

Carving a Traditional Scandinavian Folk Art Pull Toy

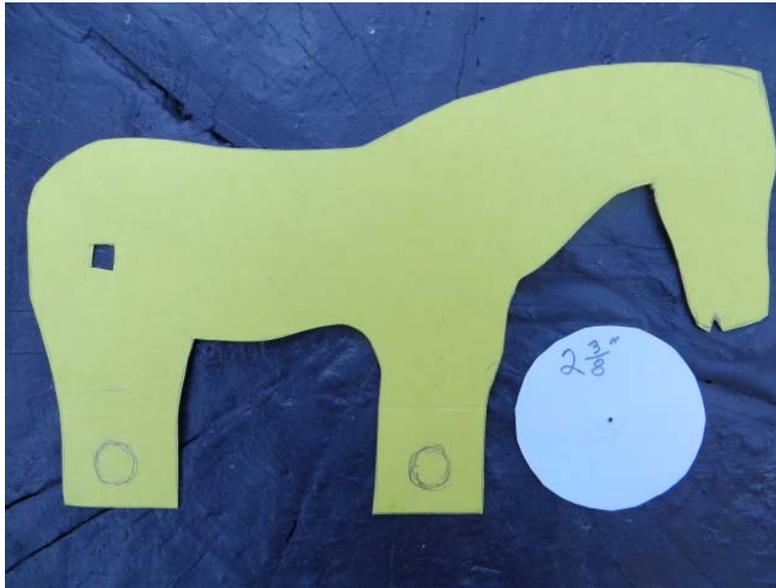


For centuries, the rural areas of Norway, Sweden, Finland and western Russia were some of the poorest in the world. Even so, the children in those areas did not lack for toys. The combination of axe, knife, the boreal forest and loving parents resulted in a wide variety of wooden toys. Hundreds of those toys have survived and are in museums today. Along with carved wooden dolls, the most common of these is the horse pull toy. Just as kids today play with toy cars and trucks, children of that time were fascinated with horses and wagons.

This project is to replicate one of those horse toys in the folk art spirit. The original piece this project was modeled after was made in Sweden in the 1880's. True, someone with a bit of art talent could "improve" on the project by correcting the proportion or adding detail, but the result would definitely not have the folk character of the original. And for certain, the end user of this project would not appreciate it one bit more.

The following pattern was drawn directly from the museum piece. Although it could be made any size, this one is the size of the original. From nose to rear is 9 1/2" and from the bottom of the leg to the top of the head is 6". It is 2 1/4" thick, with the wheels being about 2 3/8".

If you have drawing skills, simply draw from the photo, but if not, print out the pattern and enlarge it on a copy machine to get the desired size.



Materials:

- Block of wood for the horse body. This should be wood that is fairly easy to carve - basswood, butternut, sugar pine and so on. Birch would work fine if it isn't too hard for the carver. If birch is used, it would be better if it were still a little green. The original toys were likely made of birch.
- Wood for wheels. This should be wood that is durable and not prone to splitting. The wheels in the photo are made of maple, but birch would be fine. Wheels should be 3/4" to 1" thick.
- Axle. It is important that the axles are made of hard, durable wood such as oak or cherry. Dowels currently available in hardware stores are soft and weak. To get a suitable dowel you will probably have to purchase one from a specialty wood shop. Although the axles in the historic piece seemed to be about 3/8", I made these of 1/2" hardwood just in case someone tried to ride the finished horse.
- Hair for the tail. The tail in the first photo was made of real human hair. If you notify the folks at the local beauty shop that you are looking for a clump of hair about 6" long, they just might provide you with some prime tail material. There are other options though that work just as well. Sometimes you can get a long-

haired doll at a thrift shop for a dollar or two. (Sorry Barbie.) Real horse hair also works well. You will need some thread to wrap the end of the hair before gluing it in place.



Real horse hair on the left, human hair in the middle, and \$2.00 Barbie on the right.

- Quality wood glue such as Titebond II or Titebond III.
- Artist quality acrylic paint. Avoid box store paint – it is full of fillers and is not durable. Artist quality paint also has more brilliant color and is easier to mix. Buy brand name acrylic paint that comes in a tube.
- Wax. A good waxing of the painted finish will keep the toy from getting dirty with handling. If there is a chance the toy may end up in someone's mouth, use food safe wax. Food safe wax can be found at specialty wood shops or sometimes at kitchen shops.
- String to pull with.

Step 1: Lay out the pattern on the block of wood. The grain of the wood should be aligned so that it is parallel with the horse's legs. In other words, the grain will go up and down in the horse. This will give the horse strength in its legs that it may need, and it will also make carving the curves on the back much easier.

Step 2: Saw out the blank. Although this could be done with a frame saw, if you have access to a band saw it will save time.

