

Bromancing the Bridle

Harness maker David Freedman and carriage guru Jeff Morse totally geek out on the metrics of the equipment you put on your horse's head. You'll never look at your bridle the same way again.



Harness maker David Freedman means it when he says, “I am fascinated by the way we interact with horses, so I pay close attention to what my trainers and drivers tell me.” That may be an understatement, as the following conversation illustrates.

Typically interview panelists finish each other's sentences. However, David Freedman and Jeff Morse got into each other's heads when they hooked up for this chat. The scheduled topic was the fitting of a harness bridle, but, as you will see, the dialogue seamlessly morphed into the anatomical intricacies of a horse's head, the evolutionary place of stoicism in the equine psyche, as well as dos and don'ts of harness adjustment.

The two have spent time together at carriage competitions and at Jeff's Green Meads Farm in the Berkshire hills of Massachusetts. So, intentionally or not, they had already prepared talking points. Jeff suggested the topic in a phone conversation prior to the kickoff of his 2022 competition season. David conferenced in as he was

preparing for his first trip abroad since the onset of COVID, where he would attend European driving competitions and meet suppliers at the International Leather Conference in Dubai.

David says, “I've worked with Jeff Morse. He gets it all, nuts to bolts. But he also gets that the bridle, its fit, and its purpose is a higher level of complexity. That's why he suggested this subject. I think any horseman will attest that if you get a horse right in the bridle, you've probably got them right everywhere else, including foot flight, head carriage, soundness, bending, suppleness, roundness—and this includes dental care, by the way. Whatever you are looking for in your specific discipline, if they are not right in the bridle, they are not right anywhere else.”

By Stephen Kinney

DAVID FREEDMAN: You can do a lot with a horse that doesn't have a harness on. You can do nothing with a horse that doesn't have a bridle on. You can stop and fix things if you break a trace or a back strap. If something goes wrong with a bridle, that's next

ABOVE: David Freedman showing a new harness to a customer in England; Jeff Morse prepared for competition.
OPPOSITE: A carriage bridle, close up and in detail (photo from Freedman's Harness).





IDEAL FIT

The bridle crown and browband, when properly attached to each other, form what is known as “the hat” on top of the horse’s head. A “glove-like” fit keeps the hat secure without undue pressure points on the head. If it does not fit correctly, the rest of the bridle will not fit correctly and will either create pressure points due to tightness or create an instability for the rest of the bridle. Note all buckles have room for adjustment. Also note, **the blinker**, which focuses a horse’s vision, is ideally positioned center over and parallel to the horse’s eye, not touching the eyelashes (photos © Nicole Laver, Freedman’s Harness).

level! If you have expectations on your horse and yourself to have a good drive, nothing is more important than a well-fitting bridle. It is your aid. You have no leg, just your whip and your connection through the reins to the bridle. So, yes, the bridle and its fitting is more complex than other parts of a harness.

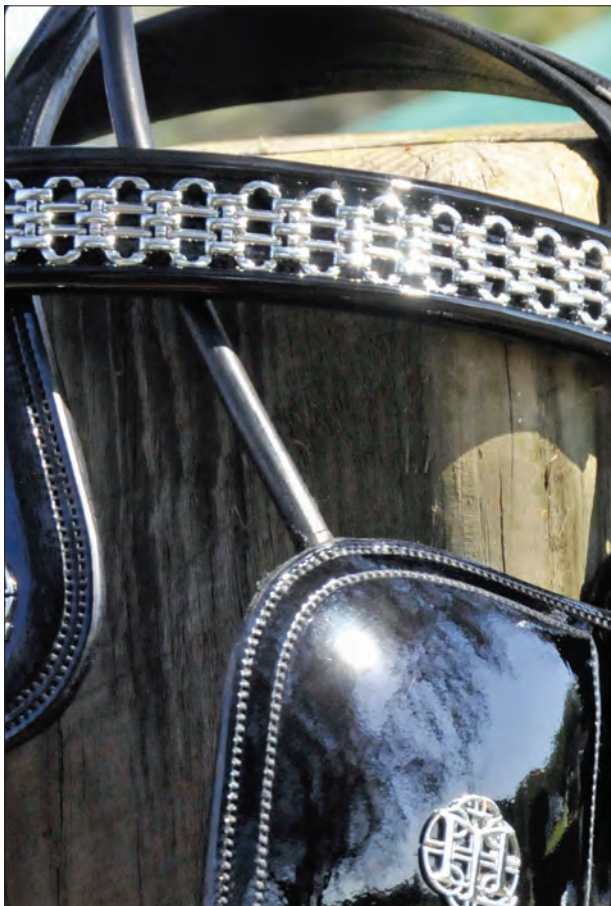
JEFF MORSE: David, I wanted to focus on the bridle, because its fitting is entirely different than other parts of the harness. First of all, it surrounds all the sensory input devices that a horse has: his ears and eyes are all mounted on his head. And the structure of his head is different than the rest of the body because it is thin skin over bone and not a lot of muscle or meat. I want to explore some of the things you have to consider when you are making bridles and putting them on a horse’s head. Talk about the pressure points and how you avoid applying unnecessary pressure.

