



Chris Kornkven's 2-story horse barn is actually a used shipping container with a metal storage room built over the top, and 14-ft. wide lean-tos on both sides.

## 2-Story Horse Barn Made From Shipping Container

Chris Kornkven, Whitewater, Colo., constructed a mouse-proof horse barn from a used shipping container. By downloading Sketchup ([www.sketchup.com](http://www.sketchup.com)), a free program on the internet, he was able to fabricate an 8-ft. wide, 8-ft. tall by 40-ft. long metal storage room on top of the container, adding 14-ft. wide lean-tos on both sides.

"Sketchup lets you draw blueprints with dimensions down to 1/16 of an inch. It works great for designing and printing out plans for building projects like mine," says Kornkven. "I came up with the idea because my wife wanted a mouse-proof shed to store tack and feed for her horses. She loves how it turned out."

He bought the 40-ft. long, 8-ft. wide, 9 1/2-ft. high container from Container One (ph 330 286-0526; [www.containerone.net](http://www.containerone.net)). "With shipping from Denver, Colo., the container cost about \$3,200," says Kornkven. "We laid down a gravel foundation before the delivery, and the driver dropped the container down exactly where we wanted it."

He used a bottle jack to raise the corners of the container one at a time, and set paving stones under them and at various other points along the bottom of the container frame to make sure it was level.

"The container had no holes to deal with and no rust, so I painted it inside and out. Then I used a right angle grinder to cut out holes for side doors. I also cut a hole in the roof for a stairway," says Kornkven. "To build door frames I cut 2 by 4's in half and placed them on either side of the metal, then screwed them back together through the metal."

Once the stairs were finished, he built a floor for the upper storage room and also installed the walls, rafters, and roof. "I welded angle iron brackets to the container roof, then bolted the flooring to the brackets to keep the floor from shifting or flexing," says Kornkven. "I used a rented bucket lift to install the storage room's roof and added metal siding. I then built the lean-tos by setting posts and installing their rafters and roofs."

"My wife is happy with the barn, so I haven't bothered to total up the final cost," says Kornkven. "Anyone interested in plans for building projects involving shipping containers can find plenty of videos online."

Contact: FARM SHOW Followup, Chris Kornkven, 5462 Kannah Creek Rd., Whitewater, Colo. 81527 (ph 970 241-3371; [ds\\_vet91@yahoo.com](mailto:ds_vet91@yahoo.com)).



Rubbing birth fluid over a calf will convince a cow to accept a substitute calf, says a Saskatchewan veterinarian.

## Convincing A Cow To "Adopt" A Calf

By Heather Smith Thomas

Here's a trick to encourage a cow or heifer to accept a substitute calf if her own calf dies at birth. It can work even if the substitute calf is several days old. I learned about this idea from Andy Acton, a veterinarian in Alberta, who learned it from Dr. Joe Stooky at the Western College of Veterinary Medicine in Saskatoon, Saskatchewan.

"Stooky suggests rubbing birth fluid over the calf," says Acton. "The amniotic fluid that surrounds the fetus in the uterus is very salty and tangy, and cows are usually interested in smelling and licking it off their newborn calf. You can use this to your advantage by saving some of that fluid for emergencies if you're present during a normal birth or need to help a cow calve. Have a clean towel handy

and when there's a lot of birth fluid, soak the towel in the fluid and place it in a waterproof plastic bag and freeze it."

Then if you have a situation later where you want to convince a cow to accept a substitute calf, you can thaw out the towel and rub the fluid onto the calf. "The birth fluid doesn't have to be the cow's. She doesn't know the smell of her own calf at first, until she has bonded with her calf and knows its smell," says Acton.

Make sure to remove the dead newborn calf before the cow has a chance to smell and lick it - she'll be more likely to think the substitute calf is hers because it smells and tastes like birth fluid.

