high and increasing value of elephants. To encourage a transition away from private elephant ownership, ways to gradually decrease the value of elephants need to be explored. Government policies regarding ownership of elephants also need much tighter regulation.

Image: Elephant free-ranging under mahout supervision at a venue in North Thailand.

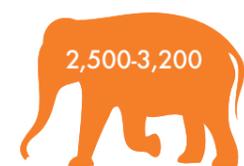


An overview of the history and status of elephants in countries included in this study

Thailand

Elephant history in Thailand dates back almost 3,000 years. Elephants have been used as war and working animals, and today the elephant is one of Thailand's national symbols. Originally, wild elephants were found throughout the country, fuelling a captive elephant population of an estimated 50,000 elephants at the beginning of the 20th century [26]. Through destruction and fragmentation of natural habitat, and poaching and human-elephant conflict situations, the wild elephant population has decreased to about 2,500 - 3,200 elephants today [10].

Wild elephants



Captive elephants



Several projects in Thailand try to address threats to the wild population, eg through mitigating human-wildlife conflict [49,50].

Until 1989, captive elephants in Thailand were mostly used in the logging industry throughout the country. However, a state-wide ban on commercial forestry left many elephant owners without income and forced them into new employment fields. Trekking camps, circus shows and street begging became the new primary employment of elephants. The tourism industry was considered a good alternative that would allow to better care for those former logging elephants, as elephant rides were considered easier than the incredibly hard work in logging camps. **Today, almost 30 years after the logging ban, most former logging elephants are old or have died and the profit through tourism has become the primary motivator for maintaining the current and increasing captive population of elephants.**

Legal protection for live elephants in Thailand is complicated. Elephants are covered by wildlife protection legislation as well as domestic livestock legislation. Elephants in the wild are well protected by the wildlife protection law, while elephants that have been taken from the wild and kept

in captivity as registered elephants or bred in captivity are governed by a combination of 18 different laws implemented by several ministries.

Until recently captive elephants were required to be registered with the ministry of interior by eight years of age. This regulation allowed for reported incidences of wild elephants being poached and illegally traded across the Myanmar-Thailand border to supply the tourism industry, sparking serious conservation concerns [9]. In addition, not all private owners are transparent about the true numbers of elephants that they have in their facilities. In 2016 this registration system has been improved, requiring elephants to be registered, microchipped and DNA-sampled at an earlier age, likely within the first year - pending final decision by the government. The most comprehensive database keeping track of the captive elephants is maintained by the Thai Elephant Conservation Center.

Concerns have been frequently expressed about the accuracy of the government databases. If these concerns are valid it may lead to inadequate continuous monitoring of the captive elephant population, enabling the further laundering of wild elephants into the system. Monitoring of the porous borders for poached wild elephants is a serious challenge for the enforcement authorities and the existence of a dual law system for captive and for wild elephants allows for opportunities to launder and exploit elephants.

Irrespective of these concerns, the available data shows a steady increase in numbers of captive elephants in Thailand over the past 20 years. In the second half of the 20th century, the population of captive elephants in Thailand decreased steadily to 3,705 in 1989 and further to 2,938 in 1991, two years after the logging ban [51,52]. In 2002 it was estimated that about 2,500 elephants were in captivity in Thailand, 969 of them used in tourism [53]. However, by 2007 the captive elephant population seemed to increase again to about 3,456 elephants [54], then further to 4,287 in 2012, with roughly 50% registered in elephant camps [55]. The elephant database by the National Institute of Elephant Research and Health Service listed 4,435 elephant records in 2014 - a 50% increase on 1991 and more than double the estimated number of remaining logging-ban elephants [56].

Number of elephants

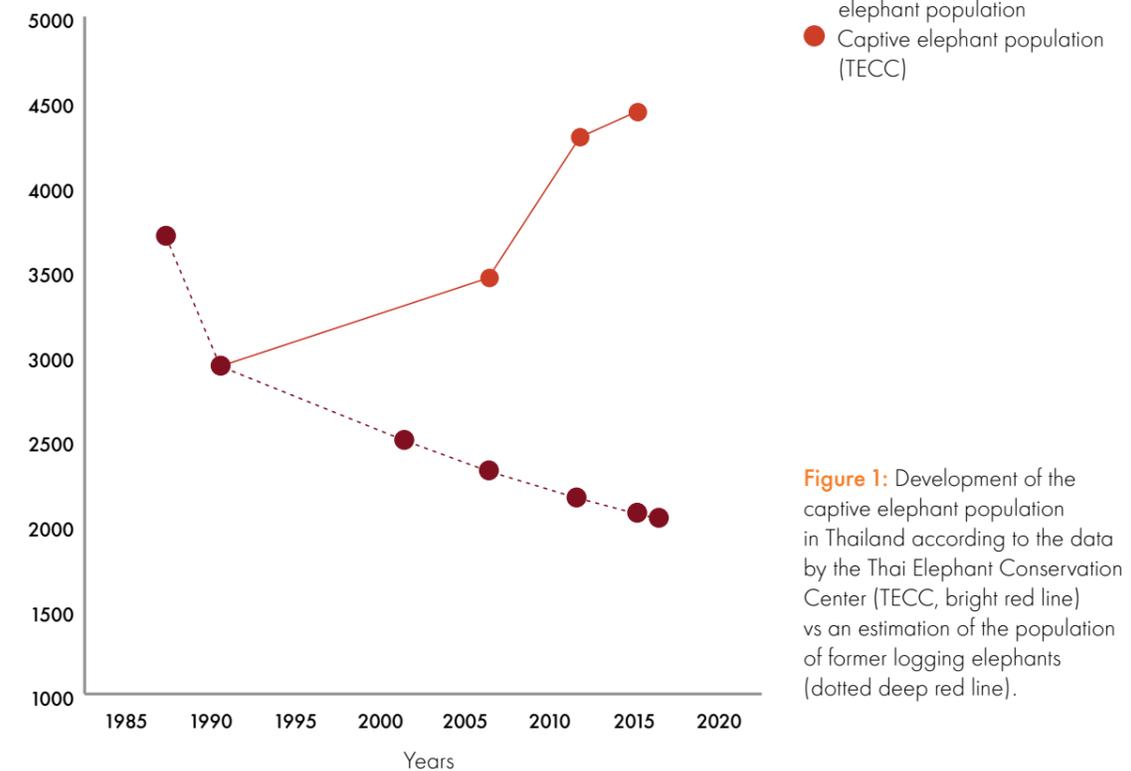


Figure 1: Development of the captive elephant population in Thailand according to the data by the Thai Elephant Conservation Center (TECC, bright red line) vs an estimation of the population of former logging elephants (dotted deep red line).

While most elephant industry stakeholders in Thailand are celebrating the increase as a success, the high number of captive elephants raises concerns regarding the implications for animal welfare. Improving the generally poor conditions for captive elephants is made more difficult by a steadily growing captive population, due to the lack of space and resources, and the profit-oriented management of those elephants. The increasing population also demonstrates that today it is not anymore about providing a livelihood for the gradually decreasing number of former logging elephants and their owners (Figure 1), but primarily about meeting the strong demand for elephant entertainment by a booming tourism industry.

Thailand's tourism industry has been increasing at a rapid pace over the past decade. Since the time of our first study in 2010 on wildlife entertainment in Thailand the tourism numbers have doubled from 15.9 million to 32.6 million in 2016 (Figure 2) [57]. **In 2014 and 2016 World Animal Protection commissioned surveys amongst tourists of the top ten nationalities travelling to Thailand to gauge the demand for elephant rides.** For each survey between 1,700 and 2,200 tourists were interviewed in tourism hotspots to better understand their attitudes and perceptions relating to wildlife tourism activities. In 2014 36% of tourists stated that they had been on or planned to do an elephant ride, which would translate to 8.9 million tourists having potentially sought out elephant rides in 2014. In 2016 World Animal Protection commissioned the same survey again and found 40% of tourists of the top 10 nationalities visiting Thailand stated that they had been on or were planning to do an elephant ride, suggesting a demand of up to 12.8 million elephant rides.

In October 2016 TripAdvisor, the largest travel site in the world, announced it would end all ticket sales of tourist experiences where travellers come into direct contact with captive wild animals, including elephant riding. The decision came after over half a million people worldwide joined World Animal Protection in demanding TripAdvisor to stop profiting from the world's cruellest wildlife attractions. Proof of how people can convince companies to take meaningful decisions that impact the lives of millions of animals.

These figures show a strong increase in demand over just two years. Yet while these are worrying figures a shift is beginning in the tourism industry. A growing number of global travel companies are changing their excursion offers away from elephant riding and show facilities. The impact of these decisions may not be reflected in the survey figures which more likely represent attitudes of individually travelling visitors. Through World Animal Protection's engagement over 160 travel companies have committed not sell or promote venues that over elephant rides and shows and instead offer more humane alternatives.[58].

Thailand's captive elephants also play an indirect role in the international illegal ivory trade. While encouragingly, Thailand introduced regulations for their ivory market by requesting traders register their stocks and prohibiting the sale of African ivory, there are still concerns around the domestic market providing opportunities for ivory laundering. Only very recently it has become possible to distinguish African from Asian elephant ivory through DNA identification, but ivory from captive Asian elephants is indistinguishable from illegally poached ivory of wild Asian elephants, leading to grave concerns of laundering wild ivory through the Thai domestic ivory market [59]. Thailand has been identified in the past as probably the biggest market for ivory in South East Asia, including illegally imported ivory [60]. This legal loophole of the domestic ivory market in Thailand is causing serious international concern. The Thai government initiated a stronger

regulation of the domestic ivory market, requiring domestic ivory traders to register their stock and business with the government [61,62]. Not only does the legal domestic ivory market offer opportunities to launder illegal ivory, but it also leads to further increasing the value of captive elephants. In 2011, three elephants that were bought by a temple and died were butchered to sell the ivory, meat and skulls, causing great concern for the economic exploitation of elephants [63].

Between 1998 and 2013 the price of a captive elephant in Thailand increased three-fold to over US\$30,000[9]. **Such a price-tag on an endangered animal as a legal commodity clearly incentivises poaching of wild animals.** Elephants are at risk of being laundered into the industry, or bred in captivity for profit purposes. It is a situation that is clearly not sustainable from a welfare nor from a conservation perspective.

