Guide to good animal welfare practice
for
the keeping, care, training and use of donkeys and donkey hybrids

This guide has been produced in 2018/19 by the voluntary initiative group on equines under the EU Platform on Animal Welfare. The positions expressed in this guide do not necessarily represent in legal terms the official position of the European Commission.

The guide presents good animal welfare practice for the keeping, care, training and use of donkeys and donkey hybrids. It is not meant to replace, contradict or put into question any existing legislation, charter, guide or guidelines

Photos are used in this guide to illustrate some of the conditions, which are described. They should not be considered to illustrate the only solution to the conditions described.

Photos used in the guide are kindly granted from:

Photo no. 2: General Direction for Animal Health and Veterinary Drugs – Ministry of Health Italy

Photos in annex 2: Source: AWIN, 2015. AWIN welfare assessment protocol for donkeys. Doi: 10.13130/AWIN DONKEYS_2015

All other photos: The Donkey Sanctuary & Donkey Sanctuary Ireland

Content

1. Introduction

In 2014 the European Commission held a meeting on the welfare of equidae, where both Member States and stakeholders from the equine sector attended. The discussions during this meeting revealed that there are challenges concerning equine welfare in the European Union. As a consequence of this, World Horse Welfare and Eurogroup for Animals prepared the report "Removing the Blinkers", which illustrated the welfare challenges in more detail.

On 14 March 2017, the European Parliament adopted a resolution on responsible ownership and care of equidae. In its resolution, the European Parliament calls upon the European Commission to develop European Guidelines on Good Practice in the equine sector for various users and specialists, drawn up in consultation with stakeholders and organisations from the equine sector and based on existing guides.

The OIE (World Organisation for Animal Health) adopted a chapter on welfare of working equids to the Terrestrial Animal Health Code in May 2016.

Based on the above background and the principle that every animal has to have a "life worth living" it is necessary, overall, to minimise their negative experiences and to provide them with opportunities to have positive experiences. This guide on the keeping, care, training and use of donkeys and donkey hybrids has been produced to help achieve this.

Across Europe, the purpose of keeping donkeys is constantly changing. While they are still used as working animals in some parts of the continent, elsewhere they are kept as pets, or used for leisure activities, therapy programs, or milk and meat production. The regulatory provisions on the keeping and care of donkeys differ between Member States. Only a few have adopted specific legislation on the protection of donkeys and donkey hybrids. In some Member States guidelines have been drawn up either by competent authorities or stakeholders. Common EU guides are believed to help enhance the welfare of donkeys throughout the Union.

It is difficult to assess the number of donkeys in the EU with any certainty. In July 2018, FAO estimated that the number is 251,000 donkeys. As official databases do not report the specialisation (i.e. meat, milk) of the different farms, it is almost impossible to precisely define how many donkeys are kept for different purposes.

2. Scope

This guide is addressed to every individual, who owns one or more donkeys or donkey hybrids, has donkeys or donkey hybrids in their possession or in any other way is engaged in the keeping, care, training and use of donkeys or donkey hybrids. It is the responsibility of the owner or keeper of one or more donkeys or donkey hybrids to be aware of the requirements of their welfare, and thus manage them in an appropriate manner.

Although this guide in general applies to all categories of donkeys, it does not address working donkeys and working donkey hybrids in detail, as these are already covered by OIE chapter 7.12 of the OIE Terrestrial Animal Health Code. The guide does not address horses or ponies, as they may have behaviours and needs different from donkeys and their hybrids (for these see: Guide to good animal welfare practice for the keeping, care, training and use of horses).

The guide addresses areas where there is no specific EU legislation on donkeys or donkey hybrids. This means that transport, methods of killing, including slaughter, identification and registration, and zootechnical and genealogical matters are not addressed. Nor does this guide address donkeys and donkey hybrids that are kept under wild or semi-wild/feral conditions.

In this guide the term "donkey" is used meaning both a donkey and a donkey hybrid (namely a mule or hinny) unless otherwise stated.

3. Biological characteristics and behaviour

3.1 Ancestry

Today's domestic donkey and many of the world's feral and semi feral donkeys are descended from the African wild ass (*Equus africanus*). A separate branch of wild asses evolved in Asia, no species of which has been domesticated but whom share many characteristics with African wild asses. African wild asses evolved to live in semi-arid environments with sparse, highly fibrous food sources and limited access to water. The behavioural repertoire of the wild asses and their descendent, the domestic donkey, has enabled these species to thrive in these conditions and renders their behaviour significantly different from that of horses and ponies. Knowledge of natural donkey behaviour derives mainly from studies of wild and feral donkeys that live under natural or semi natural conditions with no or little human interference.

Photo 1. Knowledge of the natural behaviour of donkeys derives mainly from studies of them in their natural habitat.

The donkey was domesticated approximately 6000 years ago in North Africa. Although certain characteristics, such as size, type, colour and temperament have changed, the donkey has retained much of its ancestor's behaviour, e.g. social and feeding behaviour. The donkey is, through evolution, adapted to a life as a prey animal living in mountainous, arid terrain; this is reflected in donkey behaviour, physiology, anatomy and the way donkey senses have developed.

3.2 Vision

Donkeys have a wide-angled vision, which enables them to detect movements almost all around them. There is only a small "blind area" just behind them. There is also a small blind area in the shape of a triangle in front of the tip of the nose, which means that the donkeys does not see what they eat, but feels it with the whiskers.

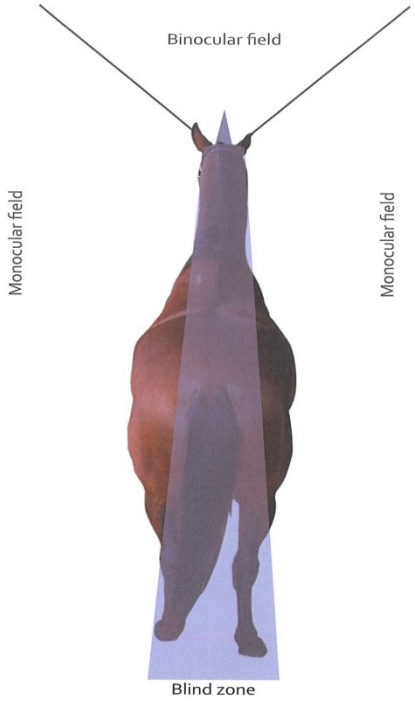


Photo 2. The field of vision of an equine, showing the binocular vision in front, the monocular vision at the side, and the blind spot behind and underneath the equine.

