Module 20

The Welfare of Animals Used in Entertainment



Lecture Notes

Slide 1:

This lecture was first developed for World Animal Protection by Dr David Main (University of Bristol) in 2003. It was revised by World Animal Protection scientific advisors in 2012 using updates provided by Dr Caroline Hewson.

Slide 2:

This module will cover:

- the most common uses of animals in entertainment
- the main sources of ethical concern
- some of the most common causes of reduced animal welfare in different types of entertainment.

Slide 3:

Entertainment may be defined as something diverting or engaging. Entertainment is not essential to human life, but it may increase our quality of life through an increase in positive emotions, income and other factors.

Probably the primary reason why animals are used in entertainment is for financial gain. The use of animals generates income for different stakeholders:

- individuals who attend the entertainment or watch it remotely often gamble on the results, which may increase their income
- governments that levy taxes on those individuals or the betting agencies, which increases public funds
- owners of the facilities concerned charge admission fees to make their living
- animal owners, who benefit financially from cash prizes for the fastest or otherwise most successful animal.

The main uses of animals for entertainment are, broadly:

- · killing, which may be ritualised, e.g. bullfighting, dog fighting, cock fighting, hunting
- performing, e.g. circuses, dressage (horses), racing
- zoos
- tourism this includes the use of animals, e.g. for rides or photographs, as well as tourists' attendance at existing events such as bullfights, racing and performing.

Slide 4:

This slide lists some of the species which are most commonly used for entertainment. The use of each depends on where you live in the world and on the ethical and cultural norms in your country, and thus the legislation. Some of the uses you see on the slide may be very familiar to you, and may be quite closely controlled in the country where you live and work. Others may be unfamiliar, or may be illegal. For example, second from the bottom is fighting between dogs, bears and cocks. Such practices are illegal in some countries (but may still occur), and may be commonplace and legal in others.

Today, we will concentrate mainly on the scientific evidence and observations about the potential for harm to animals used in entertainment. However, we will first briefly review the reasons why using animals in entertainment can cause arguments and moral unease.

Slide 5:

As with all other uses of animals – in farming, as companions, in laboratories, etc. – the concern in using animals for entertainment is whether or not they are harmed by it.

Modules 4 and 12, on ethics, introduced common ethical frameworks regarding animal use. Broadly, the frameworks centre either on our obligations to animals or on the consequences of using animals. This slide summarises the frameworks.

- Obligation-based or deontological frameworks concern our obligations to animals either by virtue of them having intrinsic value, which in turn confers rights, or by virtue of animals' dependence on us.
- Consequentialist frameworks are concerned with the effects of our actions on us and other human beings, on animals, and on the species or ecosystem as a whole.

Many people may combine elements of these frameworks in forming a position on whether a particular use of animals is right or wrong. Consequentialist arguments are probably the most common.

Cultures of different countries may differ as to what adverse consequences are permissible when using animals for entertainment, e.g. certain injury and death in dog fighting has led to the practice becoming illegal in many countries, whereas those countries permit horse-racing because the entertainment it offers does not centre on injury or death, and only carries a low risk of injury and an even lower risk of death.

In all countries, the benefits to humans of using animals for entertainment are often cited as reasons for allowing it, and are relevant considerations.

The following two slides summarise the main positive and negative consequences to humans and animals of using them in entertainment. We will then focus on animal welfare concerns in particular types of entertainment.

Slide 6:

First, using animals for entertainment can benefit humans in the following ways.

- Some uses are an expression of culture and are deeply valued for their tradition. Examples
 of this are rodeos in North and Latin American countries; dancing bears in India; and
 bullfighting in Spain and some Latin American countries. The expression of culture is a
 sensitive issue for legislators, and a source of misunderstanding with countries and activists
 who do not share that culture.
- The animals' handlers may develop strong, positive and caring bonds with the animals.
- The use of the animal may generate income for spectators, owners, betting agencies, organisers and the public at large through taxes.
- Often the entertainment provides strong social benefits such as interaction with other enthusiasts, a view of the living world (unlike, for example, computer games) and being outside. Also, participation in the activity may increase the person's social status.

In contrast, using animals as entertainment may harm humans in various ways.