STEPHEN KINNEY: Can we define the term? Are you talking about points where equipment puts pressure on the horse or are you talking about sensitive points in a horse’s anatomy?

DAVID FREEDMAN: Both. Instead of avoiding some of the natural pressure points on a horse’s head, we focus on where the pressure points need to go. Starting at the top, you have poll pressure. Moving down the face, nose pressure. Then into the mouth with bar pressure. If there is a curb chain in use, you have chin pressure. The bridle needs to use those segmented pressure points to help a horse balance. Over the poll there has been a lot of experimentation with special shaped crowns and padding and different cutaways around the ears to alleviate pressure below the poll and down the neck. The actual crown of a bridle has to sit in a very specific area and the wider it gets the more it disperses pressure into other areas behind the ears. That has been an interesting route to follow. We know through the anatomic design of a horse where those pressure points are. Avoiding them is not easy while also allowing all those points to be activated when you put pressure on the bit. The head set of a horse is connected to hoof flight, speed, control. There are a variety of elements coming into play. And you are right when you mention the level of complication in relation to other harness parts. Think about it in these very simple terms: there are as many parts in a driving bridle as there are in a saddle. And it’s a lot smaller, a lot finer, and a lot harder to make. To have it comfortable on a horse, it takes a lot more time and a lot more adjustment to have them be effective.

JEFF MORSE: One of the things that complicates your job, and the trainer’s job, is that the horses we are dealing with today, through evolutionary selection, are much more forgiving. The ones that weren’t forgiving aren’t here anymore. They accept things that may not be perfect and, because of their selection, they continue to perform pretty well. When that happens we fail to investigate things that could make life even better for them. Do you agree with that?

DAVID FREEDMAN: To some degree. I think all breeds are developing, they are fluid. Take the Morgan horse for instance. We are not dealing with the same movement or even body construction that we were 30, 40, 50 years ago. Whether people like that or not is not for me to comment on. But that’s changing. It’s different. We are breeding for more specific outcomes, to assure horses are able to do the jobs we want of them. Also,



The **winker brace** is that fine piece of rolled leather that attaches the blinker to the crown piece (photos from Freedman's Harness).

training has evolved from 100 years ago when horses' jobs were more utilitarian. Today, we have specific jobs for these horses, and we are training them a specific way. That level of detail has come through, not only on the breeding side, but on the training side as well. It is my answer to your question that this affects all equipment in general, based on so many breeds competing in so many divisions.

JEFF MORSE: I would clarify a little more. A pressure point is any point where pressure on a horse's head is distracting to them. For me, the early instigation for this conversation came one day when a groom pointed out that the underside of the rosette on a driving bridle I had used every day for many years was putting a lot of pressure just below the ear. I had never checked that. I had never put my hand under it to see how much pressure was applied there. But when I did, I said "wow, there is a lot of pressure here." All the horses I had used the bridle on had worked just fine, but I found this was an instance where I could make my horses' lives a little better. And—bear with me, David—I replaced the rosette with a zip tie and it worked great for a working bridle. That's a very sensitive place. Think about where that is located. A horse's ear has something like 22 muscles in it, lots of nerves pass in and out of the skull just below the ear. That's a really critical place. When you look at a bridle you have a brow band, the crown, a cheek piece, buckles, all coming together right in that location. It's a thing a lot of people may not be paying attention to.