In the area, where donkeys see with both eyes (binocular vision) they are able to see objects clearly both close by and at a distance. This type of vision makes it possible for donkeys to identify feed items (vegetation) close by, and at the same time detect possible dangers at a distance.

3.3 Flight and fight reaction

Donkeys have both 'flight' and 'fight' instincts. In their natural habitat, they often live singly (in particular stallions guarding a defined territory). Whether they live in pairs, small groups or singly, they are not so swift as horses, so fleeing is often not the best defence mechanism. Fight behaviours are therefore more strongly established in donkeys than in horses.

This can lead to conflict between donkeys and other domestic animals and may lead to a misunderstanding of behaviour when handled. Donkey hybrids tend to have the behavioural

repertoire of both the horse and the donkey and they may rapidly switch between the flight responses of a horse and the fight responses of a donkey making their behaviour appear unpredictable to inexperienced handlers.

3.4 Hearing

Donkeys have excellent hearing evolved to help solitary animals interact over large distances in their natural habitat. Due to their ability to move the ears independently they are able to localise sounds/noise, and they react to sudden or unusual noise normally by increased alertness and a more delayed response than that one might typically expect from a horse.

3.5 Social interaction and comfort behaviour

Due to the scarcity of resources found in their natural environment, donkeys do not have a tendency to form the large herds more typical of other equidae, instead forming small groups or pairs, or even living solitary lives, searching for food and water and only coming together to breed or when environmental resources are plentiful. Jacks may hold territories to increase the chances of breeding with females, such territorial behaviours may still be apparent in the domestic donkey. Despite the solitary life seen in resource-limited environments, most domestic donkeys prefer to form pair bonds with members of the same species and are highly flexible in their group size and structure when resources allow, for example large (>20 individuals) herds of donkeys are not uncommon. While donkeys generally prefer the company of other donkeys, they will occasionally form a strong bond with horses, ponies, donkey hybrids or other species. Donkey hybrids tend to prefer the company of other hybrids or of the maternal species.

Lack of social contact for domestic donkeys and their hybrids is likely to lead to anxious and depressed animals. Social contact with other donkeys is particularly important for foals and youngsters to ensure they do not develop inappropriately aggressive or boisterous behaviour towards humans and other species.

Photo 3. Social contact is particularly important to Young donkeys

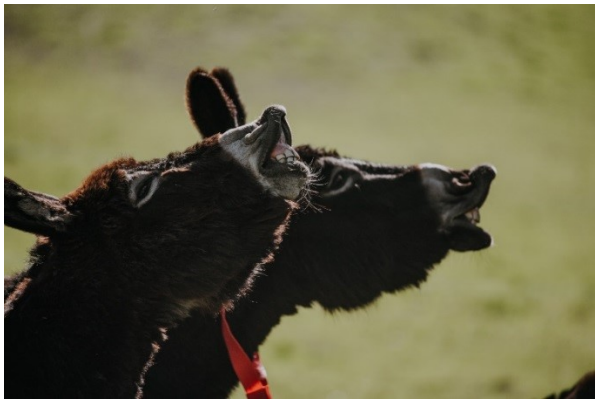


Photo 4. Flehmen enables donkeys to investigate a scent more closely

Donkeys communicate through senses of vision, sound, smell and posture and touching. For example, donkeys may show flehmen response when investigating odours and tastes of particular interest. Touching can be both aggressive (kicking and biting) and friendly (grooming). Some of these

behaviours are innate, while others need some learning at a young age. Young donkeys, who are kept isolated, may have difficulty in engaging with other donkeys if introduced into a group at a later age.

Donkeys carry out different types of comfort behaviour. This behaviour serves different purposes such as a reaction to itching of the skin, to keep insects away, to keep the coat in a good condition, or for a social purpose. Comfort behaviour is exhibited even in donkeys, who are groomed regularly. Comfort behaviour includes nibbling with the teeth, scratching with a leg (typically a hind leg), rubbing against an object, rolling in sand, mud, snow etc., body and head shaking, and mutual grooming where two donkeys groom each other (typically on the withers or back).

Photo 5. Rolling in a mud patch.

Photo 6. Mutual grooming and rubbing

Although donkeys are social animals, they have a social space, which defines the distance they wish to keep to other donkeys. This distance is individual, and is dependent on age and on how well the donkeys know each other and whether they are part of a pair bond. In general, donkeys are more tolerant of close proximity than horses are when kept in stable groups. Donkeys may also be seen standing close together when trying to keep insects away. Foals and young donkeys appear to have a very narrow or less developed social space, and they may be seen lying close together. When donkeys are group housed, it is important to take social space into account when deciding how much space they should be given.

Photo 7. Keeping close proximity

Photo 8. Donkeys need to lie flat on their side with extended legs, neck and head to enter deep sleep

Donkeys have different phases of sleep. In particular, donkeys require a phase during every 24 hour period, where they are lying down on their sides with their limbs extended and their muscles relaxed. To achieve this they need to feel safe, have enough space and a dry lying area. It is important to keep this in mind for the size and type of indoor accommodation for donkeys.

3.6 Foraging and need for movement

Under natural conditions, donkeys spend most of the day seeking feed. Depending on feed availability, they may move over large distances. In their natural environment with limited natural resources, donkeys regularly walk distances of 20km in 24 hours. This innate need for movement is still apparent in domestic donkeys who if kept in a restricted area for a certain time which limits their ability to fulfil this motivation will express this abundantly once they are allowed free movement. Especially for foals and young donkeys, free movement and playing with other donkeys is important for the development of muscles, joints, tendons, and bone structure. Furthermore, free movement will enhance their balance and coordination.

