

# Guide to Mini Round Balers For Pine Straw Producers



## Should You Be Using A Mini Round Baler for Pine Straw Production?

Many pine straw producers are making the switch from manual baling to mechanized tractor-powered balers. Here are some of the factors to consider when trying to decide whether or not to make the jump.

### Do I have dependable, affordable labor?

More and more, producers are having trouble finding labor to help get the straw out of the woods. They are also becoming concerned that their help may not return for the next season. Most of the workers in the industry are immigrants who are willing to do the grueling work for very modest pay, and replacing them may be problematic.

### Do I have enough labor to keep up with the demand?

Smaller producers will simply use the labor they have available, baling at whatever pace their small staff can maintain. But commercial pine straw production requires a lot of labor, but only for parts of the year. Staffing properly during the boom months can be difficult, and since they are only needed for four to six months in most cases, workers have to be let go every year and rehired. This creates an endless human resources hassle.

### Do my customers want square or round bales?

Many pine straw customers and retailers are accustomed to the small 15-20 pound square bales that are produced by the typical manual box baler. Some may be hesitant to make the switch to round bales. However, customers who have used both will generally end up preferring a net-wrapped mini round bale to a manually baled square bale. They weigh 35-40 pounds generally, which makes them easy to handle, and with the net wrap they do not shed needles the way the square bales do. This means less material loss when transporting (which may be in the trunk of their car).

### Does the increased production justify the up-front cost?

Every producer should go through the calculations to see if switching to mini round bales makes economic sense for them. The situations vary for each producer. Here are some guidelines:

- A mini round baler can average about 2 tons baled per hour, or 100-120 bales. This is the equivalent of about 270 square bales weighing 15 pounds



A typical hand-powered baler



Square vs. round bales (net wrapped)



Mini Round Baler: 3 pt. hitch, net-wrap model

each.

- One laborer with a 25 horsepower tractor and a mini round baler can produce 900 bales, or 16 tons, of baled pine straw in an 8 hour day. That's the equivalent of about 2100 square bales.
- The typical payment on a mini round baler would be \$200-250 per month for 60 months. Adding a powered rake would increase that payment by about \$50.

## Will the mini round baler leave too much straw behind?

If you're used to baling by hand, the idea of using a machine might make you worry that it will not pick up all the straw. There is no doubt that collecting the straw by hand assures that you can get every last needle into the bale. That being said, the hand-tied square bale is fairly loose, and a lot of straw can be lost in transport.

The mini round baler does require some experience to maximize efficiency. It is a completely adjustable machine that allows you to set the height of the pickup tines off of the ground, the speed of the tines, and the density of the bale. Once the machine is set up right, and the proper windrow size is perfected, it can be extremely effective at picking up the straw you want picked up while leaving behind everything else. Once wrapped with netting, the bale is firmly held together and holds onto needles even when handled repeatedly.

## Why should I mechanize the baling part if I still have to do all the prep work by hand?

Regardless of whether you use a mini round baler or not, there is a lot of manual labor involved in producing pine straw. Woods must be cleaned of sticks and cones. Needles need to be raked from between the trees into the middle of the rows. And all of those bales have to be collected by someone.



78" Pine Straw Belt Rake

Although much of this work cannot be mechanized, most producers using mini round balers find that they can further increase production and decrease labor needs by using a mechanized rake. Although some manual raking is still needed between trees in the row, the powered rake (usually a belt rake) can form the straw into an ideally sized, fluffy windrow that the baler can easily pick up. Belt rakes work from right to left, so the producer will drive down the right side of a row, and then come back in the same row on the other side, ending up with a windrow in the middle. Production rates are 10-20 times greater than hand raking these areas.