

TO RUG OR NOT TO RUG?

Many owners scrutinise the weather forecast to help decide which weight of rug to put on their horse. But do we need to rug them up as often as we do – and should we rug them at all? Equine behaviourist **Justine Harrison** investigates

It has become routine for many domestic horses to be rugged all year round – whether in fly sheets, all-weather turnouts, stable rugs, fleeces or even a onesie.

However, some people believe the overuse of rugs could be affecting the behaviour and welfare of our horses.

At this summer's International Society for Equine Science conference (see *Horse*, September issue) Professor Jan Ladewig of Copenhagen University questioned how often horses are rugged.

One of his key concerns is owners rug their horses “not to protect them from the elements, but so they don't have to spend so much time brushing and cleaning them.”

In a www.horsemagazine.co.uk poll, 40 per cent of respondents said they use rugs all year round.

Only two per cent said they don't rug their horses at all.

Reasons why rugs are used are varied: some people feel a horse might lose condition or feel cold without one; others say their horse has sensitive skin. Some confess they rug their horse up because they feel cold themselves.

"Rugs must fit well – think of how you feel when you are wearing an article of clothing that does not fit"

Jane Myers

But while owners are genuinely concerned about their horse's welfare and want to do the best for them, sometimes the natural needs of the equine are not taken into account.

Natural protection

Horses are adaptable creatures and live in a variety of extreme environments across the globe.

Brumbies, Mustangs and Przewalski horses live with little or no protection from sun, wind, rain, snow, insects or predators.



While some owners rug up all year round, others keep their horses au naturel

Despite being wild horses, studies have shown they are not that different to domestic horses, either mentally or physically. Even Arabs and Thoroughbreds, not considered to be hardy breeds, live rug-free in sub-zero temperatures worldwide.

So why, then, do we feel the need to rug our domestic horses so much? Do our management practices mean our horses really need an extra coat?

Let's take a look at how horses keep warm naturally:-

A protective winter coat: all horses – domestic and feral – have a coat that helps to regulate temperature very efficiently. Each autumn they grow a longer, coarser coat and produce additional grease that provides a waterproof barrier and extra insulation against the cold.

When the horse's temperature drops, a process called 'piloerection' takes place. Tiny muscles in the skin contract and raise the hair, trapping air within

the coat, which is then warmed by the horse's body and acts as an insulator. It's similar to how humans develop goose bumps when it's cold.

This gives a horse's coat the 'fluffy' appearance we see in cold weather. When the horse warms up, the coat is lowered again, releasing the warm air so he can cool down.

The correct diet: Body heat is produced by the bacterial fermentation of fibre in the hindgut. Horses have evolved to eat almost continually, and this is a very effective method of keeping warm.

Movement and shelter: Feral horses, or those living out in a group, will naturally regulate their own temperature. Moving constantly produces body heat and they can choose whether to shelter or not, often standing or sleeping close to one another to conserve heat.

Fat storage: Horses would naturally gain weight in summer in preparation for the winter months, then burn fat in winter to keep warm.



Some horses will have a scratch as soon as their rugs come off



Hairs lift up to trap air and protect the horse from getting cold

The case against rugs

Professor Ladewig believes that if a horse is constantly wearing a rug, it prevents some natural processes occurring that help keep the skin and coat healthy and reduce stress levels.

A horse's own bodycare routine includes self-grooming – scratching different parts of the body with the mouth or hooves and itching on objects around them.

They will roll on various surfaces, such as grass, sand, mud or in water to remove loose hair, dead skin and stimulate the skin's circulation.

Horses also groom each other – this is known as 'allogrooming'. An equine friend will scratch those areas that can't be reached by the horse himself.

Grooming in the withers area is an important social behaviour that strengthens the bond between individuals and may reduce stress.

"Allogrooming does not seem to occur that often, and certainly not all horses do it," said Professor Ladewig. "Is the reason we do not see it very often because so many horses wear blankets?"

"The preferred site of allogrooming is the withers and that is exactly the spot that is covered when you put a blanket on a horse."

Although today's turnout and stable rugs boast design features that aim to keep a horse comfortable and allow him to move freely, if it doesn't fit properly it can cause injury and restrict movement.

Pressure sores can occur around the withers, the base of the neck and shoulders if a rug is too tight. Leg straps can rub inside the legs and the mane may be rubbed away.

A 2008 study looked at the housing of riding horses and looked at 445 equines at a Danish riding school. The researchers found that 70 per cent of the horses had some kind of lesion from their rugs.

Horses can also get caught on fencing when wearing a rug. If a clip breaks and the rug slips, they may panic and injure themselves as they try to 'escape' it.

Equine management consultant Jane Myers of Equiculture says she has seen a wide range of rug-related injuries.

"A rugged horse must be checked twice daily, or more often if they are wearing a hood," says Jane. "Hoods can easily slip and rub the eyes. If a hood



Most horse owners have an extensive rug collection

TIP from the TOP

Ensure your horse has access to ad-lib forage so he can keep warm from the inside out.

slips it can impair the horse's vision and some have been known to fall into water and drown, injure their eyes on branches or other protrusions, or panic and run through fences."

In some cases, putting on the wrong rug can actually impair the horse's

ability to keep warm. Using a rug may prevent piloerection occurring and the horse will then lose his ability to regulate his own temperature.