Donkeys are herbivores. To increase their potential source of food in their natural environment, donkeys have evolved to be browsers as well as grazers, with woody shrubs and trees being potential food sources when grasses and other low vegetation are not abundant. Donkeys are trickle feeders; wild donkeys access suitable and sufficient feedstuffs by spending many hours (14—18 hours a day) foraging. This more or less continuous feeding suits the digestive system of the donkey who has a relatively small stomach but voluminous large colon and caecum. In the colon and caecum there is a microbial breakdown of feed, especially fibrous materials, which was not digested in the small intestine.

3.7 Stoic and abnormal behaviours

The term 'stoic' is often used to describe donkey behaviour and can be misleading. Stoicism is typical predator-avoidance behaviour in a prey species such as the donkey; appearing strong and normal reduces the chances of a predator singling a donkey out. This stoicism (or 'masking behaviour') should not be (mis)interpreted as a lessened ability to experience pain and distress. The donkey's behaviour is different from that of horses and ponies and it is crucial that this is taken into account when training, using, caring for or treating donkeys. Their stoic nature may lead to missing or misdiagnosing the severity of painful conditions or may lead to handlers not understanding the donkey's emotional state. A donkey is likely to show fewer or subtler signs of pain and distress when compared with a horse experiencing the same clinical issue.

Photo 9. The stoic donkey might just look dull but in reality be masking a genuinely life-threatening condition

Abnormal behaviours, such as stereotypies, are seldom or never seen in donkeys that live under natural conditions. The development of abnormal behaviours is a sign that the environment or the conditions in which donkeys are kept or have been kept do not fulfil their needs. Stereotypic behaviour commonly seen in other equidae such as weaving or crib biting are very uncommon in donkeys, who may exhibit compromised welfare in subtler ways such as becoming apathetic and withdrawn. Many perceived 'abnormal' behaviours exhibited by donkeys may be natural behaviours, which occur with a normal or abnormal frequency such as aggressive behaviour to donkeys or humans or attacking smaller or unknown species. Development of abnormal behaviours differs between individuals.

4. Contact with other donkeys and other species

4.1 Contact with other donkeys

As mentioned above, donkeys are socially flexible animals who when resources allow seek to live in small family groups. Donkeys frequently form very strong pair bonds, which may last a lifetime. Pair bonded donkeys may be distressed by separation by a fence and in such cases taking a donkey out of sight or touch of a companion can seriously compromise welfare and make safe handling of individuals difficult. Companion bonding in donkeys is important when considering selling, relocating (for example for veterinary treatment) or killing an animal as animals, who are separated may be at risk of developing hyperlipaemia; a disease predisposed by stress which has a high mortality rate in donkeys. Donkey hybrids tend to prefer the company of other hybrids or of the maternal species and do not appear to demonstrate such strong companion bonds as donkeys.

Photo 10. Donkey hybrids generally prefer the company of other hybrids or the maternal species

It is recommended that domestic donkeys have direct social contact with their own species for the majority of the day (individuals may be trained to accept isolation during work tasks). This makes social grooming possible, and allows for the development and expression of normal social behavioural patterns.

4.2 Contact with other animals

The donkey has a more developed fight response to that of horses, so in the donkey's natural environment any unfamiliar species entering the donkey's territory or range may easily engage the

donkey's fight response. In a domestic setting, this natural fight behaviour may transfer to small livestock species, domestic pets (dogs, cats) or wildlife entering the donkey's environment. Care should be taken to familiarise donkeys with other species, which they will come in to contact with and to ensure that introductions to other species are done in a safe and controlled manner, and handlers should not mistake alert behaviours (e.g. sniffing, nudging and braying) with those of friendliness towards the other species. Donkeys familiarised with other species may live alongside them with no problems but in general it is recommended that donkeys are housed only with equidae and where necessary other mature, large herbivores.

5. Accommodation

5.1 General considerations

Donkeys are a social species. The need for contact with other donkeys should be kept in mind when designing accommodation for donkeys.

Furthermore, any shelter, stable or housing should be of adequate dimensions to allow all donkeys to lie down and rest at the same time in a natural position undisturbed. Accommodation should permit free movement to each donkey, so that at all times the donkey is able to turn around, lie down in a natural position, get up unimpeded, and stand in a natural position. In group housing systems there should be a possibility to isolate ill or injured donkeys. The design of the group housing system should ensure that all donkeys are able to escape from aggressive companions and access feed and water at any time.

Although there are differences between breeds, height at withers or bodyweight may be used as a relevant measure when designing accommodation for donkeys. The accommodation should be constructed and maintained so that there are no sharp edges or protrusions likely to cause injury to the donkeys. Materials with which donkeys may come into contact should not be harmful, including toxic, to the animals and should be able to be thoroughly cleaned and disinfected.

Photo 11. Stable door with a smooth protective edge

The lying area for donkeys should be non-slippery and provided with an adequate amount of suitable bedding material, to ensure a dry and comfortable resting area.

Passageways should have a non-slip surface and be wide enough to allow donkeys to pass each other safely and without difficulty. The indoor height should allow the donkeys to stand in their natural position and carry out normal head movements.

If jennies are housed singly close to foaling, they should be able to see, smell and interact with other donkeys. When housed singly, jacks should have at least permanent visual and olfactory contact with other donkeys and have access to pasture or a paddock to permit grazing and free movement.

When accommodation for donkeys is designed, constructed or refurbished, the risk of fire should be taken into consideration. This is especially important with regard to electric installations. The materials used should, where possible, be fireproof. The person responsible for donkeys should have a contingency plan in case of fire or other natural disasters (e.g. floods).

5.2 Indoor Climate

The indoor climate is important for the welfare and health of donkeys. An inappropriate indoor climate can be damaging, especially for the respiratory system of donkeys, and the benefit of fresh, clean air should not be underestimated. Dust levels, relative air humidity, temperature and gas concentrations should therefore be kept within appropriate limits through the provision of proper and adequate ventilation – ideally natural although in some cases forced/mechanical systems may be required, which gives a good and evenly distributed airflow through all parts of the donkeys' accommodation without unnecessary draught.