- Gambling is addictive and can cause great misery and poverty for the person concerned and their family. Gambling may also be associated with other problems, such as violence.
- Some uses of animals that involve the animals fighting and killing each other may reinforce the public perception of such species as being 'aggressive' and requiring harsh treatment.
- Often those species are not viewed performing their full range of natural behaviours, but only the fighting behaviour, in an unnatural environment. This prevents viewers from appreciating the unique adaptations of the animal and, arguably, the value of the species.
- Related to both those points is the argument that was formulated by the ancient Greeks
 and is maintained today, that treating animals cruelly, for whatever reason, harms us by
 weakening our intellect; e.g. the view that animals are threats that deserve harsh treatment
 from people, rather than us understanding their needs and sentience.
- Using animals for entertainment can cause injury to the people concerned through accidents or because an animal is frightened and attacks the handler and/or spectators.

Slide 7:

Animals may benefit directly and indirectly from being used for entertainment.

- As with farm animals, companion animals and laboratory animals, they may enjoy
 good husbandry, including shelter, disease control and lack of predation, as well as the
 opportunity to have a good life with play, exploration, positive interactions with people, and
 other opportunities to enjoy positive emotions. For some forms of entertainment such as
 racing, many people believe that the animals, e.g. horses, enjoy the activity.
- Carrying out research may benefit them or other animals being used in the same way. For example, most zoos carry out research on the conservation of species.

In contrast, animals may be harmed through their use in entertainment for the following reasons.

- They may have been caught from the wild, e.g. young primates used as tourist attractions for photographic opportunities. Capture may cause injury, with death to some members of the social group and disruption to the group.
- They may not have adequate husbandry, especially if they are wild-caught. This means they
 may spend their lives in a restricted space, with limited scope to perform natural hunting,
 social and reproductive behaviours. In general, captivity is known to be stressful for all
 animals, and non-domesticated species may find it particularly difficult to adapt.
- The methods of control and training may be punishment-based, especially in the case of dangerous, wild-caught animals such as bears, elephants and large felids (cats).
- The entertainment may require the animals to be killed or injured, or there may be a significant risk of that. This means there is a high probability or certainty of fear, pain and distress for the animal.
- The animals may be said to be harmed because their use for entertainment is seen to be artificial or unnatural, and therefore harms their telos, or inherent nature. This perception varies between cultures. For example, in many countries, circuses are deeply rooted in cultural and social norms and the use of animals in circuses is seen as a traditional part of life. However, in other societies, the artificial training and performance, particularly of animals such as big cats and elephants, is seen as very artificial.

Slide 8:

Animals used to entertain humans all have to undergo some training, which may involve behaviours that are unnatural to the animal. Because aversive methods of training are often used, we will review the welfare aspects in some more detail here before moving on the welfare concerns in different categories of entertainment.

With training, animals learn to associate a command or signal with the immediate performance by them of a behavioural sequence, as a result of which the animal is rewarded: we either give the animal something pleasant, e.g. food, a toy, touch – this is a *positive reward*; or we remove

something unpleasant – this is a *negative reward* ('negative' because something has been removed).

An example of a negative reward is the removal of an electric shock: if we are using it to train an elephant to place his foot on a tub, and nowhere else, we might administer a constant, steady shock as soon as the elephant moves in the wrong direction. When he moves his foot in the right direction and places it on the tub, the shock stops. So, he learns that placing his foot on the tub directly averts the risk of pain from an electric shock.

'Punishment-based' training means that when the animal does something we do not want, we do something unpleasant to him/her, e.g. we give an electric shock, which is positive punishment, or we remove something pleasant such as food treats – this is negative punishment.

Traditionally, the methods for training domesticated and wild animals have centred on applying negative rewards or positive punishments, often involving pain. Such methods tend to create high levels of stress and the animal becomes 'trained' out of fear rather than because of the anticipation of something positive being administered to him/her.

Slide 9:

Other problems with training animals for entertainment by using pain are as follows.

