Saddle FITTING and Performance

No matter what brand of saddle you choose to ride in, it must fit your horse perfectly in order not to hinder his quality of movement.

Is your saddle inhibiting your horse's movement?

by Susan Stafford-Pooley
~ with files from "Beyond The 9 Points of Saddle Fitting" by Jochen Schleese, CMS, CSFT, CEE

In a recent study of 1,326 horses in the UK, 91% of owners reported that their mounts exhibited some sort of regular behaviour problem under saddle. According to Jo S. Hockenhull, PhD, of the School of Veterinary Science at the University of Bristol, England, the most prevalent problem was shying (50%), followed by walking off while being mounted (46%), and leaning on the bit (45%), which may be attributed simply to poor riding practices. More dangerous behaviours such as bucking, rearing and bolting were rare. One encouraging number from this study was that 88% of the riders had consulted with a professional to check their saddle's fit, with 61% having it rechecked annually.

Just how much influence does a poorly-fitted saddle have on a horse's performance? Jochen Schleese of Newmarket, ON, who became the youngest Certified Master Saddler in Europe in 1984 at the age of 22, had already crafted over 1,000 saddles before he watched a video of a horse galloping on a treadmill. Seeing how the saddle was interfering with the shoulder was a life-changing moment."When I thought back about how many saddles I had made with what I was being taught was right ... I knew I had to get this information out to fellow colleagues, trainers, saddle manufacturers . We needed to go back to the old system, the way we always made and checked saddles, and stop crippling the horse long-term."

Signs of a Poorly-Fitted Saddle

Saddle pain can manifest in a number of ways:

- back sore to the touch
- 'hunter's bump' (damage to the sacroiliac)
- scooting down and away from pain while being ridden
- tight barrel (abdominal muscles tensed)
- white patches of hair on withers (indicating pressure points)
- "cold" back or cinchy (aversion to being saddled)
- pinning ears, rolling eyes, switching tail
- rearing, bucking
- stumbling
- head tossing or rooting, champing the bit
- lack of engagement behind
- hollow back when jumping
- refusing jumps
- four-beat canter
- generally bad attitude while being ridden

SADDLE FITTING PROBLEM AREAS

1. Balance

If the saddle sits too high in the back, it pinches the withers and causes rider to lean back (chair seat). Too high in front and the rider's weight shifts over the last two floating ribs, creating a lot of pressure and causing the rider to sit with rolled shoulders, which can contribute to lower back pain.

A well-balanced saddle distributes the rider's weight over a large area, creating a secure seat and allowing the rider to easily pivot their pelvis forward or back.

PHOTOS COURTESY SCHLEESE SADDLERY

A good way to check your saddle's balance is with a golfball (or pencil, or any round object) to see where it comes to rest. This general-purpose saddle is well-balanced.

2. Wither Clearance

"We all learn in Pony Club that our saddle should have 2-3 fingers clearance," says Schleese. But there also has to be 2-3 finger's worth of clearance on the *sides* as well, depending on the horse's conformation (i.e. high-withered vs mutton-withered). The tree points must clear the shoulder, or over time it will eventually chip cartilage and bone away.

A saddle should have 2-3 fingers' clearance above the withers, and on the sides.

3. Channel (gullet) Width

It is important that the saddle has no contact with the spine; this includes the spinous processes, the area on each side (transfer processes) and the dorsal ligaments. It does not matter how many saddle pads you put on if there is deep muscle pressure! The correct channel clearance allows the back to raise up, which is important for collection, bascule, etc. If you determine the horse needs, for instance, a four-finger-width clearance, it must be the entire length of the channel. Conversely, a gullet that is *too* wide can concentrate weight on the ribs.

The gullet should be generously wide (bottom photo) - from front to back - so that no part of the saddle touches the spine.

When the horse travels with a hollowed back (top), the spinous processes can override each other ("kissing spines"). If the horse is able to raise his back (right) this condition can be averted.

4. Full Panel Contact

Panel pressure should be even from front to back over a 220 sq. in. area. A computerized saddle pad can detect "bridging" (excess amounts of pressure in certain areas).

5. Billet Alignment

Billets should hang perpendicular to the ground and in the correct area. If they have to be pulled forward into the girth area, the saddle will also be pulled forward into the shoulder. If they have to be pulled back, so will the saddle.

6. Saddle Length

If the saddle is too long from front to back for that particular horse's conformation and sits in the lumbar region, it can irritate the kidneys and ovaries.

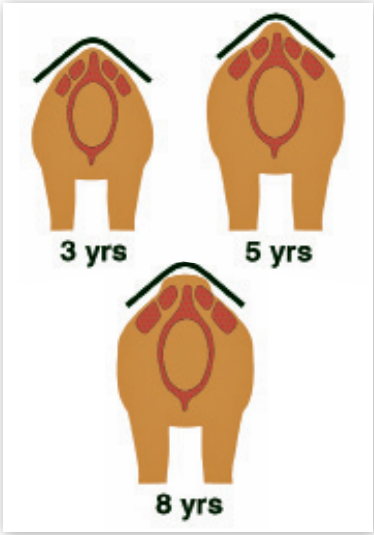
7. Straightness

Have someone ride behind you and tell you if your saddle is straight. When viewed from back, the centre of the saddle should be centred over the horse's spine. A chronically crooked saddle can cause damage to the sacroiliac. A lop-sided rider can cause the saddle to be crooked, and padding can get compressed more on one side than the other over time.

When viewed from behind, the rider should be sitting squarely in the centre of the saddle with a straight spine, weight evenly on both seat bones, and the cantle should be centred over the spine.

8. Tree Angle

Tree angle must match shoulder angle, not the wither angle. There must be room for the wither muscle to expand in order to lift the shoulder back. If the saddle pinches at the side of the withers, the horse may drop his back and refuse to move forward.



The ideal tree width changes as the horse grows. This diagram illustrates how a saddle that fits a three-year-old will not be suitable for the same horse just a few years later.

9. Tree Width

Tree width changes as the horse grows and develops, and should allow for range of motion of the shoulder rotating back when the leg moves forward. Too narrow and it interferes with the shoulder and limits freedom of movement; too wide and the riders' weight will cause the saddle to hit the top of the withers. Once again, this is not something that can be fixed with a saddle pad!

Points to consider when purchasing a saddle:

- an adjustable saddle tree (both width and angle)
- wide channel clearance along the entire width
- rear-facing tree points to prevent permanent shoulder damage
- shoulder relief panels to accommodate larger shoulders
- a flexible tree that follows the motion of the horse's back