

The green manure benefit

Red clover, underseeded in corn, controls erosion and weeds

BY SUSAN HARLOW

When it finally rained last August, the corn that Jack Lazor of Westfield, Vt., had planted in fields along the edge of the Missisquoi River stood in a foot of water. But there was no erosion. Underseeding the corn with mammoth red clover helped hold the soil in place.

Lazor, one of the first certified organic dairy farmers in Vermont, has been underseeding small grains with clover for years. But this was the first time he had tried it with corn.

With a Sustainable Agriculture Research and Education grant to buy seed and a seeder, Lazor implemented his idea. The clover would serve as a cover crop to prevent erosion, help control weeds and add some green manure to the soil.

With more farmers cropping distant fields these days, green manure is a benefit of increasing importance, Lazor says. "It's not really unusual to be growing corn 10 miles from home anymore, and farmers often can't haul manure that far."

Lazor leases 80 bottomland acres along the Missisquoi in North Troy. There he grows corn and soybeans to help feed his 70-head Jersey herd. His home farm, where the herd is intensively grazed, is a dozen miles from the corn fields.

Lazor planted 60 acres of corn last May 20, cultivating it four times. On the last cultivation, in mid-July, he attached the new Herd broadcast seeder to his six-row cultivator and seeded 20 to 25 lbs. of clover seed on each acre. The total cost of the work was \$600 for the seeder, about \$875 for seed at 70 cents per pound, and about \$25 to mount the seeder on the toolbar.

The seeder had to be mounted as high as possible to get the seed to spread wide enough, Lazor explains.

Cultivating while seeding roughened the soil and made better seed-to-soil contact.

By fall, the clover had grown into a thick green mat under the corn. Lazor combined the corn for shell corn in late November, then left the stalks to compost on the field. This spring, he'll plow under the clover before planting the field to corn again as part of a corn-soybean rotation.

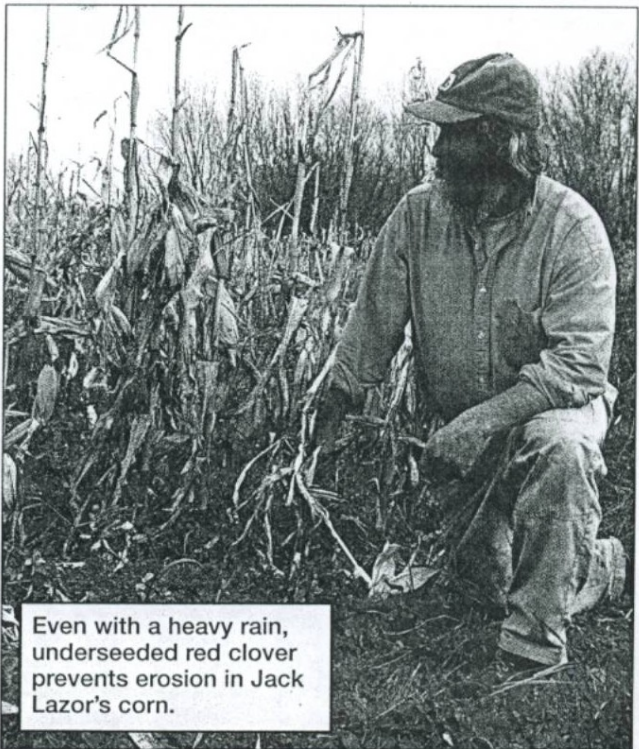
Farmers raising corn for silage might not be able to no-till or zone-till corn directly into the clover, Lazor says.

Underseed advantages. Underseeding clover definitely helped curb erosion. And over time, it will add organic matter to the soil. Lazor says the clover helped slow late weed growth as well. "It seems basically to keep out anything that comes up late. Although the biggest key to preventing weed growth is timely cultivation."

Lazor cultivated the corn crop with a Lely weeder before the plants emerged, and again at emergence. Then Lazor used a C-shank row-crop cultivator when plants were 4 inches high.

Lazor underseeds his small grains by mounting the seeder on the Lely weeder. He combines the grains in late summer, baling the straw for bedding. His Jerseys graze on the regrowth before Lazor chisel plows the residue under.

Mammoth red clover has worked well in the past, but next year Lazor plans to underseed the grains with alsike clover for better grazing. But he'll keep mammoth red in the corn to provide a lot of biomass. ❖



Even with a heavy rain, underseeded red clover prevents erosion in Jack Lazor's corn.

A niche market

When they started farming in Westfield, Vt., 20 years ago, Jack and Anne Lazor sold milk door to door, bottled in juice jars. Then they began making yogurt in their kitchen. That was so labor-intensive — both the production and driving the back roads to sell their products — they quit for a few years in the early '80s.

But by 1984, they'd moved the operation to a processing room upstairs in their cow barn, and Butterworks Yogurt has kept growing ever since — 20 to 30 percent annually. Now the Lazors'

yogurt is sold through three distributors as far away as Florida. And last year, the Lazors' made an average of 3,000 quarts of yogurt a week.

Three days a week, three employees work in the farm's yogurt room, making maple, vanilla and plain nonfat yogurt that's sold in 16-ounce cartons. Butterworks recently introduced 8-ounce containers of organic fruit yogurt.

The Lazors also sell cream, a by-product of their yogurt. And when they have excess milk, they bottle it as cream and

make cottage cheese and cheddar cheese.

Matching a fluctuating milk supply with the seasonal ups and downs of demand for yogurt is difficult. Excess organic milk doesn't bring the necessary premium from a co-op; too little milk leaves regular customers looking for other yogurt suppliers.

The Lazors plan to expand their milking herd a little to give them the flexibility to meet maximum demand. Any extra will be made into cheese or cottage cheese.

— by Susan Harlow