

INSECT PROTECTION FOR DONKEYS

Ongoing changes in the climate mean that insects are now in abundance throughout the year, and therefore can cause great distress and irritation to donkeys. Good management is often the answer to reducing the annoyance and irritation caused by fly and midge attacks. To do this you need to know what insects your donkey is susceptible to and what insects are likely to be living in your donkey's environment.

Prevention is better than cure, which is why the location of stables, field shelters and the management of times of grazing are important factors in reducing insect problems. The use of fly repellents is only part of the solution and before purchasing and applying any chemical, herbal repellent or treatment to affected animals it is advisable to first consult with your vet.

Flies

There are many types of fly; the common housefly, the stable fly, horse flies and the horse bot. The first signs of irritation by flies includes: excessive tail swishing, rubbing, stamping feet and head tossing or shaking; in some donkeys fly bites cause raised lumps and spots of blood may be seen.

Prevention – physical methods

- Remove manure frequently from grazing paddocks and the stable.
- Keep the stable environment clean; wash and disinfect the stable walls on a weekly basis, remove unwanted feed stuff and clean water troughs.
- Provide a field shelter, this will offer protection whilst the donkeys are in a paddock, they can rest and take refuge from the sun. Try to locate shelters in a shady and breezy location.
- Muck heaps should be positioned as far away from stables as possible.
- Use fly strips or traps in the stable, remember to hang well out of reach of the donkeys.
- Summer sheets or fly rugs can help alleviate irritation by preventing the flies from landing on the donkey's coat.
- Use fly fringes or masks that can be worn whilst the donkey is grazing, the masks are also a useful way to prevent sunburn in pale skinned donkeys.



Prevention – chemical methods

There are a number of chemical or herbal fly repellents available. Before using these repellents please consult your vet and always read and follow the instructions of use. It is wise to perform an allergy test with any new product by applying it to a 5 centimetre patch of skin and waiting 24 hours to ensure there is not a reaction to the product.

Chemical repellents normally contain substances like Diethyl-eta-toluamide (DEET) or Parallethrin. DEET has a track record with effective results in animal and human use. Research has shown that the higher the concentration of DEET in a solution, the more effective and long lasting it will be.

Herbal repellents should be used with caution as there is no current scientific evidence that they work on repelling insects. Herbal repellents normally contain mixtures of oils; these can range from mint, eucalyptus, aniseed, cedar wood, clove, lavender, aloe vera, walnut, and sesame seed oils. Some of these oils claim to deter the flies and some are used to calm down the itching.

Garlic is often cited for use as a fly repellent as the smell is thought to repel insects, it can be fed in dried pellet or granular form or from raw bulbs. However, there is no scientific evidence to support these claims. Before feeding garlic to your donkey, discuss the subject with your vet.

Most repellents come in a spray form which is easier to apply than a cream. However, if the donkey is nervous of the spray then creams can be more easily applied or a sponge can be used to apply the spray rather than direct application to the donkey.

Chemical preparations will need to be applied morning and evening as these are the worst times of day for insect problems. They should be reapplied at regular intervals to maintain their effectiveness throughout the day.

Midges

There are two thousand different species of flies and midges in the UK, but one of the most significant is the *Culicoides* midge which is responsible for the skin condition 'Sweet Itch'. This condition affects certain donkeys who are hypersensitive (or allergic) to the midge's saliva. The donkey's skin itches persistently which is extremely distressing, as a result the donkey will rub excessively on the areas most affected, especially on the mane and tail, and these areas often bleed, attracting more insects.

Midges are most abundant in spring, summer and autumn and are most active at dawn and dusk, so preventative measures may need to start as early as February and continue until November depending on the donkey's environment and their location in the country. Cooler areas of the UK may have a shorter midge season.

Prevention – Physical methods

- Location of where your donkeys are kept is important, avoid marshy, boggy fields.
- Keep donkeys on more exposed, windy sites, e.g. hillsides or near the coast.
- Chalk based grassland will have fewer midges than clay based grassland as it consists of free draining soil.
- Keep muck heaps and old feed stuff away from your stable and pasture.
- Stable your donkey at dusk and dawn, when midges are more prevalent.
- As well as using fly sheets, there are specific rugs and hoods available for Sweet Itch, these rugs cover the whole body, abdomen, head and neck. They are designed to be strong, tear proof and highly breathable to prevent over-heating in the summer period.
- Strips of overlapping transparent plastic placed in front of windows and doors can be useful in preventing midges from entering the stable, but make sure you introduce these strips gradually to let your donkey become accustomed to them.
- When applying preventative repellents (whether chemical or herbal) try to start using them before the midge season, prevention is better than cure. Follow the instructions accordingly.

Prevention – Chemical methods

Fly repellents and DEET (see Flies) can help with the symptoms, but you need to take veterinary advice before applying any type of repellent especially for the control of Sweet Itch.

The chemical Benzyl Benzoate has been used many years in the treatment of Sweet Itch. The liquid should be worked into the affected skin, but not be applied to broken skin. Gloves should be worn when applying this chemical and should not be applied by anyone who suffers with perfume allergy. Discuss the use of Benzyl Benzoate with your vet before using on your donkeys.

There are oil based formulations available which can help deter midge attacks; midges dislike contact with oil and tend to avoid landing on the substance. Oils tend to have a limited time period, as they don't stay on the coat for long, reapplication 2-3 times a day may be necessary. Greases are available which tend to last longer and are normally based on oil formulations; they can be messy and tricky to apply but are effective on small areas of Sweet Itch.

Soothing creams can bring relief to the itching but they do not deter further midge attacks. It may also be beneficial to give your donkey a soothing bath once a week, weather permitting, with a suitable shampoo available from your vets. As with the fly repellents, there is no scientific evidence, as yet, as to the effectiveness of herbal treatments.

Ticks

In the UK, ticks are found especially in certain locations with areas of long grass/bracken, e.g. The New Forest. Usually ticks cause mild irritation at the site of a bite but they can be implicated in the spread of Lyme disease. Most insecticide sprays or anti-flea preparations will kill them. If pulling the tick out, you must remember to ensure that the head and legs are not left in the skin, otherwise an infection can occur. If pulling the tick out, it is best to use a pair of tweezers or a specialist tick removal tool which is available from veterinary clinics and pet shops or wear gloves. Grasp the tick as close to the skin as possible without squeezing the body, slowly and firmly pull the tick out. After the tick has been removed clean the bite with antiseptic solution.