SA Horseman approached equine physiotherapist, Susan Wilhelm, about the role of the horse’s back and why it is so important that a saddle fits well.

According to Susan, the horse’s back is the pivot from which all movement occurs. The vertebrae are the foundation of the back. It is the shape of these individual vertebrae that will pre-determine the quality and level of movement a horse is able to produce and that will determine the shape of a horse’s topline.

Rounding the back (lifting the topline) allows the horse to bring his hind legs underneath his body, thus engaging the powerful hindquarters. This creates the impulsion to move the horse forward while still being light on the forehand. Good engagement of the hindquarters increases the

A saddle that does not fit a horse correctly can cause many problems, from saddle sores to impaired movement. It can lead to behavioural problems and long-term back problems.
production of capsular fluid in the hind limbs and reduces the concussion in the forelimbs.

With an ill-fitting saddle, none of the above is possible and will cause a horse to react in a way to evade the painful stimulus. The horse tries to communicate his discomfort by changing the way he moves or behaves. A horse reacts to pain by:
• Hollowing his back
• Raising his head
• Tensing the jaw and lower neck muscles
• Reducing the level of engagement of the hindquarters
• Stiff, choppy, sewing machine forelimb action
• Becoming heavy on the forehand
• Not tracking over from behind
• Clamping his tail.

All of the above, if allowed to continue over a period of time, can lead to other, more serious problems. The sacroiliac joint as well as the sciatic nerve, are susceptible to inflammation and stiffness as a result of horses hollowing their backs to avoid back pain. Muscle atrophy (degeneration/weakness) is also an indication of a horse that is unwilling to activate certain muscles. Horses that are not able to round their top lines, cannot engage their hindquarters enough to lighten the load on the forehand and are thus more prone to joint degeneration.

The basics of saddle-fitting
To ensure a well-fitting saddle, SA Horseman explored the basics of saddle fitting with Christien van Rensburg, owner of De Ruýter tack shop in Pretoria.

Buying a saddle has always been a simple procedure of going to the local tack shop or cooperative, selecting a brand name or colour, maybe sitting in a few to get the feel, add all the accessories, negotiate some discount, and you’re on your way home to the horses.

It is only over the last eight years or so that riders have become more aware of the importance of a saddle that fits well on the horse’s back. It is important to remember that the saddle is there only for the convenience of the rider – the horse does not need it! The least we can do is ensure that it fits the horse adequately and does not cause any damage to his back and impair his performance.

What should the approach be when buying a saddle? The safest option is to go to the local tack shop and ask for advice and assistance. Tack shop owners are usually very involved with horses themselves and have the knowledge and experience to help one make the right decision. For a nominal fee, they will go to your yard and do the fitting for you.

Price range definitely determines the pool of choice one has. The higher the price, the greater the selection of a good-to-perfect fit. If one’s budget is really limited, take the option that will cause the fewest problems for the horse. Here one would need some advice from someone who knows saddles and horses, to make possible adjustments to the saddle, or to assist with the correct choice of saddle pad.

Leather vs synthetic
This is no longer a major issue. Most master saddlers still believe that leather has proven itself over the years and that there is no substitute for it. With proper care, a leather saddle can last many years and always has a good re-sale value.

The synthetic materials used today for saddles, stirrups and even bits, are exception-ally strong and durable, though. However, they still have to stand the test of time. The synthetic saddle is comfortable for horse and rider, and usually more affordable.

Unfortunately it is not always possible to get someone to fit the saddle on the horse, but here are some things to do and look for yourself:

The horse
Firstly, look at your horse’s topline. There are many different shapes of horses, but the two main shapes that are directly opposing, are:
• Horses with high withers and a slightly protruding spine. This is the typical Thoroughbred shape. Ideally for this type
1a A typical Thoroughbred-type back, characterised by a high wither and slightly protruding spine
1b A broad back with low, fleshy withers and round muscular back with an almost inverted spin
2 The side panels must rest comfortably on the muscles on either side of the horse’s spine (fillets) and the pressure of the side panels should be even. In this picture it is obvious that the side panels do not rest evenly on the back muscles
3 In some saddles the width of the gullet can be changed, depending on the withers of the horse
4 The angle of the pommel should be similar to that of the wither. In this case the discrepancy is too much
5 A broken saddle tree can cause a lot of damage to a horse’s back
of horse, one would require a saddle with a high pommel so that it does not press down on the wither, with a gullet that is deep, but sufficiently wide so as not to press on either side of the wither or spine. Thicker panels will be required at the back.

- Horses with very low, fleshy withers and round muscular backs with an almost inverted spine. This type is more typical of the native breeds and many pony types. Ideally, these types of horses would require a much wider gullet and the saddle can have a lower, more rounded pommel. Flatter panels at the back will be fine. In this type of horse, the saddle will be more likely to slip either backwards or forward, so try to get as a good a fit as possible.

### Maintenance

Horses grow and develop. They build and lose muscle, pick up and lose weight. It is important to have your saddle checked regularly, to see if your horse has not “outgrown” it. This is especially important when a saddle is bought for a young horse, or one that has no condition or muscle. Some saddle-fitters believe that a saddle should be checked every six months to ensure maximum performance. This is especially important for highly competitive riders.

These principles are for the fitting of most English-type saddles. The fitting of western saddles, stockman saddles and especially endurance saddles, is also very important and will require a whole separate article.

### Fitting the saddle

To start fitting a saddle to a horse, the horse should be stood squarely and the saddle placed on his back, sliding snugly back behind the shoulder line. No girth, no rider and no numnah!

- View the saddle from the front. The angle of the pommel should be similar to that of the wither.
- Slide your hand in and over the wither and down the spine as far as you can. It should be free of any pressure or pinching.
- Stand back and look at the panels (cushions). Do they lie evenly along the back? Do they stand up in the air? Look at the seat – it must be level. The cantle can be slightly higher than the pommel. This is a very important step. If the saddle is too narrow, it will be too high in front, and apart from pinching the wither, will push the rider to sit on his buttocks in stead of on his seat bones. If too wide, the saddle will tilt forward, lie on the wither and let the rider tilt into a fork seat. In both cases the rider will be unbalanced and the horse uncomfortable.
- The side panels must rest comfortably on the muscles on either side of the horse’s spine (fillets). If one were to run one’s finger through from the front to the back along these panels, under the saddle, the pressure everywhere should be even. If there is a sudden loss of pressure in the middle of the saddle, it means that the saddle is bridging. This will cause pressure points.
- In looking at the size of the saddle, if one runs one’s hand along the horse’s side, front to back, one will feel where the ribcage ends. Follow the curve of the ribcage from below, all the way to the top of the back. That is how far back the saddle should fit – further back and it will be pressing on the loins.
- Now attach a girth (and stirrups if needed). Put a rider on the saddle and check the wither again. There must be sufficient space above the wither and on the side of the spine to cause no undue pressure. Let the rider walk and trot the horse. Look to see if the horse’s movement is free, especially the shoulder. Is the saddle bouncing up and down or swinging sideways?
- Choose the saddle that best fits the horse, even if it is not the brand name you had in mind. **SAH**