Step 3: It is important that the axle holes be drilled at this stage. If the holes are drilled after the horse is carved, there may be alignment and splintering problems. If you have access to one, a drill press will assure good alignment. Simply mark the hole and drill through the entire block. Use a 1/2" drill bit. A brad point bit will make it easier to drill the hole exactly where you want it. If you are using a hand-held drill, mark the holes

carefully on both sides and drill all 4 holes separately. Be sure to use a scrap piece of wood as a backing board beneath the horse if using a drill press. This will keep the holes from splintering as the drill bit exits the wood. To get the 1/2" axle to turn freely in a 1/2" hole, you will eventually have to enlarge the hole just a little bit. This can be done with coarse sandpaper wrapped around a dowel, and is best done when you are finished carving.

Step 4: Using a handsaw, saw a slot between the legs up to about 1/4" of the body. Be careful here to not let the saw touch the head of the horse.

Step 5: Time to whittle. Using a sharp carving knife, carve off everything that doesn't look like a horse. The only tricky part you will likely encounter is carving between the legs. I like to start that process by using the belly of the blade to chip out large pieces. I follow this by using a standard chest lever knife grip and the point of the blade to remove material from between the legs. These are both safe cutting techniques that will quickly move lots of wood. Always keep in mind that you are not after realism, but instead are making a toy that retains enough strength to hold up under hard use.



Use the belly of the blade to break away large chips between the legs. Do not be concerned with neatness, as neatness will take care of itself as you refine the shapes.



Using a chest lever grip is quite safe and will quickly remove wood from the hard-to-reach area between the legs.



Once material is moved from between the legs, start rounding legs and body. This is all easy to reach and should be pleasurable carving.

Step 6: Once you have finished carving, drill holes for the pull string and the tail. Use a 3/32" bit for the pull string. The hole should be drilled at an angle and should enter the back of the head and come out in the throat just behind the horse's jaw. Use a 3/16" bit to drill the hole for the tail. Look at a photo of a real horse if you need help with the location.

Step 7: Use a drawing compass to draw circles on the wheel wood. It is much easier and safer to drill the center holes in the wheels before the wheels are sawed out into their

round shape. Make sure that you can see the center point of the wheel made by the needle of the compass. Then, using an awl, enlarge the center hole just a bit. It is extremely difficult if not impossible to drill a hole exactly in the center of the wheel without using a brad point bit. Place the tip of the brad point bit in the center hole and drill through the wheels using a backing board to keep the wood from splintering as the bit exits the other side. Drill slowly. Once the holes are drilled, saw out the wheels. **IMPORTANT NOTE:** Not all 1/2" drill bits make the same size hole. Some bits may drill a hole too large making it impossible to glue the dowel into the wheel hole. Before drilling all the wheels, do a test hole to see if your axle material fits snugly. The very best way to get a good fit is to use a 31/64" or 15/32" drill bit for the wheels if you can find one. Then use sandpaper to work the axle down to a good fit in the hole.

Step 8: Having any sort of machine tool markings left on your finished toy will detract from the folk character of the piece, so chip carve the wheels all over to give them that hand-carved look.

Step 9: Cut a bundle of hair for the tail. You can enlarge the tail hole a bit if you want a larger tail. Make the tail proportional to the body. Using thread, tightly wrap the bundle of hair on one end for about 1/4" and tie it securely. Trim the hair evenly about 1/8" beyond the thread. Then coat the wrapped portion with wood glue. With your finger, rub glue well into the end of the bundle to keep hair from falling out of the bundle's center. This is important. Set aside to dry. If you are using stiff hair, you might need to make the tail follow a graceful curve instead of sticking straight out. This can be done by wetting the hair thoroughly and then clamping it in a curved position until it dries.

Step 10: Time to paint. Wood left in its natural state will soon become dirty and unattractive. A good finish will solve this problem. When choosing colors, remember the end user of this toy, not what adults think a horse should look like. Have fun with color. For the most durable finish, paint on a fairly thin coat of paint followed by a thicker coat after the first coat has dried. Be sure that your hands are clean while painting. If you want a bit of an antique look, wait till the paint has completely dried – give it a day or two – then lightly sand with 400 sandpaper. This will sand paint off of the edges of the chip marks left by the knife and will accentuate the hand-made character of the toy. Paint the wheels as well.

Step 11: Once the paint has thoroughly dried, give the horse and wheels a good coat or two of food safe wax. Be careful that no wax gets into the holes of the wheels, as that can keep the glue from sticking during the final assembly. When the wax is dry, buff with a soft cloth.

Step 12: Make sure the axles turn freely in the holes and then put axles in place and glue on wheels. Be sure to leave a little space between the wheels and the legs so the wheels turn freely. Glue the tail in place. When the glue is dry, install the string with a knot beneath the neck. I like to pull the knot part way into the drilled hole so the string will stay in place. Time to play.



THE END