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Selecting a Horse Trailer

Extension Fact Sheet FS-948 2012

Horse trailers come in a variety of configurations and sizes. From tagalong one-horse trailers to self-propelled horse vans to semi-driven rigs, the choices can be daunting. When determining what type of trailer is best, it is important to consider the following factors.

Horse Trailers versus Livestock Trailers

Any trailer being used to tow horses must be designed to safely haul live animals, and if possible, specifically designed for horses. These trailers are often fully enclosed and have dividers inside to separate animals during hauling. Horses can also be safely hauled in livestock trailers (sometimes called "stock trailers") if certain considerations such as taller size, wider width, and external wheel wells have been met. A livestock trailer is similar to a horse trailer in most ways but is usually partially open-slatted on the sides and may lack internal dividers to separate animals. When choosing between a horse trailer or a livestock trailer, consider what type of animals will be hauled

now and in the future. Those who raise livestock, or plan to in the future, may find a livestock trailer that is also designed



also designed horses. for horses handy to accommodate a variety of

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animals. Those that primarily haul show horses may simply prefer a traditional horse trailer.

Temperature control is one of the most important considerations in selecting a trailer. Horse trailers, since they are enclosed, must be equipped with windows and vents that can be opened or closed depending on the weather. This allows for some regulation of airflow and temperature inside the trailer. These factors cannot be regulated in a livestock trailer since the trailer is open-slatted. Therefore blanketing may be necessary in cold weather, especially for horses that are clipped.

Hitch Type

The juncture where the trailer connects to the tow vehicle is called the hitch. Most horse trailers are configured with either a bumper pull hitch or a gooseneck hitch. On a bumper pull trailer, the coupler extends out from the front of the trailer and attaches to a ball mounted on the bumper of the tow vehicle. Bumper pull trailers are usually



smaller in size and can be pulled by a smaller tow vehicle. This combination of trailer and tow vehicle is often the least expensive

the hitch.

horse hauling rig available.

A gooseneck trailer connects to a ball in the bed of a hauling vehicle. The trailer coupler is located underneath the overhang on the front of the trailer. Trailers built to haul three or more horses are usually configured as goosenecks as this type of hitch allows for greater stability and safer conditions for hauling heavy loads. Gooseneck trailers, because they are heavier, must be hauled by larger hauling vehicles. This type of configuration is generally more expensive but is also easier to drive. Because the hitch is located in the truck bed, the rig has a smaller turning radius. This makes maneuvers like turns and backing up easier to perform.

The largest horse trailers may be configured as a third hitch type called a



fifth wheel. A fifth wheel trailer looks just like a gooseneck trailer, but the hitching mechanism is different in order to provide a stronger connection between truck and trailer. All tractor trailers use a fifth wheel hitch. A smaller version of a fifth wheel can also be installed in the bed of a pickup truck.

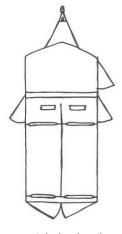
Load Types

Horse trailers can be further classified as straight load or slant load. In a straight load trailer, horses stand side by side facing forward. There is often a door in the front of the trailer where the handler can exit. Straight load is the most common layout for small, two-horse trailers. All other factors

held constant, a straight load trailer is usually less expensive than a slant load.

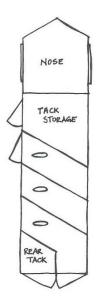
In a slant load, horses stand side by side but on a diagonal with their noses pointing toward the middle of the road. Slant load trailers typically have a storage area in the rear to utilize the dead space created by the slant design.

One major criticism of this



A straight load trailer (view from above).

load design is that a handler can easily become trapped between the horse and the exit while loading and tying.



The choice between straight and slant load is based primarily on personal preference and other constraining factors, such as the number of horses to be accommodated in the trailer. At this time, there is very little research to support that one load type is preferred or safer than the other.

Rear versus Side Loading

A slant load trailer (view from above). Most horse trailers allow horses to load from the rear. Some larger trailers allow loading via a side ramp only.

Some small trailers have both a rear and side ramp, which allows horses to be loaded on the trailer from the rear and unloaded from the side. This prevents the horse from having to back off the trailer. Side ramp trailers are usually more expensive than rear load trailers.

Ramp versus Step Up

The design of the back door on the trailer will determine whether the horse loads the trailer by walking up a ramp or by simply stepping up into the trailer. If the trailer door is hinged at the floor, the door folds down into a ramp. If the trailer door is hinged on the side, it swings open and is known



A trailer with a rear-loading ramp.

as a step up. Ramp trailers are generally more expensive than step up trailers. It is important that the ramp is strong and does not make a hollow noise when the horse walks on it. If using a step up trailer, the edge of the step should be rounded or covered to prevent the horse from injuring



ring A step-up trailer.

itself should it bump a leg or hoof. Both ramp and step up configurations are equally safe; selection of this criterion is based on personal preference.

Trailer Construction Material

Most horse trailers are constructed out of either steel or aluminum. Steel is the most common material used. It is stronger than aluminum and also less expensive. Repairs, especially welding repairs, are easier on steel trailers.

Aluminum, on the other hand, is a much lighter material. Although more expensive, an aluminum trailer can accommodate a heavier load. Aluminum trailers won't rust, but they can corrode.

Interior Size

The size of the horses being hauled will determine how large the trailer must be. Miniature horses can be accommodated in a very small trailer, whereas draft horses will need a trailer that is larger than average. For the average horse, a trailer that is seven to eight feet tall and six to eight feet wide (internal dimensions) is sufficient. As a rule of thumb, the trailer should be at least ten inches taller than the horse's head at normal resting height and allow at least three inches of lateral space on each side of the horse.

