## **Does This Saddle Make Me Look FAT??**



Have you ever wondered how to tell if your saddle fits your goat? Or have you simply assumed that because you have a "goat saddle" and you're putting it on a goat, it therefore fits? The latter description is commonly the case, and why shouldn't it be? We assume that the makers of saddles for our animals must know what they are doing and we can therefore trust their designs without checking for ourselves whether they work. However, a master saddle fitter once told me that fitting saddles to horses is a lot like fitting shoes to people. Two

people with the same size feet may find that their feet are vastly different shapes and therefore cannot walk comfortably in each other's shoes. The same principle applies to animals and saddles.

The first step in saddle fitting is placement. One of the most common mistakes I see with both horses and goats is for people to place the saddle too far forward. This will cause frictional heat build-up over the goat's shoulders as he walks, creating painful sore spots that make him resent his job very quickly. Not only that, but goats and other hoofed mammals naturally stand with about 60% of their body weight over the front legs and only 40% over the hind. Once he starts moving, the goat's weight shifts rearward toward his hind legs, bringing the weight distribution closer to 50/50. Loading the shoulders throws too much weight onto the front legs, jeopardizing your goat's balance and agility by preventing him from shifting his weight toward his hindquarters as he should. It will make steep climbs and descents more strenuous, and it will prevent him from jumping gracefully over obstacles with a pack. For your goat to move efficiently, he must be able to bring his hind feet well up under his load so he can keep the weight ratio of front to hind feet at about 50/50. If the load is too far forward, your goat will never be able to make his hind legs carry their proper share of the weight. Also, the shoulder structure is ill-equipped to take on extra weight. It is a free-floating agent suspended in a sling of muscle and is not attached to the rest of the goat's skeletal structure by any joints. By contrast, the hind legs are attached to the skeleton by strong hip joints, so it's important to allow the hind legs to carry their share of the load.

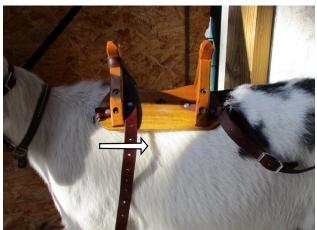
That said, it is equally important not to place the load too far back. The load should primarily rest over the goat's ribcage, which is quite short. If you place the saddle too far back, the load will not be well supported by the ribs and your cinch

will sit too far back to be useful. You could also harm your goat's kidneys. Thankfully, this mistake is not as common.

When checking saddle fit, it is important to first remove the pad. Pads create a barrier between your goat's moving back and the rigid saddle to cushion his ribs and absorb shock and friction as he moves under his load. But since the pad is not part of the saddle itself, it tells you nothing about how your saddle fits your goat. Pads can compensate for less-than-ideal saddle fit, but they can also disguise problems that may come back to haunt you on the trail. Therefore, any time you fit a saddle to a goat, always remove the pad first so you can see how the bare tree sits on your goat's back.

Now let's saddle a goat! John Mionczyinski's Wind River saddle is the original crossbuck designed for goats and has been copied many times by other saddle makers. Since it is a very common and standard design, we will see how it fits on several different goats.

Our first model is Tigerlily, a large, full-bodied doe who loves to hike. Take your bare, padless saddle and place it on your goat's withers, sliding it back into position to smooth the hair down under it. You should feel the saddle "click" into the proper spot behind the shoulders. If you're not sure you've got it right, walk your goat around and feel the movement of his shoulder blade, making sure the front edge of your saddle is not resting on it.





Now look at how your saddle sits on the goat. Viewed from the side, the forks should be even with each other. Most saddles will not be exactly level, but if the front or back of the saddle is substantially higher than the the other, then the saddle does not fit and will cause uneven weight distribution and pressure points. Depending on the severity and the cause of the unevenness, some of these problems can be corrected by shimming up the pad on the lower end. However, if the unevenness is caused by a tree that is too narrow for the goat, adding more pads will not fix the problem any more than adding extra socks will help your feet fit into boots that are too small.





The first photo shows us a nice, level saddle. Next we check that there is a good 2-3 fingers of clearance between the goat's withers and the front fork. Any less and the saddle is too wide for the goat and could compress his spine when loaded. The rear should not contact the spine either, but this is an uncommon problem and may indicate that your goat is altogether out of condition for carrying *any* saddle.