On a positive note, Thailand has seen various improved government policies, such as the previously mentioned improved regulation on ivory trade and the stricter registration procedure for new-born elephants. Additionally, Thailand drafted an animal welfare act, yet its application to captive elephants remains to be clarified. Thailand is also home to a number of progressive elephant venues that strive to provide an alternative to the conventional elephant tourism entertainment. For example, Save Elephant Foundation has created an initiative to encourage replication of such projects by reaching out to elephant owners directly to change their operating model .



Image: Female elephants at Pinnawala, Sri Lanka during their regular river access.

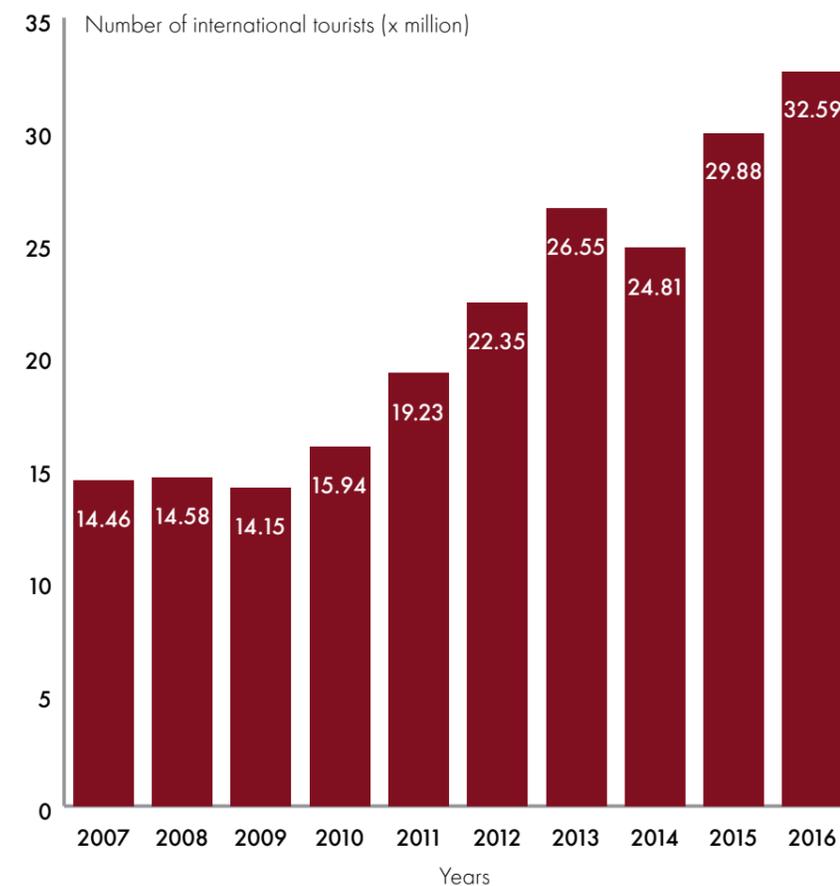


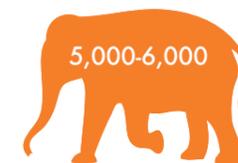
Figure 2: Numbers of international tourists (in millions) arriving in Thailand as per figures of the Department of Tourism, Thailand. Tourism numbers have doubled from 2010 to 2016.

Sri Lanka

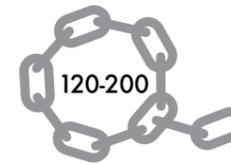
Sri Lanka is recognised as the country with the highest density of wild Asian elephants worldwide, housing 10% of the wild population in just 2% of the habitat [64]. In 2011 the last census estimated the population of wild elephants at 5,879. Wild elephants are protected under the Fauna and Flora Protection Ordinance, prohibiting killing or poaching of animals with fines of up to US\$4,500 and/or 2-5 years' imprisonment. The biggest threats to wild elephants in Sri Lanka are habitat loss and fragmentation. The continuous encroachment of people into the elephants' habitat leads to about 200 killings of elephants and 71 human fatalities by elephants per year [65].

In 2002 about 214 elephants were in captivity in Sri Lanka [53]. However since then this captive elephant population has been frequently repopulated with illegal wild captures of elephants. **Laundering the wild-caught calves into the legal population is profitable and usually well-connected people are involved in these attempts.** Amongst others, the Centre for Eco-Cultural Studies is focusing on filing court cases in such incidents and providing evidence to ensure persecution [67]. Sri Lanka also uses its elephants as diplomatic gifts to other governments, which given their often wild origin and likely destination in zoos raises ethical questions around shipping wild elephants across the world to be kept in captivity at zoos that are unlikely to meet their needs. Increasingly this practice is met with outcry from within and outside Sri Lanka arguing that separating elephants from their families and sending them to lower welfare conditions purely for commercial or diplomatic exploitation is not acceptable [68]. The use of captive elephants in temple parades and the conditions the elephants face at those temples has also been a major animal welfare concern.

Wild elephants



Captive elephants



Sri Lanka's elephant heritage dates back several thousand years to pre-BC dates where elephants were caught in the wild for the Sinhala kings. During colonial times Dutch or British rulers owned most captive elephants. Later elephant capturers were sometimes allowed to keep one or two elephants, a tradition which has led to continued private ownership of elephants even today in addition to royal or government ownership [66]. Today captive elephants are kept by private owners, temples, zoos and government facilities, such as in Pinnawala and the Elephant Transit Home. Wild elephant calves, orphaned during human-elephant conflict incidents are brought to the Elephant Transit Home for later reintroduction back to the wild or to Pinnawala, which functions as a major tourist destination in the vicinity of Colombo.

Public pressure has led to Sri Lanka at least better regulating the use of young elephants. In 2016 the wildlife department issued new regulations that banned the use of elephants below 10 years for work, and below five years for parades [69]. While only a small step, it is a step in the right direction.

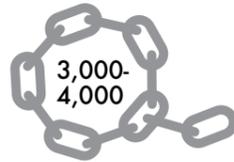
India

India is widely considered the birthplace of taming elephants for use by humans, which began thousands of years ago. The captive population of elephants nowadays seems to remain relatively stable, with around 3,000 estimated in 1985, 3,400-3,600 elephants in 2002 and in 2015 the number was still estimated to be between 3,000 and 4,000 elephants [12,64,70]. In comparison, India is home to up to about 30,711 wild elephants as per the last government census [71]. This is by far the largest portion of the Asiatic elephant population, with up to 60% of the global wild population [72].

Wild elephants



Captive elephants



In 1992 India's government initiated 'Project Elephant' to protect wild elephants, establish elephant reserves, mitigate human-elephant conflicts and ensure better welfare for captive elephants through management guidelines and workshops. Captive elephants today require to be microchipped and the owners need to provide a valid ownership certificate, which is issued for five years at a time. In case of violations against elephant regulations, these certificates may not be renewed after those five years. However, cases of unregistered elephants regularly occur, posing concerns as to laundering wild elephants into the captive elephant population [73-75].

Captive elephants are kept by the state governments in forest camps, zoos or some temples; by circuses; or by private owners using them for tourism, begging or other purposes. The conditions the elephants face in captivity are concerning. As discussed, the study by ANCF and CUPA [12] documented severe short-comings in welfare standards for most captive elephants in the included states with conditions at governmental forest camps usually being better than in private hands or temples.

In part due to those studies, in an unprecedented decision, India declared in 2009 that captive elephants in zoos and circuses must be relocated to government camps [76]. It was understood that the elephants' needs could not be met in the captive environments which they were currently held in and that they would be better cared for in government sanctuaries. At the same time India declared that breeding efforts at those facilities have no valid conservation output, as even in the best case, they would only sustain the captive population with no chances for reintroduction to the wild.

Furthermore, the Indian government acknowledged the welfare concerns of captive elephants and the need for better protection of wild elephants, by supporting the formation of an Elephant Task Force. The task force's report provided a range of suggestions on how to improve the legal situation of elephant ownership, the care of elephants and the skills of mahouts [77].

Following several campaigns of animal rights advocates, in 2016 the Animal Welfare Board of India issued formal advice to the ministry of environment, forest and climate change to ban the training, exhibition and use of elephants for performances in India. **This successfully led to India's Central Zoo Authority revoking the rights of circuses to keep wild animals, thus effectively ending the use of elephants for performances in circuses [78].**

One of the first sanctuaries for captive elephants opened up in 2010 in Uttar Pradesh, India, today keeping around 20 elephants in improved conditions and without offering any rides or shows [79].

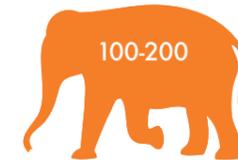
Nonetheless, the situation for captive elephants remains concerning, including their use for tourist rides and illegal trade. TRAFFIC regularly assessed the Sonapur cattle fair in Bihar for any occurrence of illegal trade and in 2013 and 2014 both found between 37 and 39 elephants for sale - a clear breach of existing laws that restricts the sale or transfer of elephants from one person to the other [80,81].

Image: Bull elephant at a forest camp in India.

Nepal

As with other elephant range states, elephants are an important part of Nepal's heritage and Nepal has a long history of captive elephants. In 2008, 109-142 resident and migratory wild elephants existed in Nepal, with their population fragmented and widespread. Increasing fragmentation of remaining forests, encroachment by humans, and increasing migration of elephants from India are causing further challenges in managing and preventing frequent human-elephant conflict situations [15].

Wild elephants



Captive elephants



In the past, captive elephants were used for hunting expeditions and cultural functions [44]. The capture and training of wild elephants was a common practice with 31 elephant camps throughout the lowlands of Nepal from 1898 until 1970 [15]. However, the number of captive elephants decreased from an estimated 325 in 1903 to 50 in 1973. In 1978 the management of 'domesticated' elephants was given to the Department of National Parks and Wildlife Conservation (DNPWC). Increasing demand for elephants for patrolling and park management duties and the difficulty of legally procuring elephants from India, resulted in an elephant breeding centre being established in Chitwan National Park (CNP) in 1986. Numbers increased again

with about 153 captive elephants in Nepal in 2003 [82]. This increase was due to a government breeding programme and increased acquisition of elephants by private tourism operators, with six resorts based inside CNP owning 70 'safari elephants' and 25 elephants maintained outside the park for elephant rides [44]. In 2011, 208 captive elephants (94 of which are government owned) [15], and in 2014, 102 privately owned safari elephants, were reported [44]. Today, government owned elephants are used for the management of national parks and research, and privately owned elephants for safari tourism. There continues to be evidence for concern over the welfare of captive elephants in Nepal. The legal protection of Nepal's captive elephants is weak with no animal welfare act or welfare guidelines for elephants [44].