## Simple Way To Fill Grain Pails

Thomas Schriner, known as "The Lean Farmer" on his YouTube videos, advises his audience on simple improvements that save time, money and effort around a farm. One of his latest ideas is a clever way to get small amounts of grain from a barrel to feed poultry and livestock without a lot of wasted motion and spilled grain.

Schriner purchased a Valtera manual waste valve that's normally used for emptying waste from an RV holding tank (available for about \$15 on websites like [campingworld.com](http://campingworld.com)). He mounted it on the bottom of a 50-gal. plastic barrel that holds his poultry and livestock feed. Schriner says he added a few washers between the valve and the bottom of the tank so the slide moves easily.

The barrel sets about 18 in. off the ground on a wooden stand that Schriner made, high enough to slide a 5-gal. pail or a horse feed pail underneath to catch the grain when he opens the slide. The stand has side rails to keep the barrel from shifting or sliding off the stand.

Schriner says that by using the slide he's able to get feed for his animals in half the time compared to removing a barrel cover, reaching in for a couple scoopsful of grain, then putting the cover back on and feeding the animals. Even though saving 10, 15 or



Barrel fitted with slide valve sets on a wooden stand, high enough to place a 5-gal. pail underneath to catch the grain.

20 seconds on a task doesn't seem like much, Schriner says the time adds up over the course of days, weeks and months. He has several other time and money saving videos on his YouTube channel.

Contact: FARM SHOW Followup, The Lean Farmer (Farming Outside the Box, The Lean Farmer, on YouTube).



String trimmer on back of mower is free to move forward or backward, out of the way of trees and rocks.

## Tractor-Mounted String Trimmer

Robert Koch's home-built, 12-volt string trimmer on back of his Deere riding mower is free to move forward or backward, out of the way of trees and rocks. By pulling on a cord, he can lift the trimmer up out of the way when it's not needed.

"I have a 1 1/2-acre yard with a lot of trees and sprinkler heads sticking up out of the ground, so trimming around trees gets to be a problem. I'm 89 years young and at my age I can't use a string trimmer due to back problems," says Koch.

The 10-in. dia. trimmer head is equipped with a pair of 5/8-in. wide serrated plastic blades and powered by a 12-volt motor that operates off the tractor's battery. The blades bolt onto a home-built hub that attaches with set screws to the motor shaft. Koch used a 1-in. wide, 1/8-in. thick steel strap to form the trimmer's round head, which is attached to one end of a 3-ft. long, spring-loaded steel arm and supported by a 3-in. caster wheel. The other end of the arm is attached to a U-shaped bracket that's connected to the mower's hitch plate, and to another plate above it by a pair of loose-fitting, 1/2-in. bolts.

The trimmer arm is hinged, and by pulling on a cord with an attached ring Koch can lift the trimmer out of the way and hook the ring onto a bolt extending from a fender-mounted electrical box.

"It works great," says Koch. "I use a switch on the electrical box to start the motor. The bracket that supports the trimmer's arm is free to swing back and forth, so if the trimmer head hits a tree the arm will swing back out



Trimmer head is equipped with a pair of serrated plastic blades, which bolt onto a hub attached to 12-volt motor.

of the way. The blades are serrated on both sides, so when one side wears out I flip the blade over and use the other side.

"The electrical box is equipped with a circuit breaker and a cigarette lighter socket that the motor's wiring hooks into. The only limitation is that I can't back up with the trimmer head in the down position, because if the caster wheel gets stuck the trimmer arm might get run over."

Koch paid \$7 for the 12-volt motor at Surplus Center in Lincoln, Neb. "That motor is no longer in stock, but you could probably use an 18-volt motor off an old string trimmer if your tractor has an 18-volt battery," he says. He bought the plastic blades at a hardware store.

He had previously installed the upper plate on back of his tractor to attach a Whirlwind Cyclone leaf vac, but says others could use the same idea by improvising.

Contact: FARM SHOW Followup, Robert Koch, 14468 Arabian Ct., Montrose, Colo. 81403 (ph 970 240-8445).