# NATURE'SHarvesters <br> An Ohio Angus farm becomes economically efficient by letting their cattle harvest their forage. 

BY CINDY FOLCK

Tractor. Mower. Rake. Baler. Wagons. Tractors. Storage. Labor costs for mowing, baling and hauling.

These costs associated with hay making can quickly add up for producers. Along with equipment, comes the costs of repairs and maintenance.

Let's shorten the list:

## Fence. Water. Cattle.

That's the list many cattle producers in Gallia County, Ohio, are using for forage harvesting. Their Ohio River Valley, with its rolling hill terrain, is better suited for pastures than grain crops. Cattle producers using extended grazing have decided instead of taking forage to the cattle, it's easier to take the cattle to the forage.

J. Tim Evans (right), farm owner, and Tom "Tombo" Woodward, farm manager, have created special paddocks and a pasture system to accommodate extended grazing for their Angus cow herd.

Sunset Valley Farm, owned by Tim and Betty Evans, uses an extended grazing program to increase productivity from their pasture systems.

Tom "Tombo" Woodward, farm manager, has worked closely with Ed Vollborn, agriculture and natural resources agent with Ohio State Extension in Gallia County, to develop a grazing system to accommodate their Angus herd of 35 cows.
"We divided the 70-acre pasture into four lots with about 15 acres in each lot," says Woodward. When the pasture was an open field, the cows would not eat grass on
the hillside. With smaller lots the cows utilize all available grass, even on the hillsides. Permanent barbed wire paddock fences with steel posts were installed, instead of relying on portable electric fence.

Sunset Valley Farm began extended grazing last summer. Woodward is impressed with the results after grazing through one winter.
"We had a light winter with only about a foot of snow, so there was less than one week the cattle couldn't graze in the pasture," he says. In fact, the farm used 110 less round bales than the previous year because of the extended
grazing. He hopes to use 150 less round bales this year, bringing more savings to the farm. But, cost savings are not the only reason Woodward likes the extended grazing program.
"We artificially inseminate all the cows by having them come to the barn for water during breeding season," he says. "With the legumes in the pasture, I think the cows are easier to breed this year."

In addition to pasture, the cows receive mineral to eliminate any deficiencies.

Vollborn has done extensive forage and soil testing in the area and found very low copper levels. Sunset Valleys
mineral supplement contains extra copper to make up for the deficiency. Woodward believes the mineral mixture has increased cow productivity. Recipient cows receive the mineral and after the transfer process, only two rrecipient cows didn't accept the embryos.

The mineral tub and creep feeder are located in a runway that runs the length of the four paddocks. The runway goes to the barn, which is the water source during the breeding season. Woodward says it simplifies moving the cows to a different pasture.
'The runway makes a familiar area we can move the cattle into, then we simply close one gate and open another," he says. The pasture set-up can be managed by one person.

A special gratity-flow water system was installed for water needs during the rest of the year. A plastic waterline draws the water from ponds. The constant-flow float system eliminatecl any freezing problems.
"The most expensive part of a grazing system is the water source," says Vollborn.

Sunset Valley has a wooded area in each paddock that provides shade for the cattle.

Clover and other legumes were added to the pasture for the extended grazing program. Tall fescue is maintained for grazing during the winter months. The pasture was not tilled because the terrain is uneven and hilly, so seed was broadcasted in the field and then trampled into the ground by the cattle's hooves.

Vollborn says the pasture should be kept in a vegetative stage, which means the cattle need to grass a paddock before the grasses head and go to seed. The cattleare kept moving around the paddocks for optimal forage growth without over-or undergrazing.


Sunset Valley Farm in Gallia County Ohio, uses an extended grazing program for their Angus cow herd.
"With continuous grazing of a pasture, you only utilize 10 percent of the forage," Vollborn says. "However, with intensive management, you can take forage utilization up to 70 percent." He adds cattle producers could double the production of animal units on each acre simply by managing the cattle's grazing movement.

Vollborn emphasizes management is the key to pasture grazing systems. James Gerrish, University of Missouri, has outlined the four key management areas for grazing systems, which are:

1. Meeting nutrient needs
2. Optimizing forage yield, quality and persistence
3. Protecting and enhancing the natural resource base
4. Developing a practical and economically viable management system

To ready the pasture for late fall and wintergrazing,
Woodward moves the cows to different pastures to allow
time for winter stockpiling. Nitrogen fertilizer is spread on the pastures to encourage tall fescue and otehr grass growth for extended grazings. Vollborn recommends applying the fertilizer in late August.

Woodward says under the snow the grass remained green and palatable, even growing on warm days. Forage tests of winter grazing pastures in February showed the same quality and nutrient results as hay being fed cattle during the same time period.

Keeping up with the pastures during spring is the challenge of grazing systems, says Vollborn. Also, the late summer months can be hard for forage growth. He says the management portion of a grazing system accommodates the high and low growth times and keeps the cattle moving around the system to utilize the available forage. Sunset Valley has seen high-quality grass, even in the hot weather.
"The summer of ' 95 was dry with high temperatures, " says Evans. "We had no rainfall

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- Ed Vollborn
during the month of July."
Still, the forage quality
remained high, allowing the cows to graze even through the dry period.

Evans has been involved
with the cattle business all his
life, but only began raising
Angus cattle three years ago.
The cattle herd had been primarily black-based commercial cows. The calves were backgrounded and sold as stockers to feedlots. Both Evans and Woodward have backgrounds in the packing and feeder industries.

After a year of extended grazing, Sunset Valley Farm is expanding the system. New forage seedings were established for a bull lot and to accommodate the replacement heifers. The pasture was seeded with orchardgrass, alfalfa. clover and wheat. The wheat was harvested at early boot stage into round bales. Woodward was pleased with the 16 percent protein content of the bales. The wheat helped to establish the pasture which will soon be ready for cattle.

Woodward concedes there was significant time spent in stringing the 3,000 feet of fence necessary to establish the paddocks and new pastures. He looksto save that time, however, in hay making and daily feeding chores. He also believes through a managed pasture system, he has been ableto increase cattle units without adding land.

