Dennis moves 800 to 1,000 head of cattle up to 10 times a day, thanks to methods he's developed quickly to set up fencing.

"Mob Grazing" Pays Off For Cattle Producer

Neil Dennis has quadrupled the carrying capacity of his pastures and cut his costs with mob grazing. Concentrating heavy numbers of cattle on small areas also has increased the native grasses, forbs and legumes found on the former croplands. He now hires out as a consultant to other grazers and is a sought-after speaker on mob grazing.

"I got the idea after moving the herd into a 6-acre paddock before later moving them into one with 40 acres. Regrowth on the small paddock was thicker, and recovery was faster, allowing higher carrying capacity," says Dennis, who then started experimenting with the idea.

Since he gets paid for pounds gained on the cattle he custom grazes, carrying capacity is vital to Dennis' bottom line. Ultra-high stock density grazing has produced twice as many pounds of beef per acre as conventional methods.

Dennis soon adopted the heavy grazing technique on all his acres. Today he will graze up to 1.3 million lbs. of beef per acre. The cattle quickly graze down available forage, spread the manure across the area, and trample it in with their feet.

How far the cattle graze down forage before being moved to a fresh paddock depends on things like recovery time. Due to heavy urine on mob grazed acres, recovery time has increased from 60 days to 70 or more. If there's less rain, Dennis gives paddocks more recovery time.

Sugar is key, according to Dennis. He wants the cattle to have access to the grass when sugar content of the pasture is high. He takes a sample of the grass, squeezes it into a ball and puts it through a garlic press, squeezing the juice onto a refractometer to check sugar content. He also checks for pH.

"The more different species and higher densities, the longer they stay in the vegetative state and the longer the sugar is present," says Dennis. "New, non-stressed bromegrass now has 15 to 18 leaves versus 4, and we can go 120 days between grazing without it deteriorating and dropping leaves like it did after only 60 days."

Dennis does some supplemental over seeding, but relies mostly on natural reseeding. He holds off on grazing each paddock at least once a year until the plants have gone to seed. Future grazing presses the fallen seed into the soil, encouraging germination.

"At times, we'll take only 20 percent of the vegetative matter the first time a paddock is grazed and then let it go to seed," says Dennis.

Bromegrass is a mainstay in Dennis' pastures. He has seen it adapt and improve with mob grazing at the same time native prairie forbs and grasses returned on their own. Organic matter in the former grain fields has increased from 3 to 10 percent, similar to what native prairies were thought to have. Water infiltration and holding capacity have also increased.

"It can take as much as 8 in. rain per hour without running off," says Dennis. "This summer we went a month and a half without rain, but the plants kept growing."

Dennis says the "fencing toys" he has developed allow him to move 800 to 1,000 head of cattle as many as 10 times a day. They let him set a quarter mile of fence in 9 min. The BattLatch automatic gate releases (Vol. 38, No. 5), which he also sells, makes shifting cattle much easier.

One thing Dennis didn't expect was how much healthier everything grew. The cattle gained faster and no longer required as much medication. One direct way it showed up was mineral consumption; another was change to the land itself.

"Free choice mineral consumption dropped 90 percent," he says. "As the land has become healthier, it warms up faster in the spring and doesn't freeze up as fast in the fall. Even the alfalfa requires a harder frost to kill it."

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John Shultz turned his Stihl 046 chainsaw into this portable sawmill. But the only parts of the chainsaw he used were the 28-in. blade and sprocket.

"No Chainsaw" Chainsaw Mill

"It runs much quieter and is more fuel efficient than conventional chainsaw sawmills, and it has electric start so I can just turn a key to start it," says John Shultz, Bennington, Vt., who turned his Stihl 046 chainsaw equipped with a 28-in. blade into a portable sawmill. He removed the blade and mounted it on the carriage, which rides on V-groove caster wheels and is pushed down the track.

He used parts from a Sears Craftsman riding mower to build the sawmill, including the mower's chassis and 11 hp Briggs & Stratton electric start engine, dash, gas tank and battery. The only parts of the chainsaw he used were the blade and sprocket.

"The key feature is how I hooked up the chain drive to the 4-cycle engine – and I'm keeping the exact details a secret," says Shultz.

The mower's engine, gas tank and battery are still attached to the machine's original chassis. The dash is mounted at eye level and contains the ignition key and throttle. The engine belt-drives a jackshaft that extends down to the chain, where it rides on 2 bearings. Both ends of the blade are fastened to a "deadman" that keeps the blade from vibrating.

Shultz uses the throttle on the dash to control the engine's speed. The chainsaw blade is belt-driven at twice the engine's speed, so he runs the engine at half throttle. "I built it about 2 years ago and have used it to cut about 6,000 board feet of lumber with no problems," says Shultz. "The mill is mounted on short telephone poles so it's not portable, but it could be mounted on a trailer.

"I came up with the idea because I have a 150-acre farm with a lot of low grade white pine scattered throughout the woodlot. These trees are low grade with short, crooked trunks, knots, and a lot of limbs that would be hard to sell to a large mill. I wanted to build my own sawmill to keep the cost down and liked the idea of using a chainsaw. However, I didn't want to listen to a screaming chainsaw all the time and watch it gobble up gas. Also, it's hard to start a start a chainsaw when it's mounted on its side.

"A friend gave me the riding mower. I have a machine and welding shop so I was able to build the entire sawmill for only about $300."

He used 1 1/2 in. and 2-in. sq. tubing to build the saw carriage and the framework for the saw head. Angle iron and 2 by 4-in. tubing was used to build the track.

"The saw head is raised and lowered and moved along the track with 2 hand winches and is accurate to within 1/16 of an inch," says Shultz. "It can handle logs from 8 to 16 ft. long and up to 24 in. in dia. I can cut boards as thin as 1/2 in. or up to 7 in. with no problem."

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