DAVID FREEDMAN: This comes down to sizing and fit of this equipment, it doesn't matter what breed you are dealing with. If you don't have a browband the right length, or if you have too much rosette sticking out the back, what we call the bridge that holds the rosette onto the browband. Or it is put on too tight, this can all affect how the bridle fits. We are sticklers for rosettes being really tight because I don't like movement. I want that browband on the crown piece tight. I don't want the browband sliding down and touching the buckle of the cheekpiece or interfering with the throatlatch. I want it staying in position independently. We put them on pretty tight. There are self-appointed experts who will say that it is better loose. But there is no proof that looser is better. That whole piece over the poll where the crown piece runs down to the rosette, including the browband, is integral to a good fit of a bridle. If the browband is too short it pulls on the back of the ear. If the browband is too long, it sticks off the horse's head and if you pull on the bit you can actually have movement back and forth of the crown, which can change the point where pressure comes down behind, and in front of, the ear. That is why I am not a huge fan of these shaped crowns. I believe the further you move the pressure forward from behind the ear the more problems you will end up with.

Let's circle back. You figure out the pressure on the mouth also adds down pressure when you engage the bit, and that may produce lateral pressure on the rosette. Maybe the bridge on the rosette is too large or is poking in or is on a particularly sensitive horse. Maybe there was not enough room in the browband, maybe too much. Your solution was to take the thing off and lock it into place. But you could dig deeper to ask what is causing the problem. It may be the bridle, but, like you said, that bridle has had no problem on any other horse. It could be your lucky bridle that you broke any number of horses to drive in. But this one particular horse, it is not working out well.



THROATLATCH

On a harness horse it is important the throatlatch is snug enough that it prevents the crown piece from slipping over the horse's ears (photo from Freedman's Harness).

What we think is comfortable for horses, whether on the bridle or any other part of the harness, is only in our minds. There is no living proof, as in the horse moving better. It is a question of, is the bridle effective? Is the horse wearing it correctly? Does it fit? Is the horse using its ears? Is the horse responding to aids from the bit? It is no more complicated than that.

JEFF MORSE: I didn't notice this as a result of it affecting the horse's behavior. I just put my hand back there and, in my mind, I felt like that horse can't possibly like that. It was a lot and it was sharp. When I replaced it, it didn't make a huge difference in performance, but he may indeed have been more comfortable.

DAVID FREEDMAN: You are talking about so many pieces in a bridle and every individual horse could handle these pressure points differently. It is not up to me to figure that out for every individual horse, but it is up to me to try to have the tools in the toolbox of bridle adjustment for you to be able to make those changes as needed. That's my job. You've been around me when I measure horses and spend time looking at their heads. [Harness size] is cookie cutter, 14.1, 15.1, 16 hands. But horses are all different and you have to build tools into those bridles so adjustments can be made. And you're still going to find details, like the rosette you mentioned.

JEFF MORSE: Getting back to what I was talking about, something that makes it difficult is that horses have evolved not to show their pain or discomfort.

DAVID FREEDMAN: You are saying they are stoic.

JEFF MORSE: Yes, it is built into some horses more than others, not to show discomfort. I remember distinctly a clinic that was held at a barn I worked in and they brought in a very high achieving jumper. I watched it go, he did everything wonderfully. I was allowed to run my hand down his back, and he almost fell to the floor, he was in so much pain. Yet, he was a good horse, he won ribbons, and as a result, no one bothered to check if a chiropractic adjustment could help him out.

DAVID FREEDMAN: You are right, horses do what they are meant to do partly because of their instincts. They are bred and built to serve us. We used them for transportation 200 years ago. It is a simple fact we are involved with animals who helped build the world and helped build North America. We have a relationship with these animals which involves a level of respect and understanding.

JEFF MORSE: Right. And I believe we have responsibility to investigate a horse's level of comfort. I see too many people thinking they can put the bit where they want

and the width of the bit is about right, so they are good to go. Or the browband where they want. There is so much more to it, but the fact is our good horses will tolerate it. How often have you seen horses where the bit is too small or too long and the horse will go around doing what it is supposed to do?