6. Turnout

Donkeys should be protected against adverse weather conditions, and they should in the best possible way be protected against possible predators.

6.1. Shelter

Donkeys have evolved to live in semi-arid environments and research has shown that they are less adapted to the wet conditions experienced in temperate climates and make use of shelter more frequently than other equidae under such conditions. Sufficient shelter should be available all year round; in the summer to provide donkeys with shade from the heat of the sun and protection from flying insects, and in winter to protect them against wet, windy and cold conditions. The shelter should be large enough to provide protection to all donkeys at the same time.

Photo 12. A shed and hard standing make ideal shelter for donkeys in winter conditions

Photo 13. A rug is a useful supplement to man-made shelter in donkeys that are elderly or unwell

Sufficient shelter for donkeys is rarely provided entirely by the natural surroundings, such as trees and hedges, particularly in winter. It is therefore recommended that donkeys throughout the year have access to purpose-built shelters with a non-slippery and dry floor and a resting area with an adequate amount of suitable bedding. Where donkeys are elderly or unwell they may also benefit from waterproof and breathable turn-out rugs, depending on weather conditions. However, rugs should not be used to replace a shelter as they do not provide protection to the areas of the donkey's body which are most prone to heat loss (e.g. the ears and rump). If rugs are used, they should be designed for the unique shape of donkeys and be well fitted, checked daily and should be of a type which corresponds to the ambient temperature. Rugs designed to protect against flies and midges may be useful for donkeys suffering from sweet itch, sunburn or insect harassment but do not replace the need to provide shelter all year round.

6.2. Pasture / paddocks

It is recommended that all donkeys should be given daily access to outdoor turnout areas or pasture, ideally with other donkeys, in order to fulfill their need for free movement and social contact. However, there may be situations where veterinary advice or extreme weather conditions make this contra-indicated.

Photo 14. A group of donkeys on well drained pasture

Paddocks and pastures should be well drained in order to avoid muddy conditions. As a guideline there should be a minimum of approx. 0.25 hectare per donkey to provide year round grazing. They should be kept clear of dangerous objects and regularly checked for poisonous plants, which should be carefully removed. Fences should be clearly visible to the donkeys, be well maintained, and of a sufficient type and height to prevent donkeys from escaping. Barbed wire should not be used. If required a taut top strand of plain wire is acceptable. Donkeys should be introduced to new types of

fence during day-time, and should be supervised for an appropriate period of time after being introduced to a new fence type or after being moved to a new paddock or pasture.

When donkeys are introduced to new companions, they should be supervised for an appropriate period of time, until aggressive interactions have ceased and the donkeys resume feeding, when they are grouped together in a paddock or on pasture.

Tethering is not recommended. It restricts the free movement of the donkey, and it does not allow for social contact with other donkeys. Furthermore, there is a risk that tethered donkeys will become entangled in the tether and injure themselves.

The use of hobbles should be discouraged.

7. Care

7.1. Knowledge

Donkeys should be cared for by a sufficient number of persons, who possess the appropriate ability, knowledge and professional competence.

7.2. Inspection

All donkeys, including those in paddocks and on pasture, should be inspected once a day and preferably more often. Ill or injured donkeys, jennies in late pregnancy, newborn foals, newly introduced donkeys, jacks during the mating season and geriatric donkeys should be inspected more often.

Any donkey, who appears ill or injured, should be given appropriate care without delay. If the donkey does not respond to such care, or if the donkey is in pain, veterinary advice should be obtained without delay. It is important to note that donkeys display subtle signs of pain and disease and unless symptoms are minor (for example a small graze) veterinary advice should be sought at the first suspicion of a problem. Where necessary, ill or injured donkeys should be separated in suitable accommodation.

7.3 Disease prevention

Vaccination at least against tetanus is strongly recommended. Donkeys are very susceptible to this disease, which is caused by a bacterium (*Clostridium tetani*). This bacterium is often found in the soil of donkey premises. It enters the body through wounds, including small penetrating wounds, which may be difficult to detect, or through the navel in newborn foals. Even though affected donkeys may survive and recover, especially if the disease is diagnosed in an early phase, others often have to be euthanized on welfare grounds.

Vaccination against influenza is recommended for donkeys.

Vaccination against other diseases, such as herpes may also be advisable depending of the geographical location of the donkey. Advice on this should be sought from a veterinarian.

Intestinal parasites can be a welfare problem causing weight loss, colic and even deaths. This is especially the case for foals and young donkeys, and immunocompromised donkeys. A monitoring and targeted programme should be established according to advice from a veterinarian.

Appropriate pasture or paddock management practice, in particular collection of faeces, is indispensable in order to reduce the parasitic burden and should always be of high priority in an endoparasite monitoring and targeted deworming programme. Donkeys kept in permanent paddocks where manure is not removed regularly have an increased risk of infestation.

The use in healthy adult donkeys of an anthelmintic without previous laboratory tests or other relevant diagnostic work to establish parasite burdens should be discouraged to counteract development of anthelmintic resistance.

A period of quarantine should be considered before introducing new donkeys on to premises, in such cases it is important to ensure donkeys at least have indirect social interaction (e.g. sight and sound) with other equidae. Equipment should not be shared to prevent the spread of infectious disease e.g. ringworm and strangles.

Prevention of disease transmission should be of high priority in the case of an outbreak of contagious disease in a donkey population. This is particularly important as donkeys often act as subclinical carriers of infectious disease and may not display symptoms as would other equidae. All donkey owners should follow recommendations set by authorities or professional organisations as a minimum standard. This includes isolation of sick donkeys, isolation of affected yards or regions, standards for hygiene and disinfection (collectively known as 'biosecurity'), transport and assembly of groups of equidae (event, shows etc.).

7.4 Veterinary treatment

Veterinary treatment of donkeys follows many of the same principles as those used for horses. However, there are a number of ways in which donkeys differ significantly in their presenting behaviours and clinical signs, drug doses required, responses to medicines and veterinary procedures, and in their physiology and anatomy. In order that correct and effective veterinary treatment is given to donkeys and donkey hybrids, veterinarians and associated professionals may find the clinical guidance contained in the Clinical Companion of the Donkey published by The Donkey Sanctuary to be a useful reference.