Tack and Supply Storage

Those that typically haul a lot of supplies when traveling may want a trailer that provides some storage areas. Those that haul long distances will need a trailer that provides storage for adequate amounts of hay and water.

Many straight load horse trailers have no storage at all aside from the small empty area in the very front. Slant load trailers typically have a storage locker, often outfitted with saddle racks, in the dead space at the very back of the trailer. Gooseneck trailers will have an open area over the neck which can sometimes be used to store supplies. In trailers where this area is open to the animal area, supplies must be secured so that they cannot fall into the animal area during transport. Some trailers are designed with a tack room, usually located in the front of the trailer.

Living Quarters

For those that often travel far distances or stay overnight at their destination, a trailer with living quarters may be an appealing option. These trailers are much more expensive but do range in price. A basic model providing just the essentials for an overnight stay may run as low as \$20,000. Luxury models can cost upwards of \$200,000.

New versus Used

Buying a new trailer is the preferred course of action for many horse enthusiasts. When buying new, it is easier to find and select a trailer with all the desired options. Some new trailers may also come with a warranty.

Do some research before making the investment of buying a new trailer. It's useful to compare what you want, what you need, and what you can afford. Trade shows and expos are often good places to look at different trailers and talk with dealers.

Buying a used trailer may be an appealing option for those on a budget. It may be possible to purchase a basic, safe trailer for as little as \$1,000. However, there is more risk associated with buying used than buying new. Used trailers can be a good investment, provided that the purchaser has the required knowledge to determine whether the trailer is in adequate condition to safely haul horses. Do not expect to repair a damaged or dysfunctional trailer unless you are an experienced auto technician. An improperly repaired problem can be just as dangerous as no repair at all. Never compromise on safety in an attempt to save money!

Before beginning a search for a used trailer, it is imperative to educate yourself about trailer safety. Be sure you can assess the following aspects of a trailer:

Brakes. Not all trailers have brakes, but all trailers hauling animals *must* have brakes. It's the law, and it's also crucial for safety. Electric brakes are the most common type found on trailers.

Make sure the brake controller in your vehicle is working properly by hooking up to a trailer known to have functioning brakes and adjusting the controller on a flat surface. Then take a test drive with the trailer in question to make sure the brakes are functioning properly. If they are, you will be able to feel the trailer brake when you press the brake pedal.

Lights. By law, trailers must have properly functioning brake lights, tail lights, turn signals, and running lights. Trailers should also be equipped with interior lights for nighttime hauling. Even if you do not expect to haul horses at night, it may be necessary in an emergency situation. Loading a horse into a dark trailer at night is not only difficult and stressful to the horse, but also dangerous. Dysfunctional lights may be as easy to fix as changing bulbs or fuses but may require other types of complicated repair. External lights are also useful when tacking up in the dark as in the case of early morning shows.

Floor. A floor that is structurally sound is one of the most important aspects in terms of safety. If there are floor mats, inspect underneath them to ensure the wood floors have no rotting and metal floors have no rusting. To detect rotting in a wood floor, stick a knife into the wood and twist. Too much wiggle room indicates rotting. Test multiple areas of the floor from the top and from underneath.

Rubber floor mats are a useful addition to



the trailer floor as they provide greater traction and help prevent fatigue. Mats should fit the trailer such that there are no gaps or uneven surfaces and should be in good repair. Heavyduty mats that are at

Padding on the interior wall of the trailer.

least half an inch thick are best suited for use with horses and livestock.

Hitching mechanisms. Check that all the components of the hitch, safety chains, and the emergency brakeaway brake are present and are

not too worn. The locking mechanisms on the hitch should not be rusty and must latch properly.

Protrusions or hazards. Inspect the inside of the trailer for

any protrusions or hazards that could

or Partial divider and butt bars in a straight load trailer.

injure a horse. Rough metal, splintered wood, or protruding screws or bolts can be a safety hazard during loading and transport.

Padding. Trailers that separate animals into individual stalls should provide padding. (Livestock trailers are generally not padded.) Padding should be in good repair and located to the front, sides, and back of the horse when it is closed in. Rubber floor mats are highly preferred but not absolutely required in all trailers. If rubber mats are missing, they can be purchased separately and installed relatively easily. **Partitions and gates.** The partitions or gates that separate animals into individual stalls should be in good repair. Ensure that wooden partitions are not rotted. Any metal components like fasteners or hinges should be free from rust and in good working order. Straight load trailers should have a "butt bar" or gate that closes behind the horse's rear end. A horse bracing backwards should lean against the butt bar rather than pushing back against the trailer door.

Ventilation. All trailers must provide adequate air exchange. Livestock trailers are well ventilated since they are open-slatted. Enclosed trailers must be equipped with windows, vents, or another way to allow for adequate airflow.

Making Your Selection

Selecting the right trailer can be a difficult and time-consuming task. When making the decision, consider two big questions. First, what are you doing? The number and size of the horses to be hauled, length of travel trips, and specific destinations will help you determine what will work best. Think about what features you want, but more importantly, consider what you and your horse need to be safe and comfortable. Second, what you can afford? Be sure to include costs for maintenance and possible repairs when making this determination.

In coming to a conclusion, you will likely have to make a compromise between what you would like to have and what you can afford. One thing you should never compromise on, however, is safety.

Carefully considering these questions and educating yourself about trailer safety will facilitate a decision that you and your horse will be happy with.

References

Renshaw, J. and R. Nottingham. "Safe Trailering and Transportation of Horses." 2011. FS-932. University of Maryland Extension, The University of Maryland. College Park, MD.

"Tips on Trailering Your Horse." 2003. TNH3001. The University of Tennessee Agricultural Extension Service, The University of Tennessee. Knoxville, TN.

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Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, University of Maryland, College Park, and local governments. Cheng-i Wei, Director of University of Maryland Extension.

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