- Correct amount: it is impossible to know how much pain to cause. How hard should you hit
 a donkey to make him or her move forward? Can you always administer a hit exactly hard
 enough every time the animal stops?
- Timing and consistency: starting and stopping the negative experience must come as soon
 as the animal starts showing the relevant behaviour, and every time the animal starts to
 show it. Five seconds after the behaviour starts is too late.
- Prevents learning: fear and pain cause high levels of emotional arousal: under those conditions animals cannot easily learn and make associations between their behaviour and your command. Consequently, trainers may consider their animals to be 'stupid' and may not treat them kindly.
- Physical damage: training animals for entertainment using pain can cause damage and lead to infection and illness so the animal cannot work well.
- Owner–animal relationship: pain-based methods of training are a negative approach to training, which may reduce the owner's attachment to the animal.

Slide 10:

We shall now consider the particular welfare concerns for animals used in the entertainments listed on the slide.

The first category – animals used in fighting or killing – has fairly self-evident negative effects.

The second category may not have such obvious problems, especially if the uses are already widespread and well-regulated, as is the case especially with horses in many countries.

The third and fourth categories – zoos and tourism – may also raise welfare concerns.

Slide 11:

In the category of fighting and killing, dog fighting and cock fighting are probably the most common. They are illegal in many countries but are permissible in others. Because birds are relatively cheap to keep and to replace, cock fighting is a common pastime in some parts of the world where people have low incomes.

Related to dog fighting is bear baiting, which is thought to occur only in Pakistan. Bears are typically wild-caught, raising welfare concerns regarding the remaining social group in the wild (as noted earlier), and for the captive bear due to his or her lack of domestication.

In all cases, gambling is probably the main impetus for the activity, although the sight of a bear fighting a dog and each animal being injured is part of that particular spectacle.

Fear is perhaps the main welfare concern in all cases.

In the case of dogs, aggression is unusual for domesticated dogs and one of the first steps in domestication is likely to have been removal of very aggressive or overtly territorial dogs so that they may co-exist happily with humans and with other dogs. To make fighting between dogs a spectator activity requires selection, over time, of animals who show aggression, and this in turn is most likely to be motivated by inherent fear, which the handlers may reinforce in the dogs' early experience.

The aggression may also be inherent predatory aggression.

Examples of breeds within which there has been selective breeding for aggression are:

- pit-bull terrier
- Japanese Tosa
- Dogo Argentino
- Fila Brasileiro.

Dogs often fight to the death, and can cause each other severe injuries. However, the fighting breeds listed here seem to have a very high pain threshold so they may not suffer much discomfort from skin wounds or, possibly even deeper bite wounds. However, the build-up of inflammatory substances and development of infection in wounds following a fight are likely

to cause some degree of sensitisation of the pain pathway if the injuries are not treated and analgesics given.

Similar principles of selection for aggression and associated fear, injury and pain apply in the case of cock fighting.

Even when fights are illegal, legislation may be difficult to enforce if the local authorities lack resources or have political links to the organisers. Moreover, since the activity is illegal, this may make handlers reluctant to seek veterinary attention for their injured animals.

Slide 12:

In contrast to dog and cock fights, bullfighting is a highly ritualised fight to the death between a bull and a human, called a *matador*. Bullfighting involves great human skill, training and risk, and is a deeply rooted part of Hispanic culture. The fight typically lasts 15–20 minutes.

The welfare concerns are that the bull is subjected to pain and distress, as listed on the slide. That is:

- bulls may be prepared by having irritants applied to their eyes to distort their vision
- during the fight, which is highly ritualised, the matador goads the bull to increase his
 aggression and the risk. Goading may include using hand-held harpoons decorated
 with brightly coloured, weighted banners to enrage the bull. The harpoons usually stay
 embedded in the bull's back, causing the bull to lose more blood and open the wounds
 further
- once the bull is disabled by injuries, which include loss of blood and pain, the matador kills
 the bull using a long sword that is forced downwards between the shoulders to penetrate
 the heart. However, this is not completely reliable, and it is not an approach to the heart
 that would be permitted in any regulated slaughterhouse. Consequently, the bull may be
 conscious during the subsequent rituals which are:
 - an assistant stabs the downed bull with a short, broad knife to sever his spinal cord
 - the bull's ears or tail are cut off to be given to the matador as a trophy
 - the bull is tied by the horns and dragged out of the ring.