7.5. Hoof care

Donkey hooves are anatomically different to those of other equidae. They have a more upright hoof pastern axis and a number of other anatomical differences when compared to the horse. Donkey hooves also have a different microstructure with a more open tubule structure than that of the horse hoof. This means the horn absorbs and holds more moisture. When kept in wet, dirty conditions, the donkey foot is predisposed to hoof problems such as white line disease and abscesses.

Hooves should be cleaned and checked for signs of disease or injuries, such as thrush, cracks or foreign bodies (stones, for example) at appropriate intervals. If there are signs of hoof problems, such as lameness, hoofs should be checked immediately. It is essential that donkeys living in temperate

environments are given free access to an area of hard standing (e.g. concrete) to ensure hooves can dry out and are not permanently waterlogged.

Hooves of donkey kept in farming conditions or as companion animals tend to grow too long unless they are managed by human intervention. It is recommended that only trained professionals with experience of the unique foot anatomy of donkeys should trim their hooves. It is recommended that shoes are only used where donkeys are working and wearing their hooves excessively and where specialist farrier assistance is available. It should be noted that most donkeys work well without the need for shoes. Hooves should be trimmed according to a donkey's work type (as suggested by the veterinarian or the farrier). Hooves should never get more than 1 inch (2.5 cm) longer than they would be immediately after trimming by a specialist farrier. Overlong hooves should be tackled by experienced farriers under veterinary supervision and radiographs should be taken to guide trimming.

Donkeys, even with regular hoof trimming, need to have a proper amount of movement in order to guarantee adequate blood circulation to the hoof and growth of good quality horn.

7.6 Dental care

Donkeys may present a series of oral and dental disorders, affecting animals of all ages but with a natural trend to increase with age. These disorders may be exacerbated in those cases where donkeys present developmental disorders or receive an incorrect diet, not based on roughage.

To avoid these conditions becoming a problem, it is advisable to have the teeth checked at least annually by a trained professional.

7.7. Feed

Donkeys should be fed an appropriate diet of a sufficient quantity to maintain them in good condition (normal weight and a body condition score of 2.5 – 3/5 measured using a donkey specific body condition scoring system, as in annex 2) and to avoid becoming under or overweight and to allow them to express their natural behaviours.

Photo 15. Straw is an invaluable source of roughage for donkeys

Donkeys are highly efficient at digesting fibre of poor nutritional quality. They possess a superior digestive efficiency compared to horses and ponies when digesting highly fibrous roughage such as straw. These adaptations may be beneficial for working donkeys and allow them to thrive on fibre

sources which would be inadequate for horses and ponies managed in the same way. However, this adaptation to survive on poorer quality feed can lead to obesity in companion donkeys when they are mistakenly fed in the same way as horses and ponies. Obesity is also likely where donkeys are kept together with horses or ponies and are not fed and managed differently to their companions. An obese donkey is at high risk of developing serious health problems. Key to the formulation of management and dietary plans is awareness that the requirements of donkeys are very different to those of horses and ponies. Failure to manage this appropriately can lead to health and welfare issues.

The donkey should be fed a diet high in fibre and low in energy and non-structural carbohydrates (starches and sugars). The majority of the diet is best supplied using straws or stover (the leaves and stalks of field crops such as corn, maize or sorghum) and supplemented with a variable proportion of moderate quality hay, haylage and/or grazing depending on what is available locally, the donkey's body condition, the time of year and the prevailing weather conditions. Providing donkeys with opportunities to browse on safe tree branches and shrubs also helps to ensure they can display natural browsing behaviours. Feeding recommendations are often extrapolated from horse nutrition, however, this will result in an overestimate of the nutrient requirements for maintenance and for work.

The donkey should be fed with rations in a trickle-feeding manner throughout a 24-hour period to ensure sufficient chewing time throughout the day and night, as the donkeys' digestive system is adapted to a more or less continuous intake of food with high fibre content. Chewing promotes production of saliva, which acts as a lubricant and acts to neutralise the continuous production of acid in the stomach. To prevent stomach ulcers and enhance gut health donkeys are therefore dependent on continuous access to roughage. It is advised, where possible and when donkeys' dental health is good, that straw is provided *ad libitum*.

A guideline for the daily supply of roughage should be at least 1.3% of bodyweight in dry matter (the majority of which is normally straw) with appropriate supplementary grass, hay, haylage, fibre concentrates or additional straw depending on individual circumstances.

Consuming roughage resembles the natural feeding patterns of donkeys as far as possible. Donkeys should have access to roughage both when housed, in paddocks or turned out on areas without grass. If the donkey has prolonged time without access to roughage (3-4h) it will affect the overall health of the donkey negatively (increasing the risk of colic, gastric ulcers and hyperlipaemia) and may encourage the donkey to develop abnormal and unwanted behavioural patterns.

Although many donkeys can live on a diet of straw supplemented appropriately with grass and / or hay or haylage with supplemented vitamins and minerals as necessary, certain individuals, such as pregnant and lactating jennies, young growing donkeys, working donkeys or donkeys kept for breeding purposes, have higher energy needs due to their level of exercise or basic needs. Therefore, they may need to be supplemented with higher energy, fibre- or oil-based feeds such as alfalfa or rice bran. Such higher energy feeds should be given in small rations divided throughout the day (at least 2-3 meals per day depending on the amount of feed) and the amount should be adjusted to the current level of work for the donkey. The use of cereal grain-based feeds is discouraged in donkeys as their use increases the risk of donkeys developing gastric ulcers, laminitis and colic.

Photo 16. Elderly or infirm donkeys benefit from supplementary feeding with non-cereal based feeds

All feed sources should be of good hygienic and nutritional quality and stored under hygienic conditions: dusty, mouldy or rancid feed should always be disposed of. Feeding equipment should be kept clean and placed in a way that minimizes contamination.

Any feed change should be done gradually over a period of at least two weeks.

For group housing or in paddocks there should be sufficient feeding space to avoid competition and aggression among donkeys.

Care should be taken to make individual adjustments of the daily food supply based on the body condition score of the donkey. See annex 2 for guidelines for body condition scoring.

