

Smoothing *the way*



Hacking out is a great way to keep horses fit and happy, as well as an opportunity to improve positioning and symmetry. **Stephanie Bateman** talks to **Dr Russell Mackechnie-Guire** about how the latest research can help you get the most out of your hack.

Getting out of the arena and exploring the surrounding countryside with your horse is undoubtedly food for the soul. Hacking is

perfect for long, slow fitness work, as well as schooling and engaging your horse outside of the arena and improving your horse's proprioception (the sense of self-movement and body position). Through his recent studies with riders who are dedicated hackers, Dr Russell Mackechnie-Guire, Performance Coach BHSI and founder of Centaur Biomechanics, explains that you could improve the efficacy of your hack, as well as help to reduce the risk of injury, by making a few small adjustments.

"Hacking is absolutely an activity for both horse and rider to enjoy, but it's also important to give some thought to the surfaces your horse is travelling over every week to avoid any potential imbalances. Minor asymmetries in the way you and your horse move can stack up over time to become detrimental."

Russell has six tips to help riders ensure they enjoy well-balanced exercise as well as a relaxing amble.

1) Criss cross

Hacking out with a friend is more fun and potentially safer than hacking alone, but riding side-by-side for long periods of time can have negative consequences.

"Riders who ride in pairs and abreast need to be cautious, especially if you're riding for long periods of time, and habitually stay on the same side of each other," says Russell. "The rider on the left will rotate their body to chat to the rider on their right, and vice versa. Although it seems trivial, we found that people could hack for up to a couple of hours, and that's a long time to be in this rotational



▲ Sloping ground and the curve of road cambers causes asymmetries in your horse's gait

movement pattern. That rotation can affect the rider's pelvis, resulting in quite significant asymmetries in position. Aim to swop sides regularly and spend equal amounts of time on both sides."

2) Change the pace

Russell's research has also found that most riders who hack spend lots of time in walk and very little in trot or canter.

"Walk hacks are fine, but remember that the rider stays as a constant weight on the horse's back, whereas if you include some trot or canter work, you unload the saddle pressure. The forces on the horse's back are equivalent to the

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IT'S IMPORTANT TO GIVE SOME THOUGHT TO THE SURFACES YOUR HORSE IS TRAVELLING OVER

rider's body mass, so you might have two hours of 75kg sat continuously on the horse's back, which could create localised pressures. We want to prevent capillary vasodilation, where the capillaries are

Friends who ride out together frequently will often rotate their bodies to chat, so swap sides regularly

camber, but the horse will also develop additional locomotory asymmetry if the rider is always rising on the same diagonal,” explains Russell. “Riders should ideally change their trot diagonal every 30 strides to start reprogramming and strengthening the hindlimb that the horse may be trying to offset you onto – we don’t want to make horses one-sided.”

5) Going out on a limb

Lots of riders choose to trot up hills – but again, the camber of the road is worth considering.

“When trotting uphill, the outside hindleg can get left behind on the camber of the road, which can rotate the pelvis,” says Russell. “Walking uphill is possibly better for the horse, unless it is completely safe to move onto a flatter part of the road, so that you’re not trotting along the cambered edge.

“I have nothing against trotting on the road, but prolonged periods of trot increase the concussive forces on your horse’s joints.. Consider your horse’s age when you’re trotting for long sessions on the road too, as growth plates may not be fully developed in young horses, and older horses may have joint osteoarthritis.”

6) Back with the hack

“Even for horses that ‘only’ hack, saddle fit really needs to be optimal and in balance,” explains Russell. “The back movement in walk is very different to a 40-minute schooling session where the back comes up and the horse engages, so your saddle may need to be rebalanced to reflect that.”

Want to spend more time exploring your local hacking routes this summer? Visit bhs.org.uk/rideoutuk for lots of advice and encouragement!



compressed and blood flow is restricted. This can cause skin and hair follicle damage, where white hairs appear three months after the initial problem. If you’re hacking for more than an hour, I’d recommend including some short bursts of trot – even just 30 strides – to unload the horse’s back and allow the capillaries to refill, and that should help reduce any pressure-induced effect. Standing up in your stirrups can also help change the weight distribution on the horse’s back.”

3) Consider the camber

Riders who are lucky enough to have quiet roads often make regular use of them, but roads aren’t completely flat, and the sloping camber section at the edge where equestrians usually ride can affect the horse’s movement over time.

“If you ride close to the verge, your horse will always be battling the camber of the road, as their left legs will be lower than their right legs,” says Russell. “The same can happen off-road if a route heads across sloping ground for a long distance; it can cause asymmetries. Try to ensure you’re giving your horse some work across flatter surfaces.”

4) Modulate the gait

Many riders don’t consider which trot diagonal they’re on while hacking, and commonly, the rider will rise on the diagonal that the horse feels more comfortable on.

“This is potentially problematic, because if you include regular bouts of trot over a long road hack, not only do you have the asymmetries caused by the road