Despite these concerns positive developments have been seen in Nepal in recent years. Elephant Aid International has been successfully collaborating with the government to provide electric fence enclosures to government elephant camps, in order to prevent the chaining of elephants [83]. The Nepalese government is thus one of the first governments making such important commitments to elephants' welfare.

In 2016 Tiger Tops, **one of the first companies to offer elephant-back safaris decades ago, has decided to stop offering elephant rides and built large-scale enclosures for their elephants that allow for unrestrained movement and social interaction between elephants. Eventually, Tiger Tops also decided to abandon the hosting of the annual elephant polo tournament for animal welfare reasons [84].**



Image: Safari-ride elephant tethered to its shelter in Nepal.

Scope and methodology

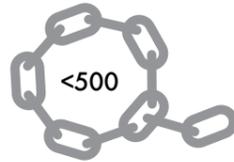
Lao PDR

Lao PDR is known as the “Land of a Million Elephants” reflecting the historic importance of this species to the country. Lao PDR historically had large and widely distributed populations of both wild and domesticated elephants. In the late 1980s, the wild elephant population was estimated to be 2,000–3,000 animals. More recent estimates show the wild population in decline at 600–800 [85]. As with Nepal, threats to elephants include fragmented habitat and human–elephant conflict.

Wild elephants



Captive elephants

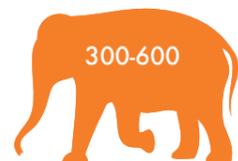


Lao PDR has a strong tradition of using elephants as work animals, with most having been and continuing to be engaged in timber harvesting operations by logging companies, transporting goods and providing rides for tourists. Captive populations are also declining in numbers. The number of captive elephants in Lao PDR in the late 1980s was estimated to be 1,332 animals, 864 in 2000, and 500 in 2009 [85,86]. The registration of captive elephants in Laos is required by law and hunting of protected species, such as the Asian elephant, is strictly prohibited.

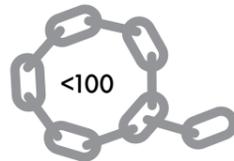
Cambodia

Elephants in Cambodia hold cultural significance, particularly for their critical role in their building of the 12th century temple of Angkor Wat – the largest religious building in the world. In addition to habitat loss, elephant numbers suffered during the civil war of 1975–79 where under the Pol Pot regime, people were forced to hunt elephants and other wildlife for food, and through hunting by Khmer Rouge soldiers. The long period of political unrest along with widespread firearm ownership resulted in massive decimation of wildlife, including elephants [87]. Habitat loss and degradation are still key threats.

Wild elephants



Captive elephants



Reliable estimates of wild and captive population numbers are scarce for Cambodia. Most accurate estimates suggest a wild population of 300–600 remaining elephants [87,88].

Captive elephants are required by law to be registered with the Forestry Administration, with most being privately owned. Estimated captive population figures are considered to be around 93 today [87], down from 162 in 2002 [88]. These figures show a general decline in captive numbers. Elephants are rarely bred in captivity due to local taboos and financial concerns, and there is currently no effort to breed captive populations. Although animals were taken from the wild, this has decreased due to less demand for captive animals and alternative incomes for local people.

Study scope

This study, that was conducted between November 2014 and May 2016, aimed to assess the scale of the captive Asian elephant tourism industry across Thailand, Sri Lanka, Nepal, parts of India, Laos and Cambodia. It also aimed to provide clarity about the conditions the elephants face in the industry by assessing aspects of the elephants’ welfare at each venue. World Animal Protection conducted a similar study on elephant welfare in 2010 in Thailand and this research updates the data for Thailand five years later and identifies broader trends in the captive elephant tourism industry in Thailand.

The study focused on elephants in venues that were accessible to tourists, and so does not reflect 100% of the captive elephant population. For instance, in 2001 it was estimated that in Thailand between 1,200 and 1,400 elephants were ‘unemployed’ [89]. Usually these elephants would be kept near their owner’s villages or used for illegal logging activities. In other countries elephants would be kept at temples for ceremonies, or kept by government authorities for use in national park law enforcement activities. A welfare assessment of the husbandry of those animals was not within the scope of this research. This choice of focus on tourism elephants was made due to World Animal Protection’s campaign focus and does not suggest that elephants in other captive situations do not suffer or do not require attention.

Except for India, the aim was to identify and visit as close as possible to 100% of the existing captive elephant tourism venues, be they elephant riding camps, elephant shows in zoos, elephant-care tourism experiences or venues focusing on providing better alternatives to captive elephants without offering rides or shows.

The venues were identified through a review of internet sources, guidebooks, interviews with local experts and plain and simple physical scouting for venues street-by-street in tourist areas with a likelihood of elephant attractions. In Thailand the GPS points of the venues identified in the 2010 study proved to be very useful in addition to the other methods.

This study will only provide names of the top ranking venues in the Appendix. Other venues will not be named. We acknowledge that practices may change at venues and we would like to avoid misrepresenting venues in this report once they have implemented improvements.

All venues were visited by the researchers in person at least once, sometimes repeatedly, to document the situation and ensure an objective assessment not reliant on hear-say or anecdotal evidence. For some venues personal visits were not possible to conduct. These venues are not included in the analyses, yet we have listed these venues separately for transparency reasons.

Assessment tools

For each venue we collected a range of information, including the number of elephants and their genders, the way the elephants would be kept during day and night time, the occurrence of stereotypies, the daily routine for the elephants, the interaction between keepers and elephants, and of course the activities the elephants were used for. The data was collected mostly through direct observation in combination with interviews with staff on site. Photographs and occasionally videos were taken to document the findings.

At each venue we also completed a rapid welfare conditions assessment, using a score sheet approach. This score sheet covered nine categories that have a significant direct impact on an elephant’s welfare and the researchers scored each venue along a 5-point scale from 0–4 for each of those categories. The total score for each venue was converted into a single final score on a scale from 1 (worst) to 10 (best possible captive conditions). Calculating the final scores required rounding of the individual scores. Scores of .0 to .4 were rounded down, while scores of .5 to .9 were rounded up to the next digit.

It must be kept in mind that this rapid welfare conditions assessment was created to allow for the large scope of this study and is not an attempt to be fully comprehensive. It does not provide a direct measurement of an individual elephant’s welfare, but rather evaluates the conditions that impact on welfare and that the animals would face on a daily basis. With these limitations in mind, this study does identify the key areas of welfare concern and in previous published studies this methodology has proven to give a good indication of the situation for the animals.

Findings

Asia

The research confirmed the ongoing popularity of elephant attractions throughout Asia.

A total of 2,923 elephants were kept at 220 identified and assessed venues. Elephant rides were offered at 189 venues, housing a total of 2,454 elephants. More than 80% (160) of those sites used wooden or steel saddles, while the remaining ones offered rides without saddles, for example as part of courses that teach visitors the basics of how mahouts manage their elephants. Elephant circus shows, often several times per day, could be seen at 38 venues which would almost always offer saddled elephant rides as well. Twelve venues offered bathing and washing elephants without offering rides and a further twelve venues offered purely observational activities without any washing and not using short chains at all.

Thailand uses roughly twice as many elephants in tourism than all the other countries combined (Figure 3). Thus Thailand has the vast majority of elephants used for tourism. This is no surprise considering the large numbers of captive elephants in Thailand and its booming tourism industry that by far surpasses all other countries included in this study. India and Sri Lanka also have other uses for their captive elephants outside of tourism, such as ceremonial or religious uses, or for enforcement work in national parks.

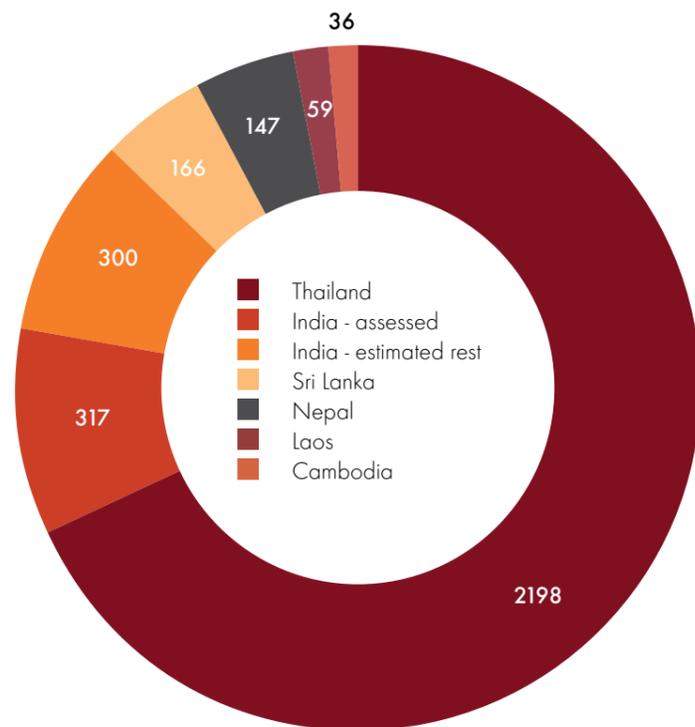


Figure 3: Number of elephants in tourism by country. Due to India only having been partially assessed we included an estimated figure for the remaining numbers of elephants in tourism in order to provide an accurate representation of the situation.

