

EQUINE NEWSLETTER

The Donkey – an introduction



Figure 1 - Tippets Brook Miniature donkeys looking for more polos!

When we think of the word equine, a horse or pony is often the picture that pops up in our minds. Equine is a term derived from the family Equidae under the scientific classification of flora and fauna.

The family Equidae encompass a very broad range from, domestic horses, ponies and donkeys to wild asses, zebras and their hybrids, mules, hinnies and Zeedonks (or Zonkeys) the Zebra/Donkey hybrid.

It is felt that the donkey is often an afterthought when discussing equine matters and we all know that there has been a tendency, in the past, to consider and treat them as small horses. We now know that this is not the case. They have very specific needs in terms of husbandry, nutrition and social requirements. This piece is a prelude to more specific articles and, hopefully in time, talks on donkeys and mules. We do not have many mules or hinnies in the UK, but they are worth mentioning because they are a very interesting anomaly.

The donkey is a wonderful animal, but it is often much maligned. It is noted for being stubborn. However, this is said to be a sign of its superior intelligence because donkeys don't like to do things that might put their safety at risk.

In the UK donkeys are predominantly lawn mowers. They provide pleasure and companionship to their owners/carers and other animals. Some donkeys are ridden or driven which they can particularly enjoy if donkeys are worked together. Physical activity has health benefits which are often overlooked. However, their place and importance in the world is either not known or and most definitely underestimated.

As an agriculture student some 30 years ago now, it was surprising to learn that over half of all the food produced in the world was grown using animal draft power. It is difficult to find definitive sources but an academic I know, working in the area of environment and sustainable food production, put that figure at just over 52 percent at present. We live in an area of the country where agriculture plays an important contribution to the local economy and cannot help but notice the

large-scale machinery used that seems to get bigger by the year. However, we only need to think of a crop such as rice and you begin to picture the role that draft animals play. A lot of this draft power is provided by domestic Water buffalo, yaks and oxen. In certain parts of the world the Camelidae family provide the power, Bactrian (two-humped) camels in northern Asia, Dromedary (single-humped) camels in north Africa, the middle east, the Indian continent and historically Australia, where feral camels have sadly become a pest. Latin America uses the Llama as a pack animal. Across parts of Asia the elephant too is an important source of power. However, throughout the world Equidae, horses, ponies, donkeys and mules are used. In the more marginal, impoverished parts of the world it is the donkey that provides the largest proportion of equine power.



Figure 2 - the author holding 'Sugar' the donkey gazing at his, then, idol - Geoffrey Hayes from the children's program Rainbow

Donkey is also known as an ass or in Latin America is called a burro. The ancestor of the domestic donkey is the African wild ass which is an endangered species. There are two subspecies, the Nubian and Somalian wild ass. They are found in the arid, desert areas of the Horn of Africa, in Eritrea, Ethiopia and Somalia. There is an Indian wild ass that is found in part of the Thar desert, on the west side of India, called the Rann of Kutch. Temperatures in that desert can reach 50 degrees Celsius.

The donkey has been a working animal for at least 5000 years and there are more than 40 million donkeys in the world, mostly in underdeveloped countries. Their main use is as pack or draught animals, although some are still used for their milk and meat.

While domestic species of donkeys have been increasing in numbers this is beginning to plateau and even decline due donkeys being sold or stolen and slaughtered for their skins to be used in traditional Chinese medicine. The skins are dried then exported to be rendered down to produce a 'medicinal' gelatine product called ejiao (pronounced eh-gee-yow). It is dissolved in hot water or alcohol and is believed to improve blood circulation and treat people with anaemia. It is also used in beauty products such as face creams too.

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Figure 3 - a young donkey recovering from a fractured leg at the University of Khartoum Vet School



Figure 4 - a small donkey pulling fuel in Sudan. Too slow a shutter speed has caused the blurring, but the donkey was going a fair lick at the time!

In certain parts of the world it's not uncommon to breed donkeys to horses. A Jack donkey on a female horse produces a mule and stallion that is mated with a Jenny produces a hinny. There are slight phenotypic/visual differences between the two. A mule appears to have a horse's body and legs with the donkey head, ears and tail. A hinny appears to have the body and legs of the donkey with a horse's head, ears and tail. This is a gross over-simplification and it is often very difficult to tell mules and hinnies apart.