Also, horses are used to steer and marshal the bull during the fight. Despite wearing armour, horses are sometimes injured.

Slide 13:

The deep social roots of bullfighting mean that many people in many societies do not perceive these activities as anything other than part of their social fabric. Also, in many of the countries where bullfighting takes place, it is often the interest of tourists that keep the practice going.

After Spain, the countries where the entertainment is most common are Colombia and Mexico.

In Spain, the region of Catalonia banned bullfighting in 2012.

In Colombia and Mexico too, some jurisdictions have been debating a ban on the practice.

As noted earlier, people from different ethical standpoints may draw different conclusions about the practice. Broadly the main arguments supporting the practice concern its cultural roots and tradition, the fact that the matador risks their own life too, and the benefits of making money from it.

Arguments against the practice concern the bull suffering unnecessarily, and the contractarian argument that bullfighting is cruel behaviour that weakens the intellect, such that it makes one less able to appreciate arguments against its conduct. Some ethicists would also regard the cultural argument as an anthropocentric fallacy because it entails suffering.

Slide 14:

We shall now move on to discuss the welfare concerns for performance animals in the following categories:

- dancing bears
- marine animals
- circuses
- fiestas/rodeos
- horses: racing, jumping and dressage.
- dog racing.

Slide 15:

The first example concerns the use of dancing bears in India. Briefly:

- sloth bear cubs are taken from the wild and their mothers are usually killed. The removal or death of the bears has implications for wild populations of sloth bears, which are threatened in some regions of India
- the captured animals are controlled by means of a tether through the muzzle (which often penetrates the roof of the mouth, as you can see in the picture). The tether is inserted without anaesthetic, which is painful, and it creates a chronic unhealed wound which causes ongoing pain and distress

- the husbandry of these wild-caught animals is also a concern because they are not domesticated and are typically kept tethered
- training the animals to 'dance' may involve punishment-based interactions that cause fear and pain.

Slide 16:

Another use of wild-caught animals for entertainment is in circuses; such animals include bears, big cats and elephants.

In some countries circus animals have been bred in captivity. However, the prevailing view is that such animals are not truly domesticated and so not well suited to the constraints of circus life.

In other countries, many animals used in circuses may have been wild-caught, with associated trauma and mortality in the selection of young animals.

Additional welfare concerns in circus life include the following.

- 'Life on the road': as the circus travels to different places to perform, this means repeated transport in confinement for these animals. As the numbers of each species within a given circus are small, and there has been relatively little research reported on the effect of transport, it is difficult to ascertain the effect of this on circus animals. However, general concerns mentioned in Module 25 on livestock transport apply, e.g. road surface, ventilation, loading and unloading practices, and external temperature.
- Lack of space and freedom to perform natural behaviours often results often in abnormal behaviours, such as head-bobbing in picketed elephants and pacing in caged tigers. Small studies (Friend & Parker, 1999; Nevill & Friend, 2006) have indicated that, in both these cases, providing the animals with even small exercise pens with electric fencing to contain them may be a welfare benefit. However, in general, circuses cannot provide the enriched environment that zoo facilities can, so they are limited in their options to allow animals to perform behaviours that are important for them.
- The lack of behavioural opportunity is probably made worse by the fact that, according to reported estimates, circus animals only perform or undergo training for less than 10 per cent of their day
- Training methods: these can be strongly punishment-based, and applied without knowledge
 of the psychology of learning. They can induce fear and resulting aggression in the animals,
 as well as pain, especially when wild-caught animals are being subdued.
- Some domesticated animals are also used in circuses, such as dogs and horses. They
 may have an 'enriched' life in a circus environment when compared to their home-kept
 pet relatives but, for wild species, this is not the case. Moreover, many horses and dogs
 may also be cruelly trained, and the other issues, such as lack of space, lack of normal
 interaction with conspecifics, and transport are still potentially detrimental to them.

An indirect welfare problem for many circuses is that they are small and have limited financial resources. This contrasts with larger well-known circuses where, typically, any existing research has been done. The conditions are likely to be worse in smaller circuses for financial reasons.

Taking all of these factors together, a review published in 2009 (lossa et al., 2009) concluded that "Data collated from other studies suggest that species commonly kept in circuses appear the least suited to a circus life."