Our research shows that 2,242 elephants (77% of all elephants) are kept in severely inadequate conditions, represented by welfare scores of 5 or lower on a welfare conditions scale from 1 (worst) to 10 (best)

During the day, when not being used for rides or shows, 1,839 of the elephants were chained on short chains of maximum 3m length

The welfare conditions for captive elephants across the assessed countries is deeply concerning. Our research shows that 2,242 elephants (77% of all elephants) are kept in severely inadequate conditions, represented by welfare scores of 5 or lower on a scale from 1 (worst) to 10 (best) (Figure 4). For those elephants it means being chained day and night when not used for activities; allowed only the bare minimum of social interaction if any. They are fed an inadequate diet with very little variation, have no access to appropriate veterinary care and face generally stressful environments, such as loudspeakers, concrete shelters, large visitor groups or roadside locations. During the day, when not being used for rides or shows, 1,839 of the elephants were chained on short chains of maximum 3m length. A further 608 elephants were chained on long chains outside of rides. 2,154 elephants were kept at venues that offered saddled rides to tourists every day.

194 elephants were kept at venues where conditions were described as best possible under captive conditions

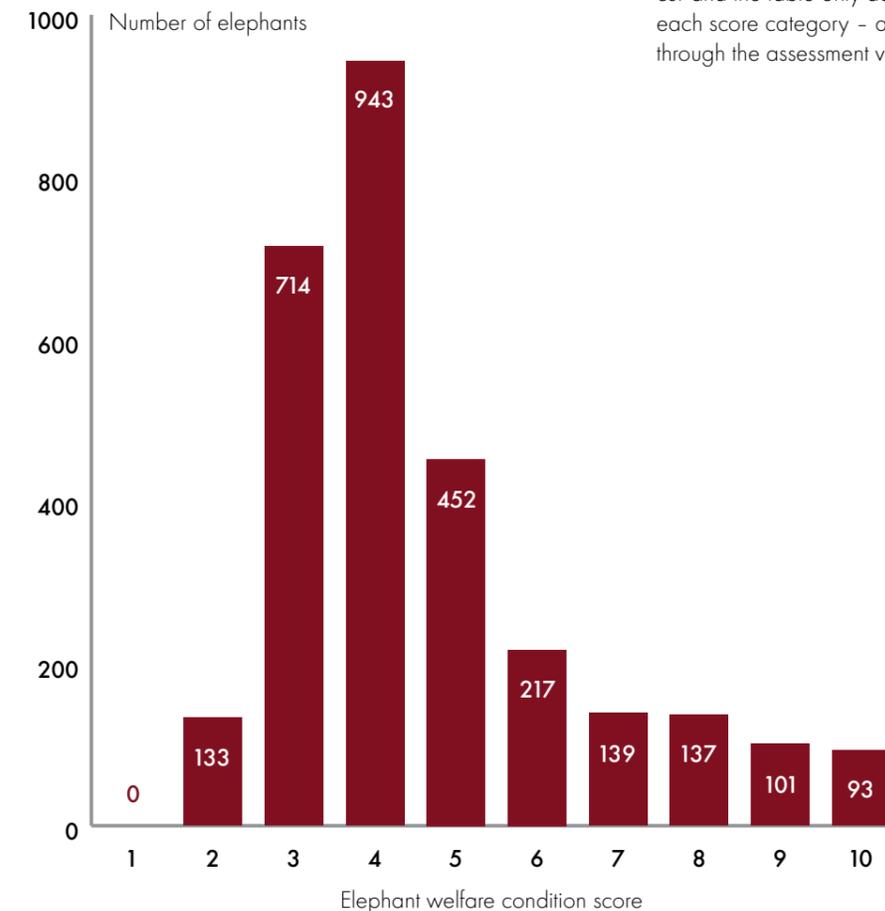


Figure 4: Welfare conditions for elephants at venues in Sri Lanka, India, Nepal, Thailand, Laos and Cambodia combined, as found by this study. 1 represents worst welfare conditions, 10 the best possible welfare conditions in captivity.

Improved conditions, represented by scores from 6-8, were experienced by 487 elephants. Their venues provided a more natural environment, less intensive tourism activities, e.g. no saddled rides, more knowledgeable and caring staff, limited working hours and usually better working conditions for the mahouts as well. However, even at those places, elephants were mostly restrained by chains, albeit usually longer chains, and were used for activities that required them to be under the constant control of their mahouts in order for tourists to safely participate in direct interactions with the elephants.

Lastly, 194 elephants were kept at venues where conditions were described as best possible under captive conditions, receiving scores of 9 or 10. Usually this involved chain-free access to enclosures or natural habitat, social interaction with other elephants on their own terms and formation of social bonds, access to natural browse or being able to forage themselves in natural habitat, and very limited or no direct interaction with visitors.

On the next page Table 1 provides a description of the most common conditions at the various camps according to their scores. Please note: exceptions to those descriptions did occur and the table only describes the most likely scenario for each score category – as evidenced through the assessment visits.

Table 1: Description of the typical conditions for elephants at venues with low, medium and high scores as per this study's welfare condition assessment.

	Freedom of movement	Social Interaction	Hygiene	Nutrition	Environment	Tourist interaction	Elephant management and mahout living conditions
Scores 1-5	Elephants are usually restrained with 1–2m long chains, standing side by side on concrete or sometimes on dirt. Elephants are only allowed to move during the tourism activities or during morning/evening routine of showering the elephants.	Many elephants may be able to interact with their direct neighbour through trunk touches. However, the level of interaction is very limited and more complex relationships are impossible under these conditions. Compatibility of elephants to each other would often not be respected when chaining them up beside each other, which can contribute to higher stress levels. Bulls are often chained up in isolation, even when not in musth. Calves are separated from their mothers at 1–2 years of age.	Most commonly the elephants are showered once or twice per day, using a water hose in combination with a brush. Where access to a river or lake is given, the mahouts may bring their elephants there for bathing. Mud baths or sand pits are not available. Old faeces often accumulate for days around the standing ground of the elephants and limited drainage leads to urine smell or wet standing grounds. In urban areas, garbage may be found in the vicinity of the elephants.	Lowest ranking venues usually provide sufficient amounts of foods. However, the quality of the food is inadequate. In venues in the south the diets primarily consist of pineapple leaves, supplemented by smaller amounts of grasses. Pineapple leaves are cheap and easy to acquire, however, such a monotonous diet is very concerning from a nutritional context. Furthermore, the provided food often bears the risk of being contaminated with insecticides or pesticides.	Environments are usually urban, as many of these venues require easy access for larger numbers of tourists. This then brings along noise pollution through traffic and loud-speakers. Smaller venues outside of urban centres are often located directly beside the roadside to attract visitors.	Tourists mainly visit these venues for saddled riding or watching elephant shows. Feeding of elephants before or after these activities is common, as well as posing for selfies in close contact with the elephants. Some show venues allow visitors to sit on the elephant while the elephant stands on their hind-leg, or have the elephants lift the visitors in their trunk. Rides are 15–30mins and usually follow identical paths at every round. Venues with high footfall see queues of elephants from morning to evening, picking up visitors from a tower and carrying them on a short trek before lining up again for the next visitor group. The stressful environment often also shows in injuries and marks on the elephants' heads from use of bull hooks.	The focus of these venues is usually on quantity of visitors and less on welfare of elephants or mahouts. Veterinary care may be accessible only through transporting the elephant for a long distance. Mahouts are more likely to be unskilled labourers that have received only brief training on how to handle elephants. Consequently, force and punishment of elephants is applied more commonly. Other times they may be professional mahouts but prefer working at these camps to make more money through tips from visitors. Venue management usually only provides minimal living conditions for mahouts that are concerning and show a clear lack of respect for the profession.
Scores 6-8	Venues usually avoid using short chains or having the elephants stand on concrete. Mostly long chains of up to 1.5m or more are used during restraining times. During the day, the offered activities may allow for some sort of freedom to move independently. At night elephants are usually chained in the forest or in fields on long chains.	Elephants in medium ranking venues are allowed slightly more social interaction. Limited socialisation with other elephants is usually permitted. However, this will commonly not allow for the creation of social groups or expression of more complex behaviour. Calves stay with their mother for a little longer than 2 years or even remain with the mother for several years at the higher scoring venues of this category.	Elephants usually have access to a river for a daily bath and scrub by their mahout. Depending on the offered activities, further baths may occur as part of the tourism experience. The elephants are under control for most of the bathing time. Standing grounds are usually clean and dry, with faeces being removed daily. At the higher scoring venues a mud puddle may be available to the elephants at times.	Middle ranking venues provide a more varied diet, consisting of several cultured ingredients, such as elephant grass, sugar cane, banana tree stems, etc. This is an improvement to the monotonous diet in lowest ranking venues, but still bears risks of pesticide contamination and insufficient variation. Food may also not be available at all times throughout the day. Water access is usually provided only once or twice per day.	Environments are usually rural or sometimes near forests. These venues usually depend less on walk-in visitors and thus are able to choose more remote locations, providing a more natural environment than the lower ranking venues. At times noise pollution due to larger visitor groups may be present.	The middle ranking venues are either saddled riding venues with strict regulations as to how many rides each elephant can give and for how long, or they offer half-day or day-long activities where visitors get assigned an elephant and learn to control, command it and care for it. While these activities are less intense than saddled rides, they do bring visitors into very close contact with the elephants, requiring full control of the elephant at all times. Venues at the higher end of this category only offer activities such as feeding and bathing with elephants. This involves close direct contact at least during some of the activities, but for the most part elephants are left to do what they like to. There is a higher risk of injury to visitors and disease transmission through such close interactions.	Middle ranking venues do usually employ better qualified mahouts and offer more regulated working times. Mahouts at times use bull hooks and other tools inadequately for punishment, but less frequently. Venue management will call for external vets to treat their sick elephants or some of the larger venues have their own vet staff on site. Still the focus for managing their elephants is primarily on ensuring smooth operation of the business and only secondarily dictated by what is good for the elephants.
Scores 9-10	At the highest ranking venues, elephants are usually not chained at all during the day. Due to the limited direct interaction with tourists, the animals are able to move around freely on their own terms – under supervision by mahouts that interfere if required. At night elephants may either have access to fenced enclosures or in some cases may be chained on long chains, e.g. in natural habitat with foraging options around them.	The highest ranking venues allow their elephants to interact in groups and sometimes house family herds. Mahouts and management often try to match the elephants based on their compatibility to each other to ensure social bonding. Full range of social interaction between elephants without restraints is allowed. Most higher ranking venues restrict captive breeding in order to prevent a further increase of the captive elephant population and reserve resources for existing elephants in need.	Elephants get access to water every day, often for several times either as part of a walk or within their roaming area. The animals are able to bathe on their own and use the time to play or interact with other elephants. They are often able to choose freely when to bathe and when to do something else. Mahouts occasionally supplement the bathing with scrubbing and traditional care processes. Due to the elephants mostly not being fixed to a specific standing location, the elephants are free to choose spots according to their preference.	Elephants at highest ranking venues usually receive a mixture of a varied diet with cultured ingredients of higher quality, complemented with access to natural browse for foraging during the day and at night. Cultured ingredients may be washed before providing them to the elephants to minimise pesticide-caused problems. Elephants are likely to have constant access to drinking water.	Environments are mostly entirely in the natural environment, with some venues very remote. Either a small visitor base with thatched huts or simple houses exist or the visitors would be taken out into the forest to view the elephants. Very little to no noise pollution is present. A few of the venues with larger visitor footfall may not provide fully natural environments and then elephants are largely kept on wider pastures or land with artificial shades.	At the highest ranking venues no direct interaction between visitors and elephants is offered. Visitors observe elephants behaving naturally, interacting with other elephants or browsing in the forest. These experiences are often felt to be extremely rewarding as they convey best the nature of elephants. Also the lack of direct interaction ensures these activities are safer for visitors and least stressful for elephants. Education of visitors is usually taken very seriously and provided through dedicated and knowledgeable staff.	Elephant management at these venues usually prioritises the welfare of the elephants over control of elephants. Due to less direct interaction with tourists less control over elephants is permissible and allows for a less stressful environment. Mahouts for the most part are very highly recognised by the venues and are often personally introduced to the visitors, allowing them to be respected for their skills. At the highest ranking venues the mahouts will also receive training in managing elephants more humanely, without using force. Some of these venues are applying positive reinforcement training techniques to complement conventional elephant handling with a more humane approach.