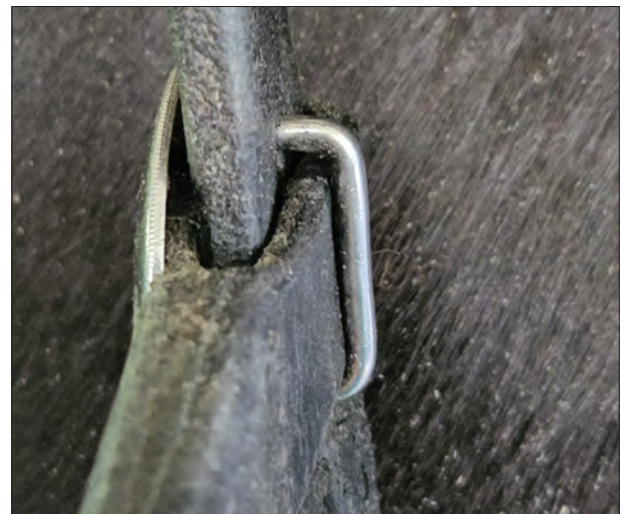
DAVID FREEDMAN: Your larger question is, is it correct? Is the horse comfortable? Will the horse perform to its best level? My answer is that a lot of horses don't perform to their highest level because equipment doesn't fit properly. We've done so many different things based on what we think, but there is no hard evidence that putting a shape in a breast collar and moving the draft angle below the point of the shoulder is more comfortable on a horse. I have never seen proof.

JEFF MORSE: It just makes us feel good.

DAVID FREEDMAN: It's a feel good thing. I have clients—not a lot in the Morgan world—who use a lot of padding under their saddles. Who is being made comfortable? Your horse or you in your head? The higher they build these saddles up the more these saddles rock from side to side and the sorer backs these horses have. How about getting a better-fitting saddle with closer contact? We happen to be having a conversation on bridles, but you know yourself we can have the same ongoing conversations on breast plates versus collars, and back pads and britching. And it is even more interesting that you are defining it as an issue of a horse's comfort. The equipment has to allow this. I had a text message last night from Dwayne Knowles. Two weeks ago, we had shipped him a new set of fine harness. He sent me a message to say things are going great, he was breaking in the harness. That's smart. They're using it. Some of the stretch is going to come out of it. Some of the stretch is going to come out of the cheek pieces. The browband is going to shape a bit. The winker brace is going to shape, so is the throatlatch. They're using it rather than just taking it out of the box at a horse show. The level of performance is going to increase, not decrease, as the equipment stretches and molds.

JEFF MORSE: I remember years ago Mabel Owen came up to see some stallions here and I started talking about one and she said, "I bet he's got a small mouth." I had been in horses for 20 years and never really thought about what it meant to have a small mouth on a horse. As soon as she left, I went up and took a look and sure enough this horse had a small mouth, and he had a bigger distance from the prominent cheek bone on the side of his head to the corner of his mouth than other horses. Since you have taken measurements on so many different horses, are there parts of the head where measurements vary more than other parts of the harness?

DAVID FREEDMAN: The number one spot is the distance between their ears. That is why I'm not a fan of a shaped crown. No two horses heads are exactly the same, so to make a pattern and get it comfortable on one Morgan of a certain size, how are we going to get it comfortable on every Morgan? That is one reason we never do a cutaway crown. It is really hard to make it with enough carry on both sides that it is going to provide any level of comfort. Then again, we cut away the back of the crown piece because we think that the horse is going to be more comfortable behind the ear, but it has nothing to do with the crown, it has to do with the



BRIDLE DILIGENCE

Many muscles and nerves gather in the area around a horse's ears. Therefore, a rosette should be snug-fitting to avoid bridle pieces moving and browband length should be carefully fitted to each horse. Jeff Morse recommends checking the "bridge" at the back of your bridle's rosette to be sure it is not aggravating the sensitive areas around the

ear (photos from Freedman's Harness, Jeff Morse).



BRIDLE DILIGENCE

David Freedman isolates browband fit as one of the most important elements in a bridle's utility. A browband too long allows the rosette and crown to slip back, having an effect on the placement of the cheek pieces and bit. A browband too short and the crownpiece and rosette create interference around the ear (photos by Jeff Morse).

length of browband. If the browband is the right size there shouldn't be a problem behind the ear. If it is too long, there is too much movement. Call this the hat area, the browband, crown, and the winker brace buckle, how they are all fastened together. It is important for the comfort because everything hangs from that. The cheeks hang from that, the bit hangs from the cheeks. It is the foundation of the bridle. If you don't get that part right, it doesn't work.

JEFF MORSE: I was intrigued when you came here to measure horses and you walked into a stall with a dress maker's tape and took about three measurements and said, "I'm already to go home. I can build the whole harness now." And then you said something to the effect that your father was better than that, he could build a whole harness on one measurement.

