



**Ken Gies simplified his small farming operation by switching from full-sized draft horses to 5 mini horses less than 40 in. tall. He modified his farm equipment so they could handle it.**

## He Harvests Hay With Mini Horses

To simplify his small farming operation, Ken Gies switched from full-sized draft horses to 5 mini horses less than 40 in. tall. He modified his equipment so they could handle it.

“My motivation was that I saw so many mini horses doing nothing. These guys are strong. They can mow lawn or pull a small log arch or even a stone boat,” he says.

On his family’s 10-acre hobby farm in Fort Plain, N.Y., his minis provide the power for a variety of jobs including putting up hay. They mow, rake and load 6 acres of hay 3 times a summer.

Each of the cuttings takes about 10 days to complete. Though he continues to tweak and improve equipment, he’s pleased with what he has built so far.

**Mower:** He modified a one-horse ground drive mower. “I put a steerable axle on the mower tongue, which eliminated side draft,” he says. With a team of 3 minis, he has had the best success using a 32-in. long SCH EasyCut cutterbar.

**Rake:** The used rake Gies purchased online had been used to rake leaves at an estate. It weighs less than 200 lbs. and works well for the second and third hay cuttings. The heavier first cutting is more of a struggle as the long hay tends to wrap around the wheels when he doubles or triples up windrows.

**Tedder:** Gies started with a 4 star Kuhn tedder. He removed the two outer wings and

reversed the shaft direction. “I don’t want them to spin too fast,” he explains. “You want to sweep the hay and stand it up, not throw it. It spins slow so it requires less power.”

**Hayrack:** Gies built his hayrack for about \$500, including a 5 by 8-ft. running gear out of schedule 40 2-in. pipe and light duty 12-in. trailer hubs and tires. The wheels have tapered bearings and bolt-on rims. With a pressure treated lumber deck and sides made of cattle panels cut in half, he estimates the wagon hauls about 1,000 lbs. of hay at a time.

**Hay loader:** In the past Gies and his four children hand-loaded loose hay. With only one “hired hand” at home last year, he got serious about creating a hayloader. After trying and failing with a prototype made mostly with scrap materials, he invested in an 18-ft. long, 4-ft. wide hay inverter belt and about 500 nylon teeth. The first set-up didn’t work, so Gies reversed the direction and put the hay loader in front of the wagon. He reversed the direction of the teeth and added tin to the top to hold the hay. The drive belts were twisted to reverse the driving direction, and Gies built the rollers out of 5-in. thin-wall pipe and cold-rolled 3/4-in. rod.

“I used one-way pulleys from old alternators,” he notes. “If I were to change anything, I would slow the belt down just a bit, maybe with 3-in. pulleys on the rollers. This would hopefully reduce the power



**Mini horses provide the power for a variety of jobs, including putting up hay. Rake shown above was formerly used to rake leaves at an estate.**



**Gies bought an 18-ft. long, 4-ft. wide hay loader, reversed the belt direction, and mounted it in front of a wagon. He mows, rakes and loads 6 acres of hay 3 times every summer.**

needed to run the loader.”

After getting the hay off the field comes the best part, filling the haymow.

“I unload with my existing hayfork and trolley. A team of two minis can lift as much hay as the forks can hold. It is a real blast looking back and seeing a 6-ft. wide jag of hay rise off the wagon as the team moves forward,” Gies says.

Working with mini horses requires a more gentle manner and attitude than working with large horses, he says. It generally takes minis a couple hours to settle when they start doing

farm work.

He emphasizes he is not an expert horseman and has no desire to build equipment for others. He just wants to inspire other horse owners to figure out ways to work with mini horses.

“There’s so much opportunity for experimentation. The little horses are just so much fun,” he says.

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## Processor Unit Upgrades Older Forage Harvesters

You can upgrade your forage harvester with a new processor unit from Lebanon Ag Services (LAS). The processor is available for many makes of pull-type harvesters. The finer grooves and opposing diagonal design, combined with a 40 percent speed differential, shreds corn silage more thoroughly.

“Our customers told us they wanted to do a better job of processing than was available on the market,” says Mervin Bowman, Lebanon Ag Services. “There is quite a demand for older forage harvesters, and farmers cutting their own corn want a processor for it.”

Bowman was aware of a company that makes replacement rolls that offer a superior cut. They have opposing spiral grooves with a shearing or scissoring action. Other processors that have straight grooves on the rolls have more of a chopping action. The scissoring rolls also have more grooves per inch, which means finer teeth for a better cut.

“We got permission to use the rolls in a processor that we would make,” says Bowman.

While the rolls were key components, Bowman tackled several other improvements to OEM processor designs. His heavy sheet

metal shields with welded seams swing away for easy access to the rolls. The processor itself can be removed quickly by loosening drive belts and removing 8 bolts. This gives easy access to chopper knives without dropping the cutter head to open the cutter head cover.

“Service was in our mind from the beginning,” says Bowman. “We wanted to make it easy to service the machine.”

The LAS processor design also makes it easy to adjust rolls to a precise gap to match crop and conditions and operator preference. A safety stop prevents roll teeth from touching, even if the lock nut loosens accidentally. Heavy-duty springs maintain a constant roll gap, even in heavy crop conditions, while allowing broken bolts, knives or other items to pass through with less damage to rolls.

“Our processor fits later model New Holland forage harvesters built with processors in mind,” says Bowman. “Older models are easy to adapt for mounting our processor. Deere harvesters require more modifications, but our kit comes with everything needed.”

The LAS processor ranges in price



**By removing the belts and 8 bolts, the processor can be quickly lifted off, providing easy access to chopper knives (above). Opposing spiral grooves on rolls create a scissors-like cutting action, reducing fuel and horsepower needs.**

from \$6,800 to \$7,500 (Canadian dollars) depending on model. The company has dealers in Ontario and a few in the U.S., with one each in Wisconsin, Pennsylvania and New York.

“We are looking for more dealers,” says Bowman. He also noted that the current currency exchange makes it a good time to

buy Canadian made equipment.

“The U.S. dollar is worth \$1.37 Canadian, so it is very favorable for U.S. buyers at this point,” he says.

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