The following images give a visual representation of certain aspects that relate to the above groups of welfare condition scores. The images only represent specific conditions at selected venues to visualize the relevant score groups – they do not necessarily correlate with the overall score that a depicted venue will have received through this assessment.

Lowest welfare venues with scores of 1 to 5

kept elephants restrained with short chains and often standing on concrete; offered a large number of saddled rides; and provided limited opportunities for social contact between elephants and a mostly inadequate diet.



Medium welfare venues with scores of 6 to 8 gave elephants a little more freedom when not in activities; there were no short chains or concrete ground; rides were offered without saddles or close contact activities; and the settings were more natural, allowing elephants the possibility to interact somewhat with others and eat a more varied diet.



High welfare venues with scores of 9 to 10

limited direct contact with elephants or restricted it completely; provided free range opportunities for elephants all day, allowing elephants to socialise in natural herds; gave access to rivers and natural habitat for foraging; and trained their mahouts to manage the elephants in humane ways.

While these welfare condition scores are based on a relatively complex scoring system, our data shows that it is also possible to gain vague indications of the welfare conditions by simply looking at the activities offered by the venues. Figure 5 shows that venues offering elephant shows or saddled elephant rides dominate the lower ranking welfare scores, followed by venues that only offer rides without saddle, such as venues that offer to “be a mahout” for a day. Higher scores were usually achieved by venues that do not offer any riding but close direct interaction, such as washing of elephants. Lastly, **the highest welfare conditions score were achieved by venues that only offer observational activities with no close direct interaction with the elephants and where those elephants have free-range opportunities.** There are exceptions to these rules as Figure 5 also shows. For example, venues with a score of 7 can be found across all those four different activity types.

The assessment used in this study primarily includes provisional factors, i.e. factors in the elephant’s environment that impact on its welfare. However, we also collected data on direct welfare indicators, such as behavioural abnormalities, such as stereotypies. Stereotypic behaviour is only found in wild animals held in captivity and is usually an indicator for acute stress that can lead to chronic behaviour

problems if not addressed. A common cause for stereotypies can be restraint, which may not allow the elephant to carry out actions it would like to do at a specific time, leading to stress. Typical stereotypic behaviour in elephants can be repeatedly shifting weight from one side to the other, moving a few steps forward and backward continuously, or bopping the head up and down. Numerous other stereotypic behaviours can be identified as well. Also stereotypic behaviours are certainly not the only behavioural abnormality indicating welfare concerns, but other types of behaviour problems tend to be more difficult to diagnose, especially in short observation times.

In this study we registered 556 elephants displaying stereotypies in the 1,845 elephants that were not in any activity during the assessment visits. We excluded elephants that were in activities, such as riding, as usually such stereotypic behaviours are suppressed during activities. We documented a clear correlation between the ratio of elephants expressing stereotypies and the welfare scores for the venue the elephants were kept in (Figure 6). In venues with a score of 2, representing the worst conditions identified in this study, 90% of elephants that were not busy with a tourist activity expressed stereotypies. In venues with scores of 3 we still documented 51% of elephants with stereotypies. The ratio continues to decline with higher welfare scores.

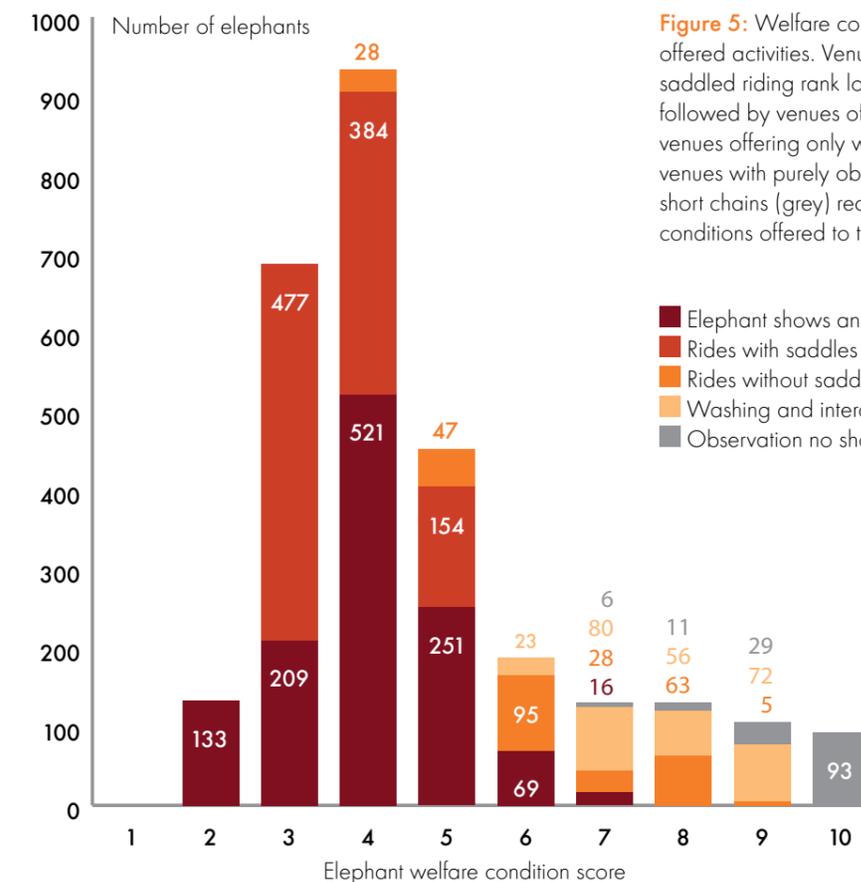


Figure 5: Welfare condition scores according to their offered activities. Venues offering elephant shows or saddled riding rank lowest (deep red and bright red), followed by venues offering rides without saddles (orange), venues offering only washing of elephants (tangerine), and venues with purely observational activities and not using short chains (grey) receive highest scores for the welfare conditions offered to their elephants.

Since India was only partially assessed, several venues there are not accounted for in this research, for example unfortunately we were not able to assess the elephant sanctuary run by Wildlife SOS. In the countries other than India an additional 12 venues were identified but were not possible to assess. For Sri Lanka, Nepal, Cambodia, Laos and Thailand we are confident that our research has covered more than 90% of the existing venues.

In comparison, the various countries show similar scores in their elephant welfare conditions, when averaging all individual venue scores (Figure 7). All countries, except Cambodia, show average scores of between 4 and 5 points. Cambodia scores significantly higher, as there are only very few elephants in four venues that this study assessed and two of those venues scored very highly. Most other countries also featured at least one venue that reflected a growing recognition of implementing higher welfare standards and avoiding conventional elephant entertainment.

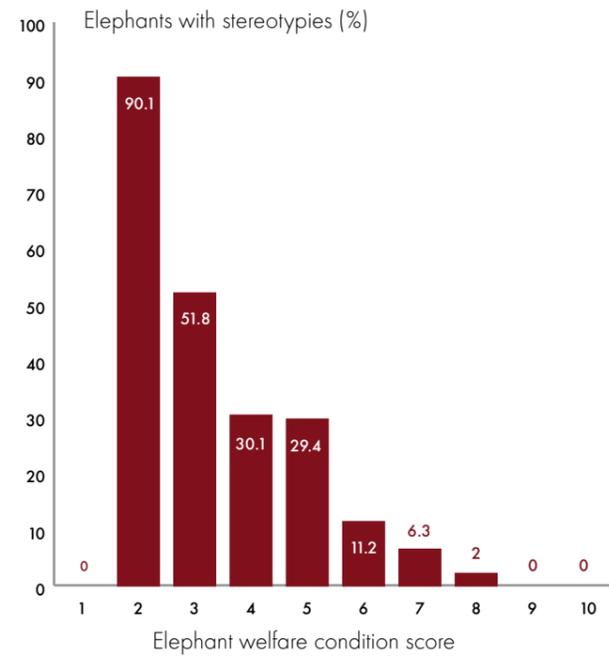


Figure 6: Percentage of stereotyping elephants in all observed, non-active elephants. Lower welfare condition scores clearly show higher percentages of stereotypic behaviour problems, possibly indicating higher stress levels.