7.8. Water

Donkeys' need for water depends mainly on the level of activity, ambient temperature, and water content of their feed. Donkeys will typically drink 5 – 10 % of their body weight daily. Lactating jennies and donkeys with a high level of activity such as working donkeys may need more water. In donkeys' natural habitats water is normally in short supply and sparsely located. This has led to donkeys being more thirst-tolerant than horses and being able to rehydrate rapidly without adverse effects. Such thirst-tolerance and the natural adaptations to maintain appetite when dehydrated should not be mistaken for a reduced overall requirement for water, which remains similar to that of horses.

Photo 17. Although relatively thirst-tolerant donkeys should be provided with a source of clean, palatable drinking water

Donkeys may be very particular about drinking from unfamiliar or contaminated water sources leading them to tolerate excessive dehydration meanwhile maintaining a seemingly normal appetite. This may predispose to health issues such as impaction colic. Care should be taken to provide clean, palatable water from suitable containers. In addition, many donkeys appear to dislike very cold water and geriatric or vulnerable animals may benefit from warmed water in the winter months to maintain appropriate levels of hydration. During periods of cold weather, water sources such as troughs and buckets should be inspected several times a day to ensure that they are free from ice and are providing fresh water.

Donkeys should preferably have free access to water, and under domestic conditions should not be without water for more than four hours. This also applies to donkeys in paddocks and on pasture. In group housing or in paddocks and on pasture there should be sufficient drinking space to avoid competition and aggression among donkeys.

8. Handling and training

Persons with responsibility for the use, handling or training of donkeys should have appropriate knowledge, experience and skills so that they know and understand the natural behaviour of donkeys and their specific expressions. Donkeys could display fear reactions if not used to human contact and restraint. If donkeys have the possibility of interacting with humans only in stressful or painful situations (e.g. veterinary visits, dentistry, farriery), they may display dangerous reactions. The donkey has a reputation for being stubborn and unwilling. This is often because the donkey shows reluctance without displaying the body language of the horse or pony. The actual cause of the behaviour is more likely to be fear, pain, lack of motivation or clarity of instruction rather than stubbornness.

Donkeys should be regularly handled in a gentle manner from an early age. Donkeys that have been well handled are more likely to be confident and more motivated to learn new things. Donkeys can be trained to remain calm by gradually and gently introducing them to things that may scare them. Careful, gentle habituation of the animal to strange sights and sounds can help prevent accidents. Young foals should learn to be led by a head-collar, be touched all over the body, to have their feet lifted and remain calm during foot trimming.

Donkeys easily learn behaviours that are closest to their natural behaviour. Methods, which are normally applied when training donkeys, are negative and positive reinforcement. The best results are obtained with positive or combined reinforcement. In positive reinforcement, the donkey is given a reward (e.g. a feed treat) immediately when the donkey responds correctly. In order to teach more complex behaviours, shaping can be used. Shaping is the process of breaking down the final required behaviour, such as calmly picking up feet, into small, manageable, incremental and achievable steps.

Inappropriate training methods may have a negative impact on the welfare of the donkey, and such methods may also lead to aggressive or conflict behaviour, which may compromise the safety of those handling the donkey. Apart from rough and brutal methods, inappropriate training methods also include situations where the trainer is inconsistent and gives conflicting signals to the donkey. Rewards should never be given for any behaviour that could be considered as being pushy or aggressive in any way.

The company of a calm and confident donkey could prove beneficial when a donkey has to be habituated to an unknown environment, for example being loaded for transport or to a novel object, which the donkey could see as dangerous.

The behaviour of a mule reflects both parents; the donkey and the horse. Mules can be less tolerant than donkeys when approached by an unfamiliar person, and their training should start when very young in order to ensure they are able to behave safely with humans.

9. Equipment

9.1 Saddlery, harness etc.

All equipment used to ride, drive, lunge, or in any other way handle a donkey (such as head-collar, saddle and girth, bridle, bit, driving harness, boots, and blinkers) should be kept clean and well maintained. It should be fitted correctly in order to avoid injury, pain or distress, and it should be checked before use. Special attention should be paid to ensure that equipment is appropriate for donkeys as most equipment designed for horses and ponies will require significant adjustment to fit properly and safely on donkeys and donkey hybrids.

Excessive restriction, for example pressure from a very tight noseband should be avoided. The use of a serreta noseband with protruding bumps or 'teeth' is strongly discouraged.

Equipment such as bits, halters, whips and reins are used as to provide tactile signals to the donkey. This equipment should be used with care and patience. It is the responsibility of the handler or rider to ensure sufficient and updated knowledge about equipment and tack and the correct use of it before applying it on a donkey.

Photo 18. Donkey in harness at an equestrian show

9.2 Restraint equipment

In certain situations, it may be necessary to restrain donkeys for their own safety, for the safety of other donkeys, or those who handle the donkey. Means of restraint could, for example, be the use of a twitch under veterinary supervision or a restraining stocks or chute for veterinary treatment.

When a donkey needs to be restrained the mildest method should be applied, and only for the time absolutely necessary. Restraint should never be a substitute for good management and appropriate training. Where necessary to facilitate safe handling for urgent procedures, sedation applied by a veterinarian would be recommended.

10. Working donkeys

Working donkeys play a fundamental role in supporting the livelihoods of millions of the world's poorest people. In particular, working donkeys significantly contribute to agricultural activity; provide transport of food, water, animal feed, goods, construction materials, and for people, enabling the elderly to travel to hospitals and the young to attend school. In addition, working donkeys can be used as a source of manure, meat and other animal by-products. As stated in OIE Welfare of Working Equids chapter 7.12 the welfare of these working equids is often poor because their owners lack sufficient resources to meet their needs or have insufficient knowledge of the appropriate care of equids. Certain environments, such as working in construction industries or in harsh surroundings, may present a particular risk to their welfare.

Photo 19. Working equids often live in harsh environments

As with any other donkeys, their basic needs have to be fulfilled and workload capacity considered. Please refer to the OIE Welfare of Working Equids chapter 7.12 for detailed consideration of the working donkey and donkey hybrid welfare needs.