DAVID FREEDMAN: That is an interesting part of my trade. First of all, the company for 200-plus years, and since 1910 when we came to Canada, has been based on these breeds, Morgans, Saddlebreds, Hackneys, 15–16 hand horses. When you are dealing with these breeds you are dealing with a very specific group of measurements within a size bracket. Those measurements are mostly the same all the time, but with a few intrinsic points that differ, little things that have to be cited and noted when you are building something like this. So you take three or four measurements to incorporate within the cookie cutter pattern. That could mean a seven-inch cheek piece or a seven-and-a-half-inch cheek piece. Those two differences for me, of a half an inch on a bridle, are the difference between a 15.1-hand horse and a 16.1-hand horse, versus a 14.1-hand horse. We are fitting a fairly large group of horses based on a half an inch. When I go up from seven-and-a-half to eight, I'm going up to Budweiser Clydesdales. There is not a lot of travel here. Back to measurements. I could measure two horses at 43-inches over the poll, but one could be longer-cheeked and one could be shorter-cheeked. They could both have the same distance behind the ear, the same browband measurement, but they could have different noseband measurements, one tighter, one looser. They may look like matched heads, they could be siblings, but they actually are not the same. We had this happen at your farm, two siblings, same size, different fits.

JEFF MORSE: You once used the analogy about a bridle, that "it should fit like a good pair of well-used gloves."

DAVID FREEDMAN: Another one of my dad's theories. All harness should have what we call a "glove fit." That is pretty simple. Not too loose, not too tight. Just right. Put them on, super comfortable. Right? When it comes to a bridle, what is really important is that you are not in the last hole of adjustment. I don't care if you are in the second hole, middle hole, just don't be in the last hole. If you are in the highest hole, closest to the rosette, and something changes, you have nowhere to go. If you are on the longest hole, not so bad. You can raise it up. On the bit, you can't be in the tightest hole, the shortest hole, because if you need to raise the bit, you can't. The glove fit entails many things, the horse's bit, its position in the horse's mouth. The crown is sitting behind the ear, not transferring weight toward the forehead. It should be sitting behind the ear, creating poll pressure. The center of the blinker should be sitting in the center of the horse's eye. It should be closed just so much that the horse's eyelashes do not



Jeff Morse's Heyday Black Hawk at a carriage driving competition (photo © Blue Moon Images).

touch the blinker. It should be flat and straight ahead. The horse should only be able to see forward and down. It should not be able to see around or behind and reacting to its environment rather than simply reacting to the bit. We put blinkers on the horse so they stay focused on their work, not on other moving things around them. I am a stickler that the blinker is straight on the eye, but not touching the horse's eyelashes. Cavessons are on a soft spot on a horse's face and sometimes not adjusted high enough. Horses have to find their balance within the harness, to move the carriage forward or back, and the bit and bridle are big parts of where they find that balance. Some of the pressure of that balance comes through the noseband or cavesson. The noseband is adjusted independently on a carriage harness and the cavesson on a fine harness has one strap over the poll. You have to test your throatlatch. You buckle on both sides, put your hand in the center between the ears and pull forward on the bridle. If you can get an ear out, your throatlatch is too loose. If you can get it off that easy, they can get it off that easy. You can ride with a looser throatlatch, but in a driving bridle the throatlatch has to hold the hat on the head and in position.

JEFF MORSE: I've heard you say that the better the driver the more particular they get about their equipment. You used the illustration

that Chester Weber did not want his leader reins sewn together because he could feel the joint where they were sewn catch slightly in the terrets. You had to figure out how to make the leader reins, which are 20 feet long, with no sewn joint, out of a single cowhide. Are there other things you have learned from trainers that you might not have thought about yourself as a harness maker.

DAVID FREEDMAN: I shared that statement because it is part of my experience that as trainers and drivers do more, they ask more. The more you ask of these animals, the more tools you need in the toolbox, the bridle, the bits, other parts of the harness. Whether you are longlining, ground driving, breaking, or driving the horse, trainers have a certain expectation of how the equipment has to perform. It is an unwritten but fundamental expectation of how adjustments can be made so the horse is comfortable doing the job he's asked to do and how the tools are allowing the job to be done. Your hope, Jeff, is that your horse is performing to the best of its ability at that time in its training and to your own personal expectations of where that horse can perform. When a horse and driver you train comes out of the ring, can you say the horse did what was expected of it and your driver did great? That's it. There is nothing more. ■