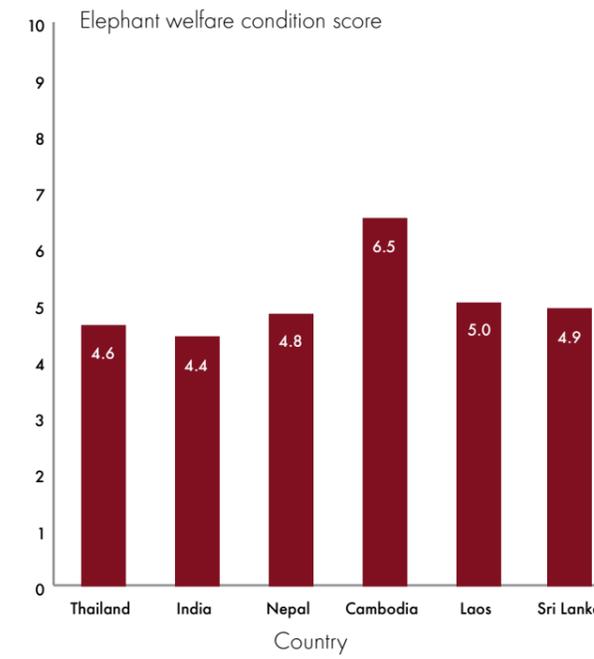


Figure 7: Average welfare condition scores of elephant venues by country.

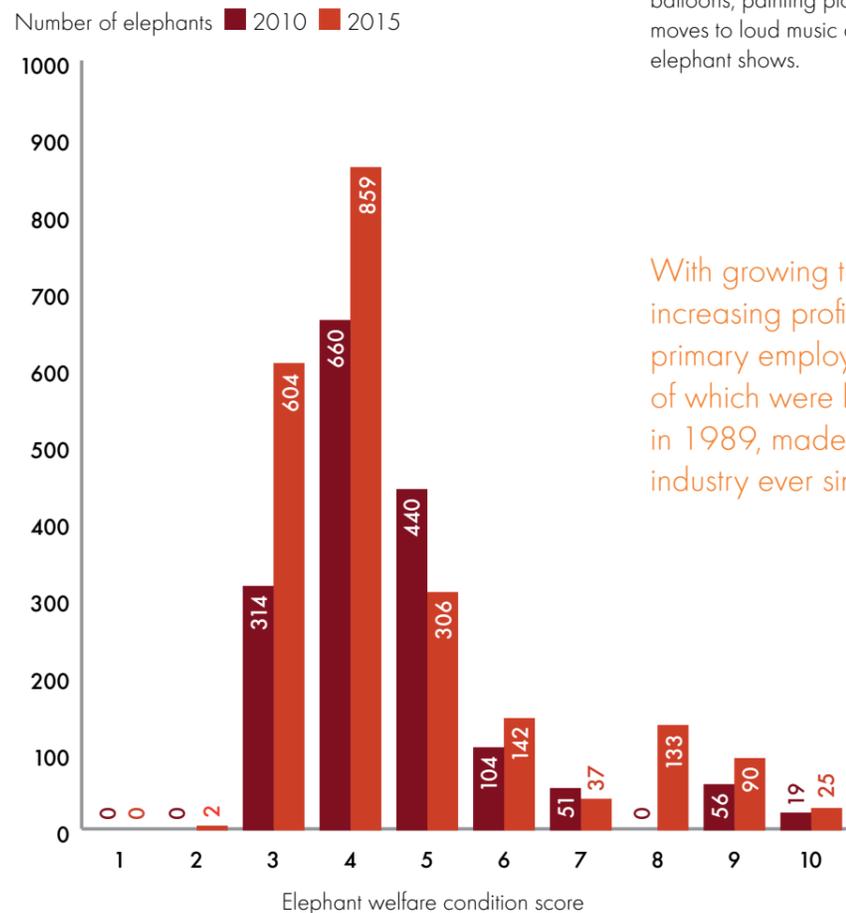
Image: Elephants on the way to a tourism venue in Cambodia.



Thailand
Scale of the industry and animal welfare

Thailand has by far the highest numbers of elephants used in tourism. Tourism was originally an alternative income source for elephant owners who previously worked their elephants in logging camps. With growing tourist numbers and increasing profits, today it is the primary employment for elephants - many of which were born after the logging ban in 1989, made to work in the tourism industry ever since. In 2010 World Animal Protection conducted the first study of its kind to assess the scale of the elephant tourism industry in Thailand and the welfare conditions for the elephants within it. The 2010 study found 1,688 elephants in 106 venues across Thailand, with the vast majority kept in severely inadequate conditions and only a few venues not offering elephant rides and attempting to provide best possible conditions for the animals.

The current study allows us to compare the situation from 2010 with today and to explore what has changed since 2010. According to World Animal Protection's studies, **in those 5 years the number of elephants at tourism venues has increased by 30% from 1,688 to 2,198.** Additionally, approximately 58 elephants are housed in 10 identified venues in Thailand that could not be assessed. Comparing the number of elephant venues from 2010 to 2015/2016 we evidenced an increase of 50% from 106 to 160 venues (of which 150 were assessed).



When looking at the distribution of elephants according to the welfare conditions they face, it can be noted positively that in 2015 more elephants are kept at more venues with scores of 8 or higher than in 2010 (Figures 8 and 9). This reflects the trend, especially in northern Thailand, of venues offering elephant attractions in more remote areas; catering to tourists that show interest in more personal experiences that do not involve saddled riding. While this development is a step in the right direction, it is unfortunately not representative of changes across the whole elephant tourism industry.

By far the largest increase of elephants into the tourism industry has occurred at venues with scores between 3 and 4, synonymous with conventional elephant-ride venues that will chain their elephants for most of the day. This suggests that the demand for elephant rides has continued to increase, despite indications that some visitors prefer choosing non-riding alternatives. However, for a successful phase-out of the captive elephant tourism industry, a demand for elephant rides must decrease in combination with increase in support for elephant-friendly venues to enable a real shift for the existing elephants towards better conditions.

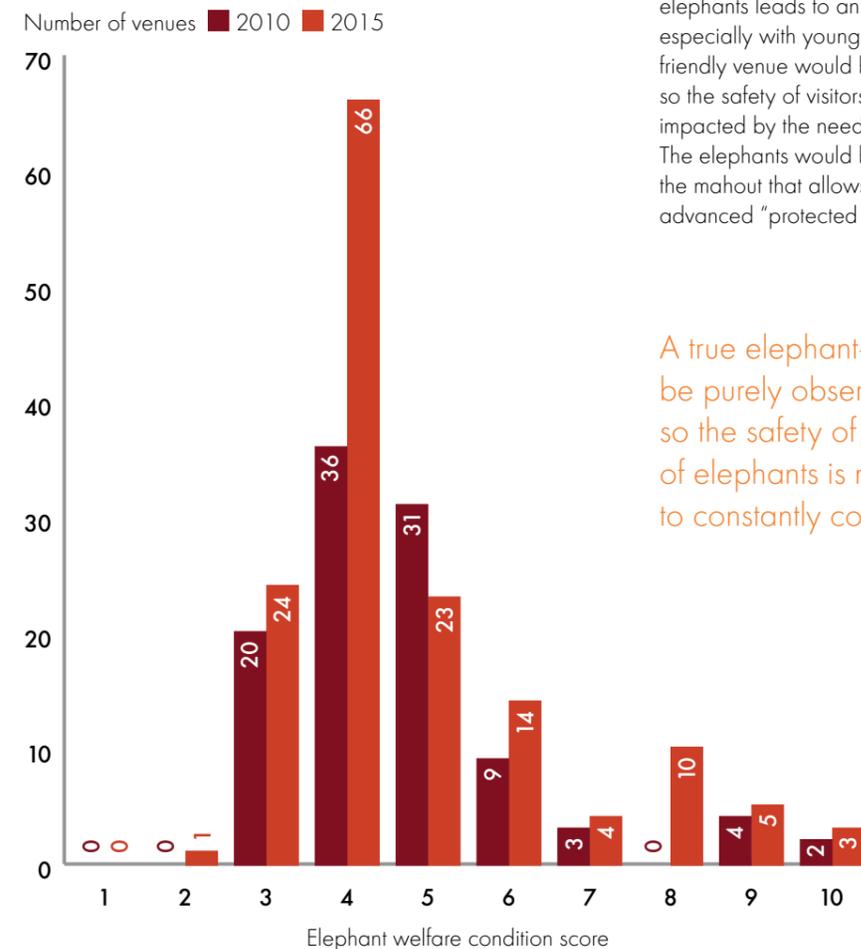
Of particular concern in Thailand is the use of elephants in show performances, where the animals are forced to display circus tricks in front of large crowds. Many of these tricks originate from circuses and have been practiced there for over 100 years. Elephants walking on tight-ropes, riding an enormous tricycle, playing basket-ball, shooting darts at balloons, painting pictures and performing jerky 'dance' moves to loud music are all common sights in Thailand's elephant shows.

With growing tourist numbers and increasing profits, today tourism is the primary employment for elephants - many of which were born after the logging ban in 1989, made to work in the tourism industry ever since.

Figure 8: Comparison of results from the 2010 and 2015 World Animal Protection studies on tourism elephant welfare in Thailand. deep red bars are number of 2010 elephants, bright red are numbers of 2015 elephants.

The training required to make elephants perform such tricks is particularly cruel and stressful, and the actual tricks can lead to injuries and damage to the elephants' health. Additionally, displaying one of the most magnificent and endangered animals in such demeaning way raises grave concerns around the message communicated to the audience. One of the largest show venues in Thailand offers elephant shows 5-6 times per day, using over a dozen elephants, including very young calves. In between the shows the elephants do not rest but approach the hundreds of visitors to lift them up in their trunks and perform for selfies. Thailand is still home to elephants in the wild and prides itself on respecting these animals as national symbols - the display of elephants in these shows is hard to align with these statements.

Most of the elephant venues with higher scores can be found in the north of Thailand, near Chiang Mai. Visitors to the north seem to be willing to invest more time and money when experiencing elephants. Increased animal welfare consciousness, especially in younger travellers, has led to a rise in venues that label themselves 'rescue centre', 'retirement place', 'sanctuary', or 'refuge'. It is difficult for a visitor to know whether these labels are true or appropriate - especially prior to the booking of a visit. In a number of venues labelled this way our researchers observed frequent chaining on short chains, strict schedules for elephant activities to meet the expectations of the visitors, elephant



rides on the neck or on a saddle, as well as inadequate transparency about how the elephants were acquired. In a particular case, the researchers documented clear abuse of at least two elephants during one of the visits to a so-called rescue centre. Staff at this venue would jab metal poles into the back of the feet of an elephant for punishment, while in the other case, just a few minutes later, another elephant was repeatedly hit with full force using a wooden stick.