11. Donkeys used for other purposes

Across Europe, donkeys are used in a number of different contexts and the purpose of keeping donkeys is constantly changing. They are used as working animals (e.g. tourism, transport of goods, pack and cart services, garbage management), but they are also kept as pets, or used for leisure activities, therapy and other animal-assisted activities, or milk and meat production.

No matter the context in which a donkey is used, the recommendations in this guide will apply.

Owning a donkey implies responsibility for the welfare, control and conduct of the animal. Donkeys should be cared for by people with adequate skills and competences. It is advisable that persons who do

not have appropriate prior experience in keeping or using a donkey seek appropriate advice prior to taking responsibility for a donkey.

Below are mentioned some of the challenges which donkeys or their owners may face in relation to milk production, leisure and tourism.

11.1 Milk production

The new millennium has seen a growing number of dairy donkey farms. Although there is no specific legislation on the protection of donkeys used for milk production, guides such as "Dairy donkeys – Good animal management practices for donkey milk production" exist.

Photo 20. Good management practices are essential to the care of dairy donkeys

Areas that deserve particular attention relating to the management and welfare of donkeys in this sector are management of different animal categories (i.e. jacks, foals, milking and dry jennies) on the farms, feeding practices for lactating animals and their foals and separation timing of foals from jennies to allow milking.

11.2 Leisure and tourism

Donkeys and mules are used for leisure activities or in connection with tourism in different ways. They are commonly used to transport passengers or luggage, for trekking, in festivals or to pull carts and wagons.

Photo 21. Passengers should be conscious of the welfare of taxi and tourist donkeys

Tourists may not have sufficient knowledge about donkeys to spot welfare problems, they may not see the welfare of the donkey as their responsibility, or they may repress concerns about what they see because they want to continue their activities. It is therefore essential to sensitize tourists to their responsibility for the welfare of these animals and to ensure that the persons caring for animals have the necessary knowledge and willingness to ensure that donkeys do not carry loads too heavy for too long a period when considering the individual donkey's load-carrying capacity, that donkeys have access to appropriate shade, water and rest, and that good quality equipment is used.

12. Mutilations and trimming

12.1. Tail docking and trimming

Docking the tail and trimming the whiskers and inner ear hairs of donkeys should be discouraged.

12.2. Other mutilations

No other mutilations should be performed on donkeys, except castration, which should only be carried out by a veterinarian and performed under sedation and local anaesthesia or total anaesthesia, in both cases followed by long-lasting analgesia. Hot iron branding should be strongly discouraged. If freeze branding is undertaken, it should be done professionally.

Photo 22. If undertaken, freeze branding should be done professionally

13. Breeding

13.1 Responsible breeding

Owners have a huge responsibility when considering whether to breed from their donkey and what to breed for. The destination of all foals not intended for reproduction should be considered carefully and planned in advance.

13.2 Breeding methods

Donkeys should not be bred in a manner that may entail suffering or injuries. A female donkey may become sexually mature around one to two years old. However, if bred that early it may compromise

their growth; foaling before four years old is associated with a higher mortality of the jenny and / or foal, thus breeding should not begin before 2.5 to 3 years. Oestrous jenny behaviour includes clapping mouth, ears back against the neck, rhythmic eversion of the clitoris, urination in small drops, braying vocalisation, mounting stance and mounting between females.

One jack can realistically serve 10-15 jennies. Two breeding strategies can be adopted: pasture breeding, where one jack is kept free in the same paddock with one or more jennies, or in-hand breeding, where the jack and the jenny are managed by handlers. Adequate space for the retreating behaviour to take place should be provided, as well as turnout time and exercise for jacks.

13.3 Foaling and weaning

The jenny should be kept in the environment where foaling is to take place for at least one month before foaling, in order for her to produce colostral antibodies related to this environment.

Photo 22. Colostrum is the essential health ingredient for donkey foals

Jennies should always be vaccinated regularly according to the protocol for the vaccines to have a sufficient level of antibodies. Vaccination against Herpes Virus type 1 and 4 should also be considered depending on the disease situation in the area where the donkeys are kept. The antibodies are transferred to the foal via colostrum (antibody-rich milk available immediately after foaling)

Delivery pens could be useful to cope with difficulties, which may occur before and during the parturition/foaling. They should be large enough to permit free movement of the jenny and the new-born and to allow veterinary assistance if necessary. Equine foaling complication is a veterinary emergency: birthing should be monitored to verify the normal foaling stages and if any abnormalities are observed during parturition, a veterinarian should be called. New-born foals should receive colostrum from the mother within the first few hours of life. In case of rejection of the foal, colostrum should be obtained from the mother or from another jenny soon after giving birth and administered to the foal; cow colostrum is not ideal.

Weaning may be a stressful experience for both jenny and foal and should be carried out gradually. Weaning should preferably not take place before the foal has reached six months of age. The weaned young donkey should preferably be kept in groups with other young donkeys or at least one adult donkey.

14. Assessment of the welfare of donkeys

Donkey owners or those responsible for premises where donkeys are kept may wish to have the welfare of the donkeys under their responsibility assessed. A protocol (AWIN welfare assessment protocol for donkeys) to assess donkey welfare has been developed as well as an equine-based welfare assessment tool to be used for working equids (SEBWAT). It is important to note that correct use of the protocols requires adequately trained assessors. It is also important to note that such assessments can't replace daily inspection or a clinical examination, when disease or injury is suspected or identified.

15. End of life considerations

Although a few donkeys die of natural causes or due to accidents, donkey owners are likely at some point to have to face the difficult decision to end the life of their donkey. The options are killing on welfare grounds or for human consumption (slaughter) or for animal consumption.

Killing in a humane manner should always be performed when a donkey is in severe suffering, does not respond to treatment, or when a donkey has a chronic and incurable condition, which causes pain or distress and does not respond to treatment such that the donkey's quality of life is poor. Owners should promptly discuss each individual case with a veterinarian. Surviving donkey companions should be permitted to stay with the body for some time after death in order to avoid the distress caused by sudden disappearance of a bonded companion and the associated risk of hyperlipaemia.