If a rug is not thick enough to provide the insulation necessary, a horse in a lightweight sheet may actually be colder than an unrugged horse. In contrast, if a horse overheats in a rug, they won't be able to cool down effectively.

Horses must be checked regularly and their rugs adjusted accordingly, especially if there is a significant change in temperature.

Rugging-up rules

If you do choose to rug up your horse, keep him happy and healthy with these tips:-

- A rugged horse needs to be groomed more often as he cannot maintain his own coat by rolling on different surfaces.
- Ensure some rug-free time every day to allow him to have a scratch – often, you'll see a horse scratching as soon as a rug is removed. This may be an indication that they have been uncomfortable for some time.
- Remove the rug to assess your horse's body condition regularly.
- Make sure the rug is the correct type,

weight and fit for your horse. "Rugs must fit well," says Jane Myers. "Think of how you feel when you are wearing an article of clothing that does not fit, rides up or is too tight."

- Give your horse rug-free access to an equine friend to allow for allogrooming.
- If a rug gets ripped, check for injury underneath and be aware it may no longer be waterproof.

As nature intended

Many horses and ponies can live without a rug all year round, provided they have a good natural coat, access to shelter and enough fibre.

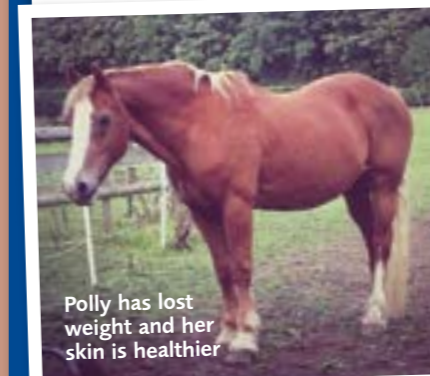
They may not be as clean as we would like, but it's natural for a horse to be muddy in winter.

Whether we need to rug our horses or not depends on the individual animal, his management and the amount of work he is doing. Those who are clipped, underweight, ill, older, shiver when it's cold, or don't maintain condition well will need to be rugged. **H**

"Her skin is healthier without a rug"

Zoe Talbot, from Suffolk, owns Polly, a 22-year-old Welsh Section D. When Zoe bought Polly in January 2009, the mare had always been heavily rugged in winter by her previous owner, despite having a full coat.

"Polly's coat looked dull and when she was rugged up I noticed she was itchy and her coat felt hot," says Zoe. "I reduced her rug weight down to a middleweight turnout without a neck.



Polly has lost weight and her skin is healthier

"But I kept rugging her as everyone else on the yard rugged their horses and it seemed the right thing to do.

"Then Polly suffered from a skin condition and I decided to take her rug off.

"She stopped itching and over the last two years has lost 100kgs of weight – this is something she needed to do. Even without a rug she feels nice and warm when I touch her coat.

"She is far more comfortable and, I think, much healthier since I stopped rugging her.

"I've kept all of her rugs and may have to consider rugging her if she becomes ill in the future, but otherwise I'll avoid using them.

"I do think a lot of people over-rug their horses, mainly because they feel cold themselves and therefore think the horse must be cold.

"In actual fact, sometimes you can do more harm than good by rugging them up."

Sensitive-skinned horses susceptible to skin conditions like rainscald should have protection from wet weather.

Selecting the right type, weight and fit of rug for your horse is vital. Remove a rug regularly to monitor body condition and check for injury.

If you decide the best option for your horse is to go without a rug, consider

the following points to enable him to protect himself from the elements:-

- Ensure he has equine company to huddle up with to conserve heat, and a suitable field shelter or trees and hedges so he can shelter from wind, rain or snow.
- Provide a steady supply of forage.

● Only groom where you really need to (saddle and bridle areas, for example), so as not to remove too much protective grease from the coat. When you do groom, use a wide-toothed brush.

● Monitor your horse closely to see how he is coping. If he is shivering on a cold, wet day, dry him off and use a rug. **H**

"Pluto is rugged all-year-round"

Becca Cameron is studying for a degree in Equestrian Sports Science at Hartpury College, Glos, and shares her 16.2hh Dutch Warmblood Pluto with her mum, Fiona.

"I used to compete Pluto in unaffiliated showjumping, but as I'm studying at the moment he is mainly being schooled and hacked out, with the hope of taking him out competing again next year," says Becca, who is originally from Inverness.

"When he's working he gets sweaty easily – he was in hard work this summer so he was clipped for that reason and wore a lightweight sheet if the weather dipped below 10 degrees.

"He is clipped out in winter for work, so needs either a stable or turnout rug to replace his coat.

"I use a fly sheet in summer as Pluto is bothered by insects – he runs about and wants to come in if he's not wearing it. He also wears a lightweight sheet in the rain as he's had rainscald in the past.

"I've done a lot of research to find a rug that fits him perfectly and I make sure he is checked three times a day and his rug changed if necessary.

"On the whole, I would say lighter breeds of horse need rugs more than heavier or

native breeds. It does depend on the individual – Pluto does not grow a thick coat in winter, whereas the Highland ponies across from him grow a very thick, fluffy coat and obviously need treating differently."



Pluto has regular rug changes to keep him comfortable