Several venues have also started marketing themselves as 'no ride' venues, clearly catering to tourists that are aware of the concerns regarding elephant rides or wanting to have a different experience with elephants. In most of these venues the key attraction is to bathe with the elephants in a river and to feed them. While this study demonstrates that the welfare conditions at those venues are clearly an improvement to conventional elephant venues and thus a move in the right direction, it must also be made clear that these interactions are only possible because the elephants have been cruelly trained at a young age to obey commands.

Also at venues that allow other forms of direct interaction it is essential for mahouts to remain in control of their elephants to protect the visitors' safety. Since any direct contact activities has to rely on the traditional cruel training, it must be questioned whether sustaining demand for such activities is a long-term solution. Additionally, our findings raise concerns that the close interaction with visitors and elephants leads to an increased risk of injury for the visitors, especially with young elephants around. A true elephant-friendly venue would be purely observational for visitors, so the safety of visitors and wellbeing of elephants is not impacted by the need to constantly control the elephants. The elephants would be managed in humane ways through the mahout that allows a maximum of freedom or through advanced "protected contact" techniques.

A true elephant-friendly venue would be purely observational for visitors, so the safety of visitors and wellbeing of elephants is not impacted by the need to constantly control the elephants.

Figure 9: Elephant venues in Thailand and their animal welfare scores as established by World Animal Protection in 2010 (deep red) and 2015 (bright red).



Image opposite page, top left: A tourist poses for a selfie on a baby elephant. It is estimated that more than 2,000 tourists watch the shows at this venue every day.

Image opposite page, top right: Elephants are often asked to perform unnatural acrobatic tricks in shows. These tricks require cruel training and can cause injuries.

Image opposite page, centre: A young elephant chained to the ground beside a road all day and heavily stereotyping. Visitors could pay to feed the elephant and take a selfie.

Image opposite page, bottom left: Training elephants for attractions such as tight rope walking is extremely stressful for the animals and can lead to serious injuries.

Image opposite page, bottom right: A young elephant is forced to stand on its hind legs and rotate a ring. Throughout the show blaring dance music from loud-speakers is playing.

Image same page bottom: A captive born elephant calf with its mother. Often the calf will be taken away from its mother aged between one and two. In the wild the female offspring would stay with the mother and in the herd all life long.

Elephant population viability and economics

The study identified 160 elephants below the age of five at the assessed tourism venues, which calculates to on average 30 new young elephants per year. Many of the venues display their young elephants as an attention getter, either by keeping a calf near the entrance or in some cases directly beside the road. When questioned where the mothers were, most venues stated that the mother is in a different camp or in a completely different area of Thailand. This was a common occurrence even for elephants as young as two years and confirms the common practice of separating the calf from the mother prematurely to prepare it for a life in captivity. The higher a venue ranked in their welfare score the more likely it became that elephant calves would be able to stay with their mother and relatives for longer.

This study only included the elephants at tourism venues, which do not represent all captive elephants in Thailand (see background information, page 10). However, due to the attraction value of an elephant calf it can be assumed that the majority of elephant calves born in captivity would be moved to tourism camps whenever possible. Yet, 30 captive-born elephants per year are not sufficient to sustain a captive population of between 3,500 and 4,400 elephants, let alone explain the continuing increase of the captive population in Thailand. **Thus, either significantly more calves are kept outside of the tourism venues in rural areas, or the documented increase in captive elephant numbers relies on elephants illegally laundered into the country.** The currently ongoing efforts by Thai authorities to establish a DNA databank for all captive elephants will be helpful in the future to confirm captive-born calves.

The value of elephants seems to continue to increase. This study documented five sources which suggested prices for elephants between approximately THB1,000,000 and THB2,000,000, depending on gender, tusks and age (Table 2). This equates to approximately US\$28,000 to US\$56,000 for one elephant (currency exchange rate of THB34.91/US\$, as of 9/11/2016). Such a price tag on the head of an endangered animal as a legal commodity is of serious conservation concern. In 2013 forged elephant papers could be acquired for US\$1,860 near the Burmese border [9]. Most people in neighbouring Burma, which holds the highest wild elephant population in the near vicinity of Thailand, are living on an annual income of less than US\$200 [90], probably even less for people living in the border regions of Thailand. Thus such a high price on captive elephants in Thailand serves as a strong incentive for people to capture wild elephants and launder them across the border into the captive population. Stronger border policing and better elephant registration systems, such as the DNA database agreed on in 2016, may help to a degree. But considering the long and mostly porous border with Burma and prevalent corruption concerns it remains questionable whether these mechanisms alone can serve as a solution if captive elephants remain so valuable in Thailand.



Image: The parking lot of an elephant ride and show venue in northern Thailand. This venue claimed to receive 700-1,000 visitors per day.

Table 2: Reported rental and buying prices of captive elephants in Thailand.

Source ID	Monthly rental price of one adult elephant and mahout (THB)	Buying price for one healthy adult elephant (THB)
1	20,000	1,000,000-1,500,000
2	30,000	
3	20,000	
4	30,000	
5		1,500,00
6		1,000,000-1,500,000
7	20,000	
8		1,000,000-2,000,000
9		780,000-1,000,000

The high value of elephants is clearly linked to the profits they may be able to generate. Profitability in tourism depends heavily on location, tourist availability and marketing. Smaller-scale venues that may have fewer elephants usually generate much lower profit margins than larger venues. In response to this, many smaller venues will adjust the number of rented elephants throughout the year to adapt to the expected customer footfall.

However, in the past few years a trend for the development of large scale, heavily promoted elephant venues have emerged. These venues cater primarily to tour groups and receive 1,000-6,000 visitors daily. Commonly these venues include elephant shows and short elephant rides, sometimes in combination with rafting on a river or a cultural show. The potential profit margin of these places is enormous, thanks to low upkeep prices of elephants, very low wages for mahouts and staff, and comparatively high ticket prices. A very crude estimation of turnover for a fictitious large-scale elephant venue, based on known elephant rental prices, feeding costs, extra bonus for mahouts for each ride, additional staff, and the income from ticket sales shows a significant margin between income and expenditures of more than US\$250,000 per month (Table 3). This calculation does not cover all the costs. It does not include expenditure items such as supplies, maintenance, marketing or initial investment, which may be significant - but it also doesn't include income streams such as souvenir sales or beverages. **These estimates, as crude as they may be, do indicate that there are significant profits in running such venues. However, no benefit transfers to the welfare of the elephants nor is any felt by the mahouts.** Equally, concerns about the impact such a profitable industry may have on elephants in the wild must be recognised (see page 18, Conservation value and captive breeding).

Table 3: Expenditure estimate for a large-scale elephant venue with 50 rented elephants, THB1,000 ticket price, 500 visitors daily.

Item	Monthly (THB)	Monthly (USD)
50 elephants and mahouts	1,250,000	36,765
Elephant food	3,000,000	88,235
Mahout ride bonus	600,000	17,647
50 staff for customer care, maintenance, transport	750,000	22,059
*Supplies	??	??
*Maintenance (cars, facility)	??	??
*Marketing	??	??
Total expenditure (not including *)	5,600,000	164,706
Income from sales	15,000,000	441,176

A high price on captive elephants in Thailand serves as a strong incentive for people to capture wild elephants and launder them across the border.

Conclusions and recommendations

This study has assessed the scale of, and animal welfare conditions at, elephant venues accessible to visitors in Sri Lanka, Nepal, parts of India, Laos, Cambodia and Thailand between late 2014 and mid-2016.

Researchers have evidenced and quantified the welfare conditions endured by nearly 3,000 elephants involved in tourism in these countries. Three out of four of these elephants endured poor living conditions, such as chaining, lack of socialisation, inadequate shelter, poor food and stressful interactions with tourists. These situations are contrary to even the most basic needs of these intelligent animals.

The industry is also characterised by concerns for low living standards for mahouts and a worrying number of incidents leading to fatalities or serious injuries in mahouts and tourists caused by captive elephants.

And although the promotion of captive elephant entertainment can appear to reflect cultural traditions this study shows such practices involve significant animal welfare and conservation concerns.

Key findings

- 2,242 (77%) of elephants used in tourism in Asia are kept in severely inadequate conditions, at venues rated 5 or less (out of 10) on an assessment scale for animal welfare conditions.
- Only 194 (7%) of elephants are kept in best possible captive conditions at venues scoring 9 or 10 on the welfare conditions scale. At these venues elephants can be observed by tourists without any direct interaction.
- Stereotypies (abnormal repetitive behaviours) were seen in 556 (30%) of elephants across all venues observed when they were not involved in a tourist activity, indicating their severe stress levels. Where venues scored only a 2, the lowest score received in this study, the stereotypies seen soared to 90%.
- Over five years since 2010, a 30% rise in the number of elephants has been documented in Thailand's tourism industry, from 1,688 to 2,198 elephants.
- The largest increase of elephants in Thailand was seen at tourist venues with welfare scores of between 3 and 4, indicating severely inadequate living conditions. At these venues elephants are made to offer saddled rides and often perform in shows.
- Venues offering saddled elephant rides and shows consistently ranked lower in their welfare conditions for elephants than venues that offered less interaction or only observational activities for visitors.
- Although huge profits can be made from elephant tourism, neither the elephants' nor the mahouts' working conditions are seen to improve in the venues catering to large numbers of tourists.

- The high value of captive elephants remains a strong incentive for illegal activities such as 'laundering' of wild-caught elephants into the tourism industry.
- In Thailand the scale-down of the logging industry was part of the initial impetus to turn elephants in captivity to work in tourism. However, there are far more elephants in tourism now than the original population of logging elephants. This highlights that captive elephant tourism has developed into the key driver for maintaining a captive elephant population.
- Most countries featured at least one venue that had a good welfare score of 9 or 10, indicating a growing recognition of implementing higher elephant welfare standards.
- In Thailand 248 elephants were kept at venues with scores between 8 and 10, a significant increase from the 75 elephants in similar circumstances in 2010 and an important indication that welfare improvements are happening within some parts of the industry, even in the context of an even greater increase in the numbers for poor-welfare conditions.