Now look at your saddle from the rear. Not only should there be good spinal clearance, but the bars (or tree) should make contact evenly all along your goat's ribcage. The angle of the bars should match the angle of your goat's back. If the bars don't make contact until somewhere near the bottom edge, the saddle is too narrow for the goat. On the other hand, if the bars only make contact at the top while the bottom edges stick out above the ribs, then the saddle is too wide. This photo shows good spinal clearance all through the gullet. Tigerlily's wide rump is somewhat obscuring the angle of her back in relation to the saddle bars, but it is a very close match. The bars sit well down on the ribs and make good contact throughout. The saddle appears slightly crooked because the goat is turning her head to the left, throwing the saddle a little to the right. Be aware of this kind of thing when looking at saddle fit.



Next, run the flat of your hand under the bars on either side to feel for pressure points and/or bridging. Often when the saddle does not fit there will be distinct pressure points at the front and/or back edges of the saddle with a "bridge" in the middle where the saddle makes little or no contact with the goat's back. Rarely will a saddle fit perfectly all along both sides of the back with zero pressure points or gaps. Your pad will help alleviate these issues, but any severe problems will require changing to a different saddle.





You can see in the first photo that there is very little space between the top of the tree and the goat's back. I can get only the tips of my fingers into the space, which means there is not much "bridging" in this spot. The next photo shows how I check for pressure points at the front of the saddle. This is a notorious pressure spot and is also the place where the saddle can contact the goat's shoulder blades if the pack is too far forward. There is a slight pressure point here, but I can just slip the tips of my fingers between the saddle and the goat. This is good. When I can't get my fingers under the saddle at all, it is a sign that this saddle will cause problems for the goat on the trail. It's important that any saddle you use is beveled along all edges, but especially along this front edge where pressure and rubbing is most likely to occur.

Now that we've checked the fit of the saddle, we're ready to add a pad. Pull the pad well up into the gullet on both ends so air can circulate over the spine. You will need to check your pad's spinal clearance again after the saddle is loaded. The front of the pad will extend partly over the goat's shoulder area, but it should not reach far up onto the scapula. If the pad is too far forward over the most mobile part of the shoulder, it may cause friction and heat to build up underneath, creating a sore spot even if the saddle itself is not riding on it. Notice on this saddle that the cinch straps come down at a rearward angle. When I tighten this cinch in the proper spot behind the goat's elbow, it actually wants to pull the saddle forward because of the way the cinch is angled. I tried placing the cinch a little further back, but this goat's large hay belly pushed it right up to the narrowest part of her chest. If she were in proper condition, the cinch might be willing to stay a couple of inches further back

where I think it would be more comfortable for her. If your cinch pulls the saddle forward as this one does, keep an eye on it during your hike because you may have to push the saddle back from time to time.



The pad is a vital part of a well-fitting saddle. Pads are designed to compress so they even out minor pressure points and bridges in the saddle fit, and they absorb shock as the goat moves under his load. A pad that is never removed from the saddle will compress in certain spots until it no longer serves its proper function. Every pad should be removed after a long trip and beaten to loosen the fibers back up and avoid compression spots. If you are a day-tripper who uses light loads, a pad can probably go a whole season without being removed, but always remove your pads before storing them for the winter even if they are only lightly used. Beat them against a fence, brush them, and store them flat so they can recover their loft. This is especially important for pads that cannot be reversed. If your pad can be reversed, make sure to do so regularly.

Now let's look at the same saddle on a different goat. Finn is a 4-year-old Alpine/Nubian wether about 200 lbs.





I place the saddle on his back in the correct spot and right away we can see that the rear fork is slightly higher than the front. My level confirms this, but the difference is not extreme.





Viewing this saddle from the rear shows us why the rear fork is higher than the front. This goat is slightly too wide for this saddle--more so in the rear than in the front. You can see from the rear angle that the top edges of the saddle bars are sitting above the goat's back. There is a proper three fingers' clearance under the front fork, but when I slip my hand under the rear fork I can easily fit all four fingers with room to spare.





When I slip my hand under the bars, my fingers slide down quite a bit before the saddle makes contact with the goat's ribs. If I slide my fingers along the bottom edges of the bars, I feel a pressure point all along the bottom. This is going to cause discomfort when the goat is fully loaded because only part of the saddle is carrying the full weight of the pack. I am unable to get any part of my fingers under the front edge of the saddle despite the beveled design, showing that there is a pressure point here.