Slide 17:

Dolphinaria are places where dolphins are kept in captivity and are usually trained to perform for human spectators. Such facilities may also involve other marine animals such as seals, turtles and sirenia – manatees and dugongs.

Welfare concerns include the following.

- Capture of the species from the wild has had an impact on wild populations and risks endangering certain species.
- The high mortality level between capture and placement in the exhibition, and the methods used for wild capture (netting and driving animals to nets or to shore). In Japan, the capture may be secondary to annual capture of the animals for slaughter for human consumption. There, animals are driven into shallow water and, over some time, killed by harpoons or trapped in nets. The annual hunt is thought to cause considerable fear and distress, especially because of dolphins' high degree of cognitive development and it is widely opposed by conservation and animal welfare groups.
- Wild-caught marine animals also have a shortened lifespan once in captivity.
- Training methods have been of concern too, including the need to use remote stimuli (and remote reinforcement) to encourage the desired behavioural display in dolphins, sea lions and others. However, for practical reasons and perhaps also because performances are for the public, training methods are mainly positive, i.e. based on the principles of learning and involve reward, not punishment.
- Although captive animals are protected from predation and environmental extremes, many
 people would argue that these hazards are 'natural' risks for which the animals have been
 equipped by evolution. Removal of natural hazards is unlikely to compensate for the severe
 behavioural and spatial restrictions placed on free-ranging marine mammals in captivity.

Slide 18:

As with circuses and bullfights, rodeos are deeply rooted culturally. Welfare concerns are that animals in fiestas and rodeos are subjected to unnecessary distress, including goading of the animals to maintain their 'wild' interactions with humans.

Rodeos can consist of various events, including calf- or steer-roping, steer-wrestling and bucking events where the contestant tries to stay on a bucking horse or bull. All of these events can cause severe injuries to the animals and can involve practices, such as prior injury or harm, to make the animal appear more wild.

Note that the performing animals may be very valuable and, therefore, they may be well cared for. However, animals who are used for training may not be well looked after. For example, some rodeo horses are worth tens or even hundreds of thousands of dollars – they are too valuable to be mistreated. Consequently, animals of lesser value are used for the rider to practise on, and they may not be well treated. Alternatives to animals for practising on may include bucking machines. However, they do not permit the rider to practise other rodeo activities, such as roping or wrestling cattle.

Slide 19:

We shall now consider the welfare of horses who are used in performance sports for entertainment, e.g. dressage, show-jumping, cross-country eventing, polo, racing with jockeys (thoroughbred racing) and racing in harness (standardbred racing or 'trotting').

The main welfare concerns in these sports are listed on the slide. Many have not been thoroughly studied yet as they have been part of the traditional care and use of horses for many decades or centuries. However, more research is now being done on them.

First, public concern is usually about injuries or deaths that are seen during the competition. For example, in the UK an annual race over fences, the Grand National, is associated with deaths and injuries every year because of factors such as the size of the fences, the angle of the course, the distance of the race (approximately 6 km), and the number of horses taking part. However, other welfare concerns that the public may not be aware of in equestrian sports include the following.

- Use of invasive interventions that affect cosmetic appearance e.g. tail-docking or tailblocking. The latter involves injecting alcohol into the base of the tail where it degrades myelin, resulting in the horse having very limited local innervation which means a low, flat tail carriage and reduced swishing of the tail.
- Training and riding techniques that involve punishment or extreme control: dressage is a
 particular instance, and the International Federation concerned has required the use of
 double bridles and spurs in all horses competing. Tight nosebands are also permitted, as
 these prevent the horse from holding his or her mouth open during competition, but seem
 likely to cause some degree of discomfort.