Putting wild elephants at risk

High-profit venues evidenced in this study cater to hundreds or even thousands of visitors daily and profit from exploiting Asian elephants, an endangered species. This not only perpetuates the cruelty of using elephants as entertainers but also poses a threat to the protection of elephants in the wild.

While in some countries captive breeding of elephants is likely responsible for many new elephants into the tourism industry, the commercialisation of captive elephant tourism risks opening up the market by also incentivising poaching from the wild. This is highly concerning and requires urgent action by all involved in the industry.

Leading by example

The research also found some positive developments. Most countries assessed had venues that strive to provide best possible conditions for captive elephants. These focussed on providing tourists with primarily observational experiences of elephants and did not offer elephant rides and other types of exploitative elephant entertainment.

While still few in number, these venues offering observation and not 'entertainment' are beacons of hope that can encourage the urgently-needed shift in the captive elephant tourism industry. Their replication, combined with increased tourist demand for better welfare venues and a decrease in profitability for low welfare venues, will benefit elephants, local communities, elephant caretakers and tourists themselves.

The study also revealed an increase in medium welfare venues - those that do not offer riding, but provide direct contact with elephants through bathing and selfie opportunities. Especially in Thailand this development seems to represent a diversification over a period of five years in the demand for elephant activities.

The increase in these types of elephant venues with improved welfare conditions must be recognised as a positive step towards better conditions for some elephants. However, the data does not yet show an actual shift towards better welfare across the whole population of captive elephants in tourism.

To achieve real welfare improvement for existing captive elephants and better protection for elephants in the wild, there is sadly no simple solution. Only by taking the following multiple approaches welfare and conservation concerns around elephant tourism can be tackled.

Recommendations

- **Enable and encourage replication of high-welfare, elephant-friendly venues.** Key to this is a shared understanding of the concepts of elephant-friendly management by elephant-owners and handlers. This should be backed by technical expertise, financial funding by governments, NGOs or the tourism industry, as well as local community inclusion.
- **Channel tourist demand away from the worst activities, such as elephant shows and rides, to more humane alternatives.** Increasing demand by tourists for humane alternatives such as elephant-friendly venues will encourage conventional venues to change their practices.
- **Devise a set of elephant-friendly tourism standards.** Within the wildlife tourism industry mislabelling of poor welfare venues as 'sanctuary', 'rescue centre' or 'retirement home' is common practice. Standards will help tourists and travel companies recognise truly elephant-friendly venues.
- **Improve conditions for captive elephants not kept in elephant-friendly venues.** Better regulations paired with adequate animal welfare laws, and actual enforcement of these laws through well-resourced authorities, will protect elephant wellbeing.
- **Stop elephants being poached from the wild for the tourist industry.** Better resourcing of enforcement authorities will enable the policing of border markets and the monitoring of captive elephant populations for irregularities.
- **Ensure a loophole-free registration process for captive elephants.** Tamper-proof registration systems are essential for captive elephants. Combined with effective enforcement and legislation they will protect wild elephants from being poached from the wild and control the trade in individual elephants between owners.
- **Limit captive breeding to facilities with genuine conservation value.** Only those facilities with the highest standards and driven by genuine conservation and science - not commerce - should be considered for captive breeding.

- **Respect local cultures and address the needs of the mahouts and other elephant-dependent people by developing alternative livelihoods with them.** There are no quick fixes. Elephant-friendly projects should always factor in elephant-dependent people. We must champion pathways that retain cultural identity without inflicting cruelty on animals, which encourage socio-economic development of communities and that ensure better health and safety protection.

Building a movement towards an elephant friendly future

The findings of this research show the importance and urgency of building a movement to phase out the exploitation and suffering of elephants forced to entertain tourists. It's World Animal Protection's aim to achieve such change through working with the tourism industry, local and national governments, elephant venue owners, elephant handlers and tourists.

As part of the **Wildlife - not entertainers campaign**, World Animal Protection:

-  Raises awareness among tourists and move people to take action together. Hundreds of thousands of people have already joined World Animal Protection's global movement for elephants and other wild animals.
-  Convinces travel companies to end their offer and promotion of cruel wildlife entertainment. More than 160 travel companies have committed to not sell or promote venues that offer elephant rides and shows and are now choosing elephant-friendly alternatives now. Many of these travel companies have also phased out all other offers of wildlife entertainment to their customers.
-  Engages with the travel industry and policymakers so they set ambitious welfare standards and legislation, and implement and enforce them.
-  Works with leaders in the tourism industry to help existing elephant venues become elephant-friendly.

Together we can end the suffering of captive elephants in tourism. Elephants belong in the wild - not in entertainment

We must champion pathways that retain cultural identity without inflicting cruelty on animals, which encourage socio-economic development of communities and that ensure better health and safety protection.

Appendix 1

List of venues with best welfare conditions (assessment scores 9 and 10)

Country	Name	Offered visitor activities
Cambodia	Elephant Valley	No rides, observing elephants, elephants free-roaming in natural habitat
Cambodia	Mondulkiri Sanctuary	No rides, observing elephants, following elephants in forest, occasional bathing with elephants
Laos	Elephant Conservation Centre	No rides, observing elephants, following elephants in forest, occasional feeding of elephants
Nepal	Tiger Tops Tharu Lodge	No rides, observing elephants, following elephants in forest and fields
Sri Lanka	Elephant Transit Home	No rides, observing elephants
Thailand	Boon Lott Elephant Sanctuary	No rides, observing elephants, following elephants in forest and fields
Thailand	Burm and Emily's Elephant Sanctuary	No rides, observing elephants, following elephants in forest and fields, occasional feeding of elephants
Thailand	Elephant Haven	No rides, observing elephants, occasional feeding of elephants, occasional bathing with elephants
Thailand	Elephant Nature Park	No rides, observing elephants, feeding of elephants, occasional washing of elephants
Thailand	Global Vision International Huay Pakoot project	No rides, observing elephants, following elephants in forest, occasional feeding of elephants
Thailand	Golden Triangle Asian Elephant Foundation	No rides, observing elephants, occasional lecture in elephant care
Thailand	Mahouts Elephant Foundation	No rides, observing elephants, following elephants in forest
Thailand	Wildlife Friends Foundation Thailand	No rides, observing elephants, occasional feeding of elephants, occasional washing of elephants

Appendix 2

The following venues were identified during the study, but couldn't be visited or only opened after the field research was already completed.

Country	Name	Offered visitor activities*
India	Wildlife SOS Elephant Sanctuary	Operated by animal welfare NGO, no riding, other visitor activities unknown
Thailand	Chang Puak Camp Hat Yai	Saddled rides, shows
Thailand	Elephant Discovery Tour	Riding without saddle, washing of elephants
Thailand	Eddy's Elephant	Riding without saddle, washing of elephants
Thailand	Elephant Valley Thailand	No riding, no washing, observation
Thailand	Ganesha Park	Riding without saddle, washing of elephants
Thailand	Hope for Elephants	No riding, other visitor activities unknown
Thailand	Kindred Spirit Elephant Sanctuary	No riding, no washing, observation
Thailand	Phuket Elephant Sanctuary	No riding, no washing, observation
Thailand	Siam Niamrit	Show

* as identified through flyer/brochure or TripAdvisor photographs and comments

Appendix 3

Scoresheet table that was used for the elephant venue assessments.

Category/Score	0	1	2	3	4
Mobility	Short chains + Trekking	Long Chain/ Small pen (< 20sqm) + Trekking	Pen 20-200sqm + Trekking	Enclosure 201 - 2,000 sqm day+night or unrestricted movement or >2,000sqm during day but limited mobility at night	Free and unrestricted movement or enclosure > 2,000sqm day and night
Hygiene	Old faeces + urine present, moist surface, stench, no access to pool/shower	Old faeces + urine present, some drainage, showering, no baths	Only recent faeces + urine, dry ground, short baths	Clean and dry surface, regular baths	Clean and dry surface, free choice of clean water, baths and dust/mud baths
Environmental noise quality	Direct vicinity to traffic, loud speaker, large crowds	Intermediate of 0 and 2	Occasional traffic or small visitor groups, no electronic noise	Intermediate of 2 and 4	No noise except natural sounds
Daytime rest area	Concrete ground, unavoidable exposure to sunlight/rain	Intermediate of 0 and 2	Dirt ground with medium shelter possibility (e.g single tree)	Intermediate of 2 and 4	Natural ground with sufficient and adequate shelter options
Naturalness	Urban or fully artificial environment with no resemblance of natural habitat at all	Intermediate of 0 and 2	Natural environment surroundings but immediate vicinity only artificial structures	Intermediate of 2 and 4	Fully based in natural environment
Social interaction	Solitary - no visual contact with conspecifics	Visual but no tactile contact	Tactile contact but no social grouping	Small social grouping possible	Possibility of free interaction with creation of social network
Diet quality	Inadequate amounts (<75kg/1000kg body weight) and limited variety	Adequate amounts but limited variety and quality, only cultivated foods	Adequate amounts, pre-selected good variety and quality, mostly cultivated, always food available, not free water access	Adequate amounts, pre-selected cultivated and natural foods, ad-libitum water and food	Sufficient natural food sources to select from, free choice of consumption
Entertainment intensity / Visitor interaction	Show, riding or intense use for other purposes	No shows, but regularly rides	No rides but strong visitor interaction with involuntary elephant participation (e.g. Be-a-mahout, washing)	No entertainment and only visitor interaction with voluntary elephant participation	No entertainment and no direct interaction with visitors
Animal management	No welfare understanding, inappropriate usage of ankhus, visible wounds on elephants, elephants constantly saddled, no vet treatments	Minimum welfare understanding, strong use of ankhus, treatment only by annual or bi-annual vet visits, elephants constantly saddled	Moderate welfare understanding, use of ankhus restricted only to required situations, call or transport to vet, no saddle unless ready to ride	Intermediate of 2 and 4	Very strong welfare understanding and focus on best situation for elephants, use of positive reinforcement training where feasible, resident vet or strong vet support

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