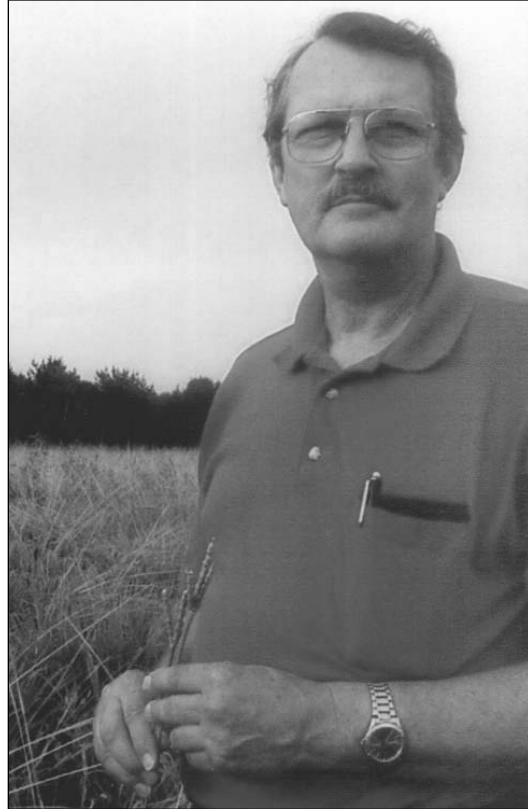


## Steve Burr Saline County

## Management Intensive Grazing

The Burr family's goal was to "establish a year-round grazing program on current cropland, converting it to a perennial forage base to help eliminate animal concentration and soil erosion."



When Steve Burr contacted the Kansas Rural Center about developing a Clean Water Farms demonstration on his land, his family had already taken giant steps to change the look and function of part of their farm.

Beginning with 300 acres of cropland, 400 acres of native grass and over 70 cows, the Burrs had converted 43 acres of cropland to native and cool season grasses. Years earlier they had planted more than 2 miles of shelterbelts criss-crossing the farm for wildlife habitat and wind protection. Underground water lines and high tensile fencing had been installed on the established grasses within their new grazing system.

The Burr family's goal was to

### Cooperator:

Steve Burr  
5360 West Armstrong Rd.  
Salina, Ks. 67401

### Watershed:

Mulberry

### Water Quality Concern:

Cropland & wintering lots border Mulberry Creek, contributing to fertilizer, pesticide and livestock waste run-off

### Demonstration:

- \* Convert cropland to grass to establish a year-round grazing program;
- \* Develop alternative watering system.

"establish a year-round grazing program on current cropland converting it to a perennial forage base to help eliminate animal concentration and soil erosion."

The cropland and animal lots bordered the north bank of Mulberry Creek west of Salina. Steve was concerned about soil losses and the potential for water contamination with nutrients and pesticides when intensive farming operations adjoined the creek. He saw the development of the grazing system as an opportunity to distribute manure more efficiently, save soil, and decrease his expenses for fertilizer, pesticides, machinery and fuel.

Participation in the Clean Water Farms Project allowed the Burrs to



*The riparian areas have been left alone on the Burr farm, but Steve also planted grasses in paddocks pastured by cattle which further filter run-off.*

expand the grazing acres by seeding additional crop acres, extending the water line above ground, and installing additional fence. In addition, the year-round nature of the operation was enhanced by improvements to the lane so that the operators had access to the south portion of the farm during wet periods.

Their demonstration work began with the perimeter fences which were completed during the winter and spring of 1995-1996. Reed Canary grass was planted that spring but germination was poor due to the seed quality. Although the plan called for fescue seeding on 28 acres in August of 1996, weather conditions were unfavorable. That area was seeded partly to wheat and partly to alfalfa. As the alfalfa stands age, the Burrs will interseed fescue to complete that conversion. In September of 1997, fescue was planted north of the house on an additional 28 acres.

Over a two year period starting in October 1996, the lane to the south end of the property was mowed, bladed and graveled. Steve reports that, "the gravel for the roadways was a

real plus because it allows for better management during wet periods. And it also prevents erosion on the roadways."

The work done through the Clean Water Farms Project has enhanced the total grazing system as well as providing further water quality protection. Steve says "the development of many types of forages and multiple paddocks allows much greater flexibility in managing the cattle herd during the winter." He also notes that drainage work done around the lots has improved herd health and "farmer attitude" because of reduced mud.

The Burrs have been happy to open their farm to others to share what they have learned about developing and managing a grazing system. This includes the Kansas Biological Survey (KBS) who chose to monitor water quality on the Burr farm. (See Appendix Page 108)

KBS' data collection timeframe in the CWFPP was short, and thus did not lend itself to strong conclusions or to showing clear water quality improvements. But the trends



*Kansas Biological Survey (KBS) chose the Burr Farm as one of their monitoring sites. Run-off samplers checked water quality entering and leaving the farm. Trends observed indicated that the perennial grass cover filtered the water as it flowed over the grasses and left the farm, reducing concentrations of nitrogen, organic phosphorous and atrazine. See Appendix.*

observed indicated that the perennial grasses may play a role in filtering water as it flowed through the grasses.

Steve's observations are that all of the grass on the farm acts as a filter for the drainage area next to Mulberry Creek. He notes that his slough picks up a fairly heavy silt load from upstream sources.

A goal that the Burrs outlined at the start of their demonstration was to be able to show "a forage system that is environmentally friendly and also cost effective for those who are willing to invest a little management time." So far, they've met this goal.

## Burr Farm Characteristics

**Farm Size:** 1300 A.; 600 A.. owned.

**Primary Crops:** Hay- alfalfa and prairie hay; milo- 35 A. every other year, alternate years in sudan grass, wheat in rotation with alfalfa.

**Livestock:** Cow/Calf;

**Equipment:** "Too Much": 2 Field tractors, haying equipment, 2 ton wheat truck, disc, field cultivator, stock trailer, 4-row planter, cultivator, grain drill.

**Seed Varieties and seeding rates:** Ks. Common alfalfa, fescue, Korean lespedeza, red and white clovers, brome

**Labor:** Hires son. Hires a no-till drill for interseeding.

**Livestock management:** Graze native grass May to December (set stocking rate); graze stubble, alfalfa and fescue with a rotation.

**Marketing:** Sell heifer pairs in spring; sell steers (calves) in fall off grass

**Weed Management:** Roundup on stubble for no-till planting; Graze weeds to death, use shovel on thistles.

**Insect Management:** None for crops other than Furadan when needed for alfalfa weevil; Pour-on for cattle (lice in fall; worms in spring)

**Disease management:** Vaccination program for cattle

**Soil Fertility management:** Soil test as needed; use commercial fertilizer.

**Water Quality Management:** More perennial grasses; utilize MIG system including alternative livestock watering.

**Crop Yields:** Ave. for area: 40-60 bu./acre wheat; milo- 50-100 bu./acre; alfalfa 3-5 T.

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