Figure 5 - is this a mule or a hinny? The photograph was taken at the Donkey Sanctuary in Co Cork, Ireland

Mules and hinnies are normally always infertile. Horses have 64 chromosomes and donkeys have 62, their offspring, mules or hinnies, have 63 chromosomes. This differential makes it impossible to make gametes (sperm and eggs). However, it is occasionally possible to breed from some female mules if put to a male horse (stallion). Those mules have followed their dams and have 64 chromosomes. The

offspring produced will be a purebred horse, not a three-quarter bred horse with one quarter donkey. So, in theory, it could be possible to breed a Derby winner with a grandparent that was a Jack donkey!

Recently a mule called Wallace in Gloucestershire caused a stir by competing in entry level dressage and winning! The production of mules is still widely practiced in the USA where mules are used as trail animals, bred out of heavy horse breeds to produce draft animals and some cowboys have a preference for mules to work cattle. There are also some flat races for mules where they are raced under the same conditions as horses, utilising starting stalls too.

The different breeds of donkey and veterinary management of donkeys will be discussed in future articles.

Sedation in horses

We are often approached by clients wanting to discuss the options available to provide chemical restraint for horses for procedures such as clipping, shoeing and dentistry.

If the horse has been seen recently we can often dispense syringes of paste to be given orally by clients, or for horses which have not been seen or are particularly difficult, an intravenous preparation can be administered by one of our vets at a visit.

Oral Sedatives:

- **ACP** – Trade names include Sedalin and Relaquin. This is a mild sedative and reduces anxiety so is best used to 'take the edge off' rather than a true sedation. It is administered like a wormer, takes 45 minutes to take effect and there are multiple doses in each syringe.
- **Domosedan Gel** – This is more potent than ACP but is slightly different as it must be administered UNDER the tongue, not just into the mouth. It takes 30-40 minutes to kick in, lasts around an hour and is suited for horses which need a deeper level of sedation for more involved procedures where ACP is not powerful enough.

Intravenous sedatives:

- As vets we have a variety of different drugs available which can be used in combination to provide long short, shallow or deep sedation for a any situation. Most importantly we will check your horse over prior to administering them and will be present during the procedure as the effects are almost instantaneous.

Side effects

- Common side effects to be aware of with all sedatives include:
 - Wobbliness*
 - Sweating up*
 - Deep breathing*
- After a sedation of any kind your horse must not be allowed access for any feed until they are fully back awake. This is to prevent choke as they will not chew properly whilst sedated.

Key Principles:

- Dose rates will depend on the size of the horse and the procedure being undertaken, our vets will advise you on appropriate dosing when the drugs are dispensed
- For an oral sedative to be dispensed the horse must have been examined within 6 months. This is to comply with prescribing regulations and ensures that there are no problems with the horse's heart. All sedatives affect the way in which the heart beats and if an underlying issue is not detected, giving an oral sedative can lead to serious complications. This examination will always be included at a visit for vaccination, but if your horse has not been seen recently we will need to book a visit to examine and discuss the most suitable option for your horse.

Emergencies / Out of hours

In the unfortunate event that your animal requires veterinary attention out-of-hours, please dial the usual office number, where you will be given the telephone number of the on-duty vet.

It may be useful to keep a pen and paper handy to take this number down. On the rare occasion that the duty vet is out of telephone reception, your call will be received by a helpful member of our answering team, who will ensure someone attends the emergency as soon as possible. **The answering team at Kernow can be contacted directly on 01432 381440, if for any reason you cannot get hold of the duty vet.**

HEREFORD: 01432 351471 • BROMYARD: 01885 488440 • LEDBURY: 01531 806129 •  @belmontfarmvets

Clinical Vets: Dominic Alexander • Will Allman • Mike Bellamy • Andrew Cooke • Nick Gibbon • James Hipperson • Louise Lafin • Hannah Mitchell
Matthew Pugh • Caroline Rank • Ally Reid • Harry Walby • Charlotte Watkins

Support staff: Sadie Davies • Michelle Harris • Lucy Hughes • Sybil Legge • Laura Langford • Alice Mainwaring • Ros O'Sullivan • Sophie Powell
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