

Denise & Tim Noonan Cowley County

Management Intensive Grazing System

Timber Creek borders the Noonan farm, and drains into Winfield City Lake, which provides drinking water for 40% of Cowley County's residents.



Timber Creek winds its way along the south side of Tim and Denise Noonan's farm in Cowley County. Eventually it drains into the Winfield City Lake which provides drinking water to forty percent of the county residents. The Noonans understand their responsibility to protect this valuable resource. With the help of a Clean Water Farms grant, they have undertaken a number of projects to improve their farm and the waters of Timber Creek.

When the Noonans bought this property in the early 1990s, the twenty-five acres of cropland had been planted to wheat continuously for ten years. Cultivated ground extended to the creek banks in several areas. Even with good farming practices, normal rainfall runoff from

the field would carry sediment, fertilizer, and perhaps pesticides directly into the creek. Periodic flooding would wash additional soil and pollutants into the waterway and down to the lake.

In an attempt to find a crop that would provide a better economic return and still address their concerns about water quality, the Noonans became acquainted with Eastern gamagrass (*Tripsacum dactyloides*). This perennial grass can produce large quantities of highly nutritious and very palatable forage during the summer months. In 1996, they began work on a Clean Water Farm demonstration that would establish the native bunch grass on the cultivated acres for a permanent hay or forage crop.

Cooperator:

Denise & Tim Noonan
19547 72nd Street
Burden, Ks. 67019

Watershed:

Timber Creek & Winfield City Lake

Water Quality Concerns:

Soil erosion and run-off from herbicides and pesticides from cropland into stream that feeds city water supply

Demonstration:

* Convert 20 acres cropland along creek to gamagrass; fence the creek

Years of nitrogen fertilizer application had steadily lowered the soil pH so the Noonans began with an application of lime in the fall of 1996 to increase the pH level. Wheat was drilled with a no-till drill that same fall. In February of 1997, they planted 'Pete' gamagrass and Ladino clover in the dormant wheat. By March, the wheat was actively growing and they had it swathed and baled for hay.

During the first and second years, mare's tail and locust seedlings threatened the new crop. The Noonan's used burning and swathing

to keep these unwanted species under control. Although the gamagrass was well established after two years, tree seedlings will continue to be a potential concern along the creek.

In the spring of 1999, they interseeded bird'sfoot trefoil and Korean lespedeza into the western half of the gamagrass field. They hope these legumes will help supply nitrogen to the grass crop. At the same time they interseeded additional clover to help even the stand planted in 1997.



The above field bordering Timber Creek which runs into the Winfield City Lake, a water supply lake for 40% of Cowley County residents, was formerly cropland. At right, the same field two years later planted to gamagrass.



The Noonans have fenced the creek and will eventually fence the gamagrass into paddocks to create a grazing system. Although they are haying the grass at the present, they hope to start a small beef grazing operation with stockers or replacement heifers.

In addition to the gamagrass, they have also established a small commercial shitake mushroom operation in the pecan grove near Timber Creek. This high value crop looks to be a good complementary enterprise that enables them to fully utilize their wooded acres.

The Noonans noted that "once we were able to actually see the soil falling off into the creek." Now they can see the sediment that is captured by the root mass of their gamagrass.

"It makes me feel good to look at the gamagrass" stated Tim at one early farm tour. "And it makes Denise feel good that we aren't dumping our soil into the creek."

Currently the gamagrass is cut for hay, but Denise is planning to interseed additional legumes to provide a nitrogen source to cut back on fertilizer needs.

While personal tragedy struck the summer of 2000 when Tim was killed in a car accident, Denise hopes to carry out the plans that she and Tim had for their farm. "Tim truly loved what he was doing with the farm," Denise states. "We should all be so lucky."

In Memory

On June 10, 2000, Timothy F. Noonan was killed in an automobile accident near Winfield, Kansas. He is survived by his wife, Denise of Burden, and a son Nathan, from Texas, and a daughter, Jessica Hansard of Wichita, and nine brothers and sisters.

Noonan Farm Characteristics

Farm Size: 125 acres.

Crops: milo, soybeans, shitake mushrooms, gamagrass, CRP contract.

Livestock: None yet other than a horse. Plan to start with dairy replacement heifers. Will also have stockers.

Equipment: JD 4020 tractor with loader.

Seed varieties: Pete gamagrass (10#), Ladino clover (2# + 1# overseeded later), Norcen birdsfoot trefoil (2#), Korean common Lespedeza (2#).

Labor and Livestock Management - Family; Will utilize MIG when livestock is purchased.

Marketing: direct hay sales to local farmers, Shitakes are marketed through the Kansas Grown Market in Wichita, an organic foods broker in Wichita.

Weed Management: Burning and swathing.

Soil Fertility: Relying on legumes for nitrogen fixation. Soil tested prior to grass planting.

Water Quality Management: Converted cropland to grass reducing fertilizer and herbicide application and run-off; Fenced the creek.

Profitability indicators: Annually make comparisons with Kansas Farm Management figures