Slaughter is an option unless the donkey has been declared as not intended for human consumption. The methods of killing should consider the differences in anatomy between horses and donkeys. The recommended site (for bullet or captive bolt-placement) in the average donkey is 1—2 cm above the intersection of two lines drawn between the base of the ear and the lateral canthus of the contralateral eye. Slaughter will involve transport for a shorter or longer distance, and maybe even through a market. Before the decision for slaughter is taken, it is necessary to assess whether the donkey is fit for the intended journey to the slaughter house. Furthermore, for animal welfare reasons, transport of slaughter donkeys over long journeys should be limited as far as possible.

A donkey should under no circumstances be abandoned or left to suffer.

Annex 1

Glossary

For the purpose of this guide the following definitions are used:

a) **Jack** means an uncastrated male donkey or ass

b) **Jenny** means a female donkey

c) **Hinny** means a hybrid that is the offspring of a male horse (stallion) and a female donkey (jenny)

d) **Mule** means a hybrid that is the offspring of a male donkey (jack) and a female horse (mare)

e) **Paddock** means an enclosure, where donkeys are turned out for exercise with or without grass

f) **Pasture** means an area of farmland with grasses, where donkeys may get all or part of their daily feed supply depending on the time they spend on pasture and its quality

g) **Biosecurity** means a set of practices employed to prevent the introduction of infectious organisms into a herd or a flock, and their transmission between animals

h) **Killing** means any intentionally induced process, which causes the death of an animal, this includes slaughter, which is the killing of an animal for human consumption

i) **Olfactory** refers to the sense of smell or the process of smelling

j) **Separation due to injury** means a temporary physical separation of an injured individual to prevent further trauma from contact with other individuals and to keep the individual at rest. To prevent mental stress the donkey should be able to see, hear, and if possible, have partial physical contact with other donkeys

k) **Quarantine** means a period of time during which an animal that might have a disease is kept away from other animals, so that the disease cannot spread

Annex 2

Body condition scoring

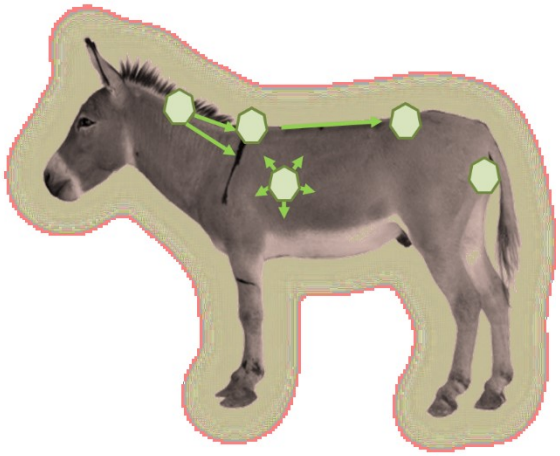
Sources: AWIN, 2015. AWIN welfare assessment protocol for donkeys. DOI: 10.13130/AWIN_DONKEYS_2015; The Donkey Sanctuary, 2018. The Clinical Companion of the Donkey. ISBN 978 1789013 900

Body condition scoring is a standardized method to evaluate the amount of fat and muscle on a donkey's body. Body condition can be affected by a variety of factors such as food availability, reproductive activities, weather, performance or work activities, parasites, dental problems, diseases and feeding practices.

How to assess

Ask the owner to handle the donkey.
Body condition is assessed visually and by palpation. Start with a general visual inspection, followed by manual palpation of the side and rear of the donkey as shown in the figure, and examine the covering of fat on:

- Neck & shoulders*
- Withers
- Ribs*
- Back & Loins
- Hindquarters



**Note: Fat deposits on the neck and ribs should be carefully palpated – deposits here are not as important if the donkey is over 7 years old or if the rest of the body condition is normal.*

How to score

Use the Body Condition Score developed by The Donkey Sanctuary*. The scale ranges from poor to obese. This system is used for all breeds of donkey and all purposes of use.

Score 1

(very thin)

©The Donkey Sanctuary

Neck thin, all bones easily felt. Neck meets shoulder abruptly, shoulder bones felt easily. Dorsal spine of withers prominent and easily felt. Dorsal spine and withers prominent and easily felt. Ribs can be seen from a distance and felt with ease. Backbone prominent, can feel dorsal and transverse processes easily. Hip bones visible and felt easily. Little muscle cover. May be cavity under tail.

Score 2 (underweight)

Some muscle development overlying bones. Slight step where neck meets shoulders. Some cover over dorsal withers, spinous processes felt but not prominent. Ribs not visible but can be felt with ease. Dorsal and transverse processes felt with light pressure. Poor muscle development either side midline. Poor muscle cover on hindquarters, hip bones felt with ease.

Score 3 (ideal)

Good muscle development, bones felt under light cover of muscle/fat. Neck flows smoothly into shoulder, which is rounded. Good cover of muscle/fat over dorsal spinous processes withers flow smoothly into back. Ribs just covered by light layer of fat/muscle, ribs can be felt with light pressure. Can feel individual spinous or transverse processes with pressure. Muscle development either side of midline is good. Good muscle cover in hindquarters, hip bones rounded in appearance, can be felt with light pressure.

Score 4 (fat)

Neck thick, crest hard, shoulder covered in even fat layer. Withers broad, bones felt with firm pressure. Ribs dorsally only felt with firm pressure, ventral ribs may be felt more easily. Can only feel dorsal and transverse processes with firm pressure. May have slight crease along midline. Hindquarters rounded, bones felt only with firm pressure. Fat deposits evenly placed.

Score 5 (very fat)

Neck thick, crest bulging with fat and may fall to one side. Shoulder rounded and bulging with fat. Withers broad, bones felt with firm pressure. Large, often uneven fat deposits covering dorsal and possibly ventral aspect of ribs. Ribs not palpable dorsally. Back broad, difficult to feel individual spinous or transverse processes. More prominent crease along midline fat pads on either side. Crease along midline bulging fat either side. Cannot feel hip bones, fat may overhang either side of tail head, fat often uneven and bulging.