



# Buying a Baler

Let needs drive purchase decisions.

by **Barb Baylor Anderson**, field editor

**S**ome producers may decide to purchase a new baler only after the old one gives out. Others may want newer or different equipment to meet future plans. Some are just impulse shoppers.

Regardless of which profile describes you or the color of equipment you prefer, manufacturers and extension equipment specialists say the factors you should consider are fairly universal.

“Your existing baler may be worn out or cost-prohibitive to repair, assuming you have the mechanical skills to overhaul it,” says Bob Schultheis, natural resource engineering specialist, University of Missouri Extension. “Consider if there are safety features or technology on a new baler that make it more desirable and time-efficient than what you currently use.”

## Bale size

One of the first things to mull over is desired bale size. Determine if you want to produce small squares, large squares or round bales. For example, Schultheis recommends a small square baler if you are looking for high-value hay because that baler thrashes out less of the nutrient-rich leaves. Also, the hay is less likely to mold, and a smaller-horsepower tractor can be used to pull the baler.

“A large square or round baler requires more tractor horsepower and may be a better choice if labor is limited,” he continues. “Round bales need to be baled 4 moisture percentage points dryer than small square bales. Large square bales should be made at 12%-16% moisture.”

Jeremy Unruh, John Deere product line manager based in Ottumwa, Iowa, says to consider your cattle-feeding system and the bale quantities you can handle and store.

“If you process hay into a total mixed ration (TMR), some processors may only handle one type of bale,” he says. “Handling is a consideration. A round bale weighs 700 to 2,200 pounds (lb.), a large bale weighs 500 to 1,500 pounds and a small bale weighs 50 to 120 pounds (dry hay weights). Small squares can be handled individually, but you need a loader to handle large squares and rounds.”

## Hay crop

Another important consideration is the crop to be baled. Cole Carling, Case IH livestock marketing manager, says that is generally a choice between high-moisture silage and dry bales. He adds that grass hay is generally easier to bale than cornstalks or silage.

“Silage bales need a heavy-duty baler. A dry-hay baler will not work,” says Matt Jaynes, Claas product coordinator based in Omaha, Neb. “Look at density and capacity. High bale density gives you better fermentation in silage and feed quality, so cattle gain better. Heavy-duty balers that are silage capable will have the right chain and sprocket size, sidewalls and scrapers for silage. High-density dry-hay round balers also have less spoilage because they stay more round and do not sag, which gives more edible feed.”

## Baler features

In addition to bale size and crop choices

when evaluating balers, Jaynes advises producers look at the size of their hay-baling enterprise as part of the decision-making process.

“Weigh your time constraints and how much time you have to get hay baled,” he says.

Some new equipment offers increased capacity, says Carling, which allows producers to bale more quickly. Increased pickup width dries windrows more quickly and consistently, too.

“Consider your return on investment,” he says. “If you only need a utility baler, that is what you should buy, or you may need more than one baler. ISOBUS compatibility also is important.”

Unruh agrees tractor-baler automation can help save time and money.

“When you talk to your dealer, ask how easy it is to run the baler behind your tractor and handle a bale, what the total weight range of bales made is, and performance in tons per hour or by acre,” he says.

“Newer round balers require more tractor horsepower to tow and run, particularly when going up and down hills,” adds Schultheis. “An expandable chamber baler allows varying bale sizes and makes denser bales that stack better and generally have less dry-matter loss.”

## Wrap

While some producers prefer twine to wrap bales, Carling sees the industry moving toward net wrap only. Jaynes says about 90% of Claas balers go out with net wrap vs. twine. Another option is a baler and wrapper combination, which Jaynes says is



an integrated round baler with a stretch film wrapper attached at the back of some models of round balers.

“It allows one operator to do two jobs at once since the silage or hay is simultaneously baled and wrapped at the back,” he says. “Producers can reduce the amount of grain being fed because silage bales are higher in feed value and better for animal health.”