- Training methods for dressage include using sustained pressure on the reins to cause the horse to hyperflex the neck, so that the muzzle almost touches the horse's chest. This is a desirable position of the head for competition, and is called the *Rollkur posture*. It is controversial as, in addition to limiting the horse's vision and causing wear of the cervical vertebrae involved, the training and posture are thought to cause pain and fear, and to result in physical and behavioural limitations that may contribute to 'wastage' of horses who are not ultimately successful in competition. A study of 15 horses who had not previously been exposed to Rollkur positioning indicated that they preferred a natural position to hyperflexion.
- General riding style: an epidemiological study of 447 horses in Switzerland (Normando et al., 2011) suggested that horses ridden in the English style (i.e. with relatively high stirrups and less ability for the rider to use his or her thighs to maintain balance and control the horse) were more likely to have stereotypic behaviours than horses ridden in the Western style. This association also depended on breed, and was most marked in horses who did not have free access to a paddock for at least six hours a day
- Riding techniques in racing: the use of spurs and the whip to control horses and make them run faster. Many horse-racing bodies are self-regulating and have rules about what constitutes the over-use of whip or spurs, but the concern remains.
- Extreme challenge in equestrian sports: the Grand National race is one example. Another
 is endurance riding, where horses cover many kilometres each day. The speed and agility
 required of polo ponies can also challenge the metabolism and musculoskeletal system. In
 all such cases, horses risk acute or chronic injury and metabolic stress.

Slide 20:

Other horse-related welfare concerns are listed on the slide. They include the following.

- Transport to the competition venues is another potential welfare concern, especially if the vehicles are not suited to the climate or road surface.
- Some horses are reluctant to get into and out of horseboxes. Some reasons for this may include the angle of the ramp, shadows, etc. the same principles as outlined for the transport of livestock, in Module 25. However, more research is needed in the case of horses. One study (Kay & Hall, 2009) of horses transported on narrow winding roads, for 10 km, indicated that transport in isolation was stressful and suppressed feeding behaviour, but that providing an acrylic mirror opposite the horse's head reduced signs of stress.
- Housing is a further concern. Typically horses are housed individually, either tied in relatively
 narrow but often open-sided stalls, or in loose boxes typically with solid walls. The first kind
 limits movement, but permits some visual and physical contact if other horses are in the
 same stable-block. The second type permits more movement but can limit social contact.
- The study from Switzerland noted earlier, and other studies, have found that prolonged stabling in isolation and lack of access to pasture are associated with an increased risk of stereotypic behaviours such as weaving. Locomotory stereotypies such as weaving and box-kicking are more likely to reflect frustration at confinement.

- Methods to stop crib-biting are also a welfare concern, as the behaviours are typically highly motivated and the inability to express them may cause suffering which was not present when the behaviour was allowed. For example: a study of eight crib-biting horses indicated that the average force that they exerted during crib-biting was enough to lift approximately 30 kg. However, because crib-biting can cause overdevelopment of the neck muscles and is seen as bad for horses, special collars or muzzles may be used to prevent it, as well as the surgical removal of certain neck muscles (this is known as a modified Forsell's procedure) or electrifying the surfaces the horse bites on. All of these methods can cause suffering and, in the latter two cases, pain.
- Feeding may also be inappropriate and affect welfare. For example, an excessive amount of
 concentrate food tends to produce a low gastric pH and predispose animals to ulceration.
 Crib-biting is associated with salivation, and may help to relieve discomfort from such
 ulceration. A further, more general, problem with performance horses is that the lack of
 opportunity to express foraging behaviour and lack of a variety of forage may together
 predispose horses to locomotory stereotypies and wood-chewing.
- A final welfare concern is that horses may be repeatedly sold on, with no one trainer or owner taking responsibility for the care of the horse if tha animal's breeding, training and husbandry do not ultimately result in success in competitions.

Slide 21:

This slide looks more generally at the welfare of horses and other animals involved in racing.

The racing of horses and other species such as dogs and camels has deep and ancient cultural roots, e.g. in countries such as Ireland and Saudi Arabia. Today, the standard of care that animals receive may be relatively high for some animals. For example, in many countries, thoroughbred racehorses have relatively high standards of care that are closely regulated. However, the standards for standardbred racehorses ('trotters') and greyhounds are not so high.

This difference reflects the economic class of the spectators. However, in many countries, racing of all species used has huge economic value, and is sustained by gambling, both at the track and in betting shops.

Despite regulation, many racehorses endure injuries (mainly fractures and tendon/muscle damage) either during races or during high-intensity training (e.g. 'bucked shins' in young horses who are trained intensively: the periosteum of the third metacarpal tears away from the bone).