That said, this saddle is not such a terrible fit we can't work with it. The saddle fits the goat's skeletal structure pretty well. It's his excess body fat that is making it pinch. Getting this goat into condition would do wonders to improve the saddle fit. Since fat compresses, I can feel reasonably good about working this goat in this saddle. I will also keep a closer eye on his comfort during a trip than I would if his saddle fit better, and I will need to be prepared to remove some of his load in the event that he starts to become sore under those pressure points.

Our next goat is Sputnik, a 4-year-old Alpine/Nubian wether about 230 lbs. He has a barrel-shaped body and a fleshy back that will always be round no matter what condition he is in.



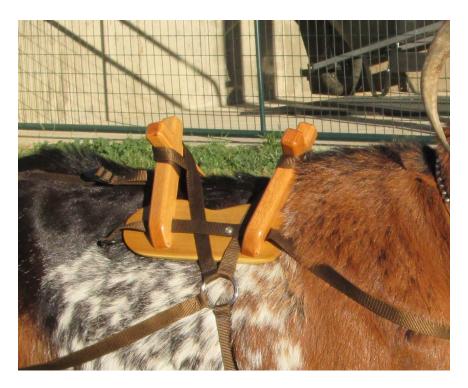


We can see immediately that this saddle is far higher in the back than in the front. It is so uneven, in fact, that my level slid off the front every time I tried to place it. From the back, we can see that the bars are floating well above the goat's ribs, making the saddle look as though it is perched on his back. I can place my entire hand under the rear fork and still see mostly daylight.





Our problems become even more obvious when I feel under the bars. Most of my hand disappears into the void between the bars and the goat's ribs. This saddle doesn't make contact until somewhere near the bottom edge. By contrast, there is no room at all for my fingers to fit under the front of the saddle. This saddle is nothing more than a series of tight pressure points and huge gaps. This goat will be sore within a few miles even if I don't load the saddle. Just cinching it down would cause pain. No amount of padding will work here unless I get the saddle so far off the goat's back that he resembles "The Princess and the Pea". We cannot work with this. Sputnik's back is not only wide, but it dips prominently behind the withers. Because of this, I use a flexible tree saddle on this goat.



By contrast, this Northwest brand packsaddle is slightly too wide for this aged goat, Cuzco. Cuzco is 13 years old here and the flesh has largely melted from his spine, so the front fork sits right down on his withers even though the angle of the bars to his ribs is actually quite good. An extra pad will give this saddle enough spinal clearance to work with this goat.

Most of our wooden saddles were designed over 20 years ago for Alpine and other Swiss dairy breeds. Modern packgoats are often crossed with meat breeds such as Boer and Kiko, which have much broader, more muscular backs than dairy goats. The meat breeds are also markedly more swaybacked than the Swiss breeds, making saddle fitting more difficult. Some modern packgoats may not be capable of working in the old wooden saddles at all, and it is important for us to keep this in mind when selecting goats and saddles. Modern saddle makers will do well to appreciate these changes that have occurred and keep up with the times.

Some packgoats these days may require a saddle that is wider in back than in front like a miniature donkey saddle. With that in mind, don't be afraid to think outside the box when working with a goat that is too wide for the average goat saddle. There are saddles made for miniature donkeys and horses that may fit your "double-wide" goat very well. When looking for a saddle, it's better to have it a little too wide than too narrow. A saddle that is too wide can often be corrected with an extra pad, but piling on more pads will never correct a saddle that is too narrow.

A well-fitting saddle is comfortable for your goat even when fully loaded on a long, difficult trail. Hair that is rubbed out or rubbed the wrong way, hot spots, and sore spots are all physical indicators of poor fit. They may also indicate a loose cinch.

A loose cinch allows the saddle to wiggle around and rub your goat's back uncomfortably, and it will allow the pad to work its way out from under the saddle. But many times a saddle fitting problem may not be physically obvious. It may present itself by a change in attitude. A normally agile goat that turns slow and clumsy when loaded may be suffering under an uncomfortable saddle. A goat that is showing signs of sour attitude, stubbornness, laziness, or reluctance to be caught and/or saddled may be trying to tell you he's sore. If your goat acts differently when saddled than he does when unsaddled, look for fitting problems. He may be trying to tell you something in the only way he knows how. Maybe your goat doesn't need an attitude change--he needs a saddle change!

Do your goats a favor and check the fit of all your saddles before heading out on the trail. Your hard-working companion deserves to be happy and comfortable in his job. He'll be able to carry more weight over a longer distance if his equipment fits, and he'll enjoy going out on pack trips for many wonderful years if you take good care of his back.