Similarly, Unruh says John Deere’s B-Wrap allows moisture to escape, but no rain can get into the bale.

“Dry-matter loss drops from 18%-20% to as low as 2%. For a 1,000-pound bale, that means an additional 150 pounds of hay for feeding,” he says.

### Storage

Wrap and bale density are crucial to successful outdoor storage. Dense, round bales shed water better, but covered storage of twine- and net-wrapped bales is preferred, says Schultheis, especially for high-value hay or in high-rainfall areas.

“The larger diameter the bale, the less hay spoilage there will be for a given depth of surface rot on outside-stored bales,” says Schultheis.

Dry-bale density is crucial to whether or not outdoor storage works. Unruh suggests small square and large square bales be covered with a tarp if stored outside or stored inside.

### Purchase time

There’s no magic time of the year to buy a baler, but Schultheis says timing may be a consideration when you plan to purchase new equipment. New models may not be that different from the previous year’s model, and you may get a deal when retailers clear inventory.

“The decision to purchase equipment should be based on the cost-benefit ratio. Whether new or used, many operations can benefit from upgraded technologies,” he says. “Consider purchasing a new baler during years when farm incomes are down. Typically, fewer buyers and less upward pressure on new machinery prices occur in such years.”

Jaynes urges producers to place orders for new machines October to March, before hay season begins. That way the manufacturer has adequate time to build your baler with ordered options.

### Baler buyer beware

Bob Schultheis, natural resource engineering specialist with the University of Missouri Extension, cautions producers to consider the following when weighing purchase decisions:

- ▶ When buying used balers, shop the Internet, such as [www.equipmentforthe farm.com/](http://www.equipmentforthe farm.com/), attend farm auctions and visit local dealers. Enlist the advice of other farmers through online forums and blogs such as [www.agriculture.com](http://www.agriculture.com).
- ▶ Be wary of a used baler with caked-on dirt and oil leaks, cracks, new welds, rust, faded paint, loose nuts, cracked belts and hoses, or one that is clean and freshly painted, or has painted-over dirt or grease. All show lack of maintenance or outside storage.
- ▶ Beware of buying a baler from a manufacturer that has gone out of business. The price may be right, but parts availability may be a problem and later trade-in value will be much less. Always check with the dealership on availability of parts and service.
- ▶ Test-operate a used baler and check for excessive wear, unusual noises, oil leaks and proper operation. See [extension.usu.edu/files/publications/factsheet/FM-02.pdf](http://extension.usu.edu/files/publications/factsheet/FM-02.pdf) for more tips. If you are buying a used baler, always check with the previous owner for the reasons for selling and ask for maintenance records.

## 35 Keys to Success

### Equipment

“We want limited downtime for our customers. When possible, look forward six to 12 months and plan purchases,” says Unruh. “The more you know in advance, the better, although equipment does break down and put you in a position where you need equipment quickly. We open orders in September with discounting, and plan our production season to meet demands.”

### Share equipment

Another option may be to split equipment use with a neighbor. Jaynes says Claas is seeing a trend toward more of the European mentality of sharing equipment. He says farmers may be able to collectively get a better-quality baler, newer technology and share labor.

“If you share equipment, be sure to consider whether it will be available when you need it, so you can put up your hay at its peak quality,” says Schultheis.

“Bottom line, when making a baler purchase, calculate input costs, including land, machinery, depreciation, fertilizer, fuel, maintenance and labor,” he continues. “If it costs \$50 per bale to make it, but you can only sell excess hay for \$35 per bale, consider buying, storing and feeding good-quality hay rather than owning equipment and fighting the weather for fair-quality hay.”

“Rain ruins hay quality, so look at your operation and see what will work for you. Do what you need to do to try and increase feed value under the right conditions,” says Carling. “Visit a dealer and do your homework on features and models and available customer support.”



**Editor’s Note:** A former National Junior Angus Board member, Barb Baylor Anderson is a freelancer from Edwardsville, Ill.