



Fast Fact Sheet: Sweet Itch

What is it?

“Sweet itch” is an allergic reaction to bites from midges or gnats. It is the most common allergy among horses and can make them extremely itchy and uncomfortable throughout midge season (generally from March to November in the UK). Sweet itch is also referred to as seasonal equine dermatitis, *Culicoides* hypersensitivity, summer dermatitis, and insect bite hypersensitivity.

Cause:

Sweet itch is caused by an allergic reaction to the saliva of tiny biting midges (*Culicoides spp*). Sometimes other insects such as black flies or gnats can cause sweet itch as well. The areas of the horse that are commonly affected include the mane and tail, the ventral midline (midline of the barrel area), face (including ears) and occasionally the legs. The insects are seasonally active: they are most numerous from spring to autumn in the northern hemisphere. They are most active at dawn and dusk.

Clinical Signs & Diagnosis:

Signs of sweet itch include:

- Mild to severe itching
- Inflammation in skin especially of the mane and tail
- Ruffled and rubbed hair
- Small pimple-like nodes in hair, especially around crest and tailhead
- Affected areas may be hot to touch
- Eventual hair loss and open wounds from rubbing
- Skin may thicken and develop folds as the condition progresses
- Coat may be scruffy and dull (though this indicates numerous other conditions as well)



Signs on sweet itch on tail and hind quarters

The itchiness can cause behavioural changes that may include:

- Excessive rolling and scratching/chewing
- Excessive mutual grooming from field companions
- Vigorous tail swishing and stamping
- Headshaking
- Horse may become lethargic, or restless
- Weight loss
- Lack of focus when being handled, ridden, or exercised. In severe cases horses may become unrideable.



Signs of sweet itch on mane

Sweet itch can be difficult to diagnose as several of the signs are indicative of other conditions. Many cases are further complicated by secondary infections, and other allergies. Vets will typically use a combination of diagnostic tools that include a physical exam, dermatologic testing, and blood testing.

Should I call the vet?

Yes. Sweet itch is challenging to manage, and management needs to be lifelong. It is a chronic condition that gets worse with time, making treatment increasingly difficult. So, it is important to get a vet's assistance as early as possible. People often try to manage sweet itch without a vet, but this is frustrating for the owner and unpleasant for the horse as the condition gets worse, affecting their quality of life.

Treatment:

Unfortunately, there is currently no cure for sweet itch, so treatment revolves around resolving symptoms and then preventing reoccurrence by avoiding exposure to midges. Vets may administer antihistamines (although these are rarely helpful) and topical corticosteroids to reduce itching. It is very important that steroid ointments are only given under veterinary supervision as they may increase the risk of laminitis. There is also weak evidence to support the use of customised vaccine to desensitize horses to allergy-inducing midge bites, but the technical challenges of immune modulation mean that it's not widely used. There is a new product used to vaccinate horses against fungal infections that has wide coverage on social media but the experiment looking at its use found no evidence that it is effective.

More mild itching can be treated with anti-itch shampoos that contain soothing ingredients such as oatmeal. Cool water bathing/hosing can also reduce itchiness, and soothing lotions may help, too.

Risk Factors & Prevention:

Not all horses who are exposed to midges will suffer from sweet itch. There is a genetic component to the allergy, with certain breeds (Icelandic ponies, Exmoor ponies, Belgian warmbloods) shown to have increased vulnerability to developing the allergy.

Horses suffering from sweet itch need to be managed to avoid exposure to midges and other biting insects. Full-body fly sheets (that include belly bands) and fly masks can be helpful but must fit well as the horse will have to wear them continually. Care must also be taken in hot/humid environments because if the horse overheats and sweats, this can attract midges and promote bacterial infections. Only place sheets on healthy skin – if the horse is already itchy and a sheet is put on, the horse may rub fibres into his skin and worsen the problem. Sheets and masks need to be kept clean and dry. High quality insect repellents containing permethrin or pyrethroid can be used, but cannot be applied to raw, broken skin.



Pony in full body rug (Boett rug)

Good stable/field management can help minimise exposure to insects. It may be necessary to stable horses from before dawn to after dusk, when midges are most active. Ultrafine mesh screens over stable windows and doors are useful but be sure to keep them clean as dusty build-up prevents adequate ventilation.

Midges cannot fly well, so fans can help keep midges out of stables but be sure these are purpose-built as household fans are a fire risk in barns. Turning out into windy areas (e.g., on top of a hill) is optimal, if possible. Stagnant water is a breeding ground for midges and other biting insects so clean troughs and buckets regularly and keep horses away from natural standing water such as ponds.

Some feed supplements appear to be helpful in reducing allergic reactions. These include omega-3 and -6 oils (e.g., flax seed oil, evening primrose oil), and a supplement called Cavalesse that contains Nicotinamide. Consult your vet or a qualified nutritionist prior to changing diets.

Recommended Resources:

World Horse Welfare. '[Sweet Itch](#)' [online article]

The Horse. '[Sweet itch in horses](#)' [Infographic]

The Horse. '[Dealing with insect bite hypersensitivity](#)' [online article]