Selective breeding may also predispose animals to injury, as some injured horses who have won big races and then become injured are 'retired' and used for breeding, which perpetuates any genetic predisposition to certain kinds of injuries.

A further concern is that thousands of horses are euthanised or slaughtered when they no longer perform well enough; while this is not in some ways different from our use of farm animals, it causes moral unease as slaughter is used to dispose of animals when they cease

to have value to us, rather than when their value is maximal. In some countries, there are very few abattoirs that will accommodate horses, and they must be transported for long hours or sometimes days before reaching the slaughterhouse. That raises the same welfare concerns as outlined in modules 16 and 25 on the slaughter and transport of livestock.

Greyhounds can also suffer severe musculoskeletal injuries and, as many do not have high economic value, their owners may not always be able to provide them with optimal veterinary care, rest and physiotherapy.

The care and welfare of unsuccessful dogs is another concern, and many may be killed inhumanely. The slide shows data from the UK, illustrating that ~70 per cent of dogs who leave racing each year may be euthanised.

However, adoption programmes are also used in some countries. Clearly, the adoption of former racehorses is less easy because of their size and high need for specialised care.

A further point with dog racing is that, depending on the type of racing, prey species may be used to train the dogs, and used in the race itself, which is frightening for them and may result in a distressing death.

Slide 22:

To sum up: in this module we are looking at an overview of the main welfare concerns related to the common use of animals in entertainment.

We started by recognising that such uses can cause ethical unease, and we briefly reviewed the main ethical positions that might be applied to this use of animals. We then reviewed the main problems and benefits of using animals for entertainment, both for the people involved and the animals.

Since then, we have been focusing on the main animal welfare concerns for animals used in entertainment.

We started by focusing on issues in dog fighting, cock fighting and bear baiting.

Then we looked at using animals for performance – dancing bears, marine animals, circuses, rodeos and, finally, spending some time on the many uses of horses for performance-based entertainment.

Although such use of horses is widespread around the world, we noted that there has been relatively little research carried out into much of it and that there is a range of concerns including on well-established methods of training, styles of riding and housing.

We shall move on to look at the third and fourth categories of animals used for entertainment: animals in zoos and animals used in tourism.

Slide 23:

Zoos, animal parks and animal collections are a global feature of the interaction between the public and exotic, wild, rare or dangerous animals. The conditions in which these animals are kept:

- influence the public view of the 'value' of these animals. Increasingly, zoos promote teaching about natural history and conservation, as well as breeding. However, some promote the view of animals as non-sentient and a spectacle
- reflect the social and economic 'value' placed on the animals, and the degree of public concern for good animal welfare.

Welfare concerns for animals kept in zoos include:

- mortality and morbidity associated with wild capture.
- confinement potentially stressful for any species, whether domesticated or not. However, as most zoo species are either wild-caught or not fully domesticated or naturally adapted to zoo conditions, there is a high probability that they may suffer from particular stress caused by factors listed on the slid
- lack of relevant sensory stimuli (light, sound, smell, substrates)
- restricted movement, feeding and other behavioural opportunities
- lack of area to retreat to/hide in
- forced proximity to humans
- too much predictability
- too little environmental control.

The effect of these stressors may manifest itself as abnormal repetitive behaviours or a very restricted range of behaviours, as well as a reduced lifespan and low reproductive success in some species. Such developments undermine the purpose of zoos, as an animal showing abnormal behaviours is of little educational value to the public, and reproductive failure does not benefit the species as a whole.

Slide 24:

Environmental enrichment has been developed as an approach to help reduce the occurrence of such behaviours and to enhance the ability of zoo animals to cope with confinement. Module 15 provides more information on that. Note that the ethology of some species includes aspects that exceed the capacity to provide for them in captivity. For example, a critical ethological review and research suggests that large carnivores have such a large hunting range that they cannot adapt adequately to the limited range that even the best zoos can provide. This was highlighted in a classic paper about the welfare of bears in zoos (Clubb & Mason, 2003).

A further concern is that the ability to provide truly enriched environments for wild animals in zoos is limited. However, some zoos, with sufficient resources, have made progress in providing for the diverse needs of wild species, and some zoos do contribute to knowledge, research and breeding programmes for some species. On the other hand, it is thought that relatively few captive breeding programmes may be effective – therefore, any suffering undergone by zoo animals may not benefit the species either (with regard to the 'respect for nature' ethical position). However, research on successful captive breeding continues in order to overcome that, e.g. looking at factors such as the risk of breeding programmes tending to select genotypes that may be less well adapted to life in the wild, following eventual reintroduction.

However, there are many zoos around the world where the conditions in which animals are kept have not altered significantly for the last two hundred years when 'bestiaries' and caged collections (e.g. royal collections) put wild animals on display as curiosities, and as public displays of wealth and of the exotic.

Slide 25:

We shall now look at the welfare concerns in the fourth category, that of using animals for entertainment (specifically, the use of animals in tourism).

In some countries, immature animals of wild species are used as photographic models, so tourists can have their pictures taken with, for example, a chimpanzee. Immature animals are used because they are less likely to be aggressive, and they are not as strong as adults.

The welfare concerns noted under zoo animals and circus animals also apply here:

- wild capture
- inadequate husbandry
- lack of domestication limits adaptability
- life 'on the road' means that housing is likely to be poor
- normal behaviours are suppressed
- confinement, often alone, may lead to signs of depression and to stereotypic behaviours.

Slide 26:

Other concerns include:

- the seasonality of the tourist trade, such that animals may not be treated well or given even more freedom during weeks or months when there are few tourists – their owner may need to do other work in order to earn a living
- as the animals get older, and with the ongoing stress of captivity, they may become aggressive. This may lead the owner to sedate them or abandon them
- there is a high risk of disease in the animals, as owners may often be relatively poor, and local or international veterinary knowledge for many species is inadequate for proper health management.

Slide 27:

Another use of animals in tourism is for rides. Donkeys, in particular, may have to bear much more weight than they can safely handle.

More generally, a survey of 10,000 working equids in nine different countries (e.g. Guatemala, India, Ethiopia) noted that animals used in tourism were often in poor condition due to, e.g. lameness, low body condition score (BCS), dehydration and lack of shade. They also showed signs of fear of people, being aggressive when approached by the researchers.

Educating tourists and animal owners alike might help to improve the welfare of those animals, and government subsidies might help with this. It is notable, that anecdotally, many of the same tourists would not consider riding a donkey down the road in their own country.

Slide 28:

We shall finish this lecture by considering how to improve the welfare of animals used in entertainment. Legislation seems essential:

- to license premises where animals are kept and used. Such licensing is in place in many jurisdictions in regard to wild animals, but is often not used for more long-standing use of domesticated animals – such as racehorse stables
- to prohibit some practices such as killing and depending on the public ethic use of animals in circuses. For example, Pakistan's Prevention of Cruelty to Animals Act (1890) in principle prohibits bear baiting.

However, effective legislation requires many factors to be correct, from the wording to the resources in place for enforcement, to independence of the enforcement body, to penalties that are strong enough to deter people from breaking the law. Bear baiting is still practised in Pakistan despite a long standing piece of legislation. The many challenges to useful animal protection legislation are covered in detail in Module 5.

Slide 29:

Non-governmental organisations (NGOs) can also help to improve the care of animals used in entertainment in the following ways:

- they can support or start boycotts of circuses or zoos (although these are often ineffective)
- they can campaign and lobby to raise public and political awareness of issues
- through education, NGOs can allow people to make informed judgments on issues, and relate their local experience to global standards
- they can promote the allocation of resources to maintain effective policing of existing legislation, and the creation of new laws.

Slide 30:

You now have an overview of the ethical and other animal welfare concerns in the use of animals for different types of entertainment, and some understanding of why those concerns may or may not be widely shared.

The main points are:

- that our use of animals for entertainment often denies or restricts fulfilment of their basic needs
- some uses are predicated on killing the animals
- some wild species are not suited to life in captivity or in entertainment, e.g. none are suited to circuses, and many are not suited to zoos
- the entertainment industry varies from large to small enterprises, and gambling typically drives many of them
- much more research is needed on many aspects of animal use, which may be so well established that related problems may not be noticed, by veterinarians or the public
- this is particularly the case with competition horses, and issues such as riding styles and training methods. It also applies to zoo species.