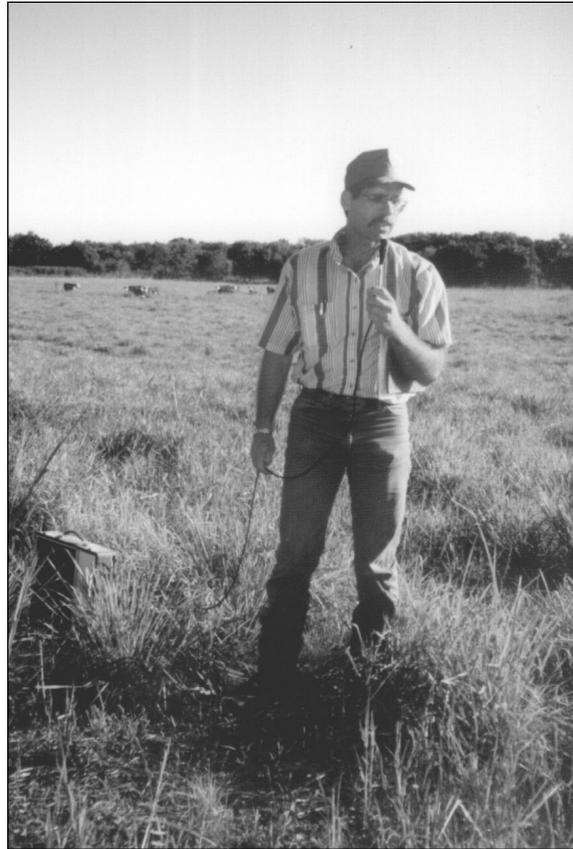


## Barry Barber- Cowley County

## Management Intensive Grazing



### Cooperator:

Barry Barber  
Rt. 4 Box 185B  
Winfield, Ks. 67156

### Watershed:

Timber Creek  
subwatershed of Middle  
Walnut

### Water Quality Concern:

Run-off from fertilizers  
and pesticides on cropland;  
livestock waste run-off from  
backgrounding lots.

### Demonstration:

- \* Convert cropland to grazing;
- \* Develop an alternative livestock watering system;
- \* Implementation of Management Intensive Grazing System

Barry Barber's landlords were so impressed with his Clean Water Farms demonstration project, they purchased additional land so he could expand his grazing system which adjoins Timber Creek in the Middle Walnut Watershed.

As a new tenant in 1996, Barber began the conversion of cropland and cattle feeding lots to a grazing system. The existing operation included a beef backgrounding lot. Corn and sorghum ensilage had been grown on the cropland under a typical high input system.

Barber recognized the potential for contamination of both ground water and surface water in Timber Creek and a farm pond. The open feedlots

and the intensive tillage of the cropland increased the chances of soil loss. Heavy deposits of manure in the lot as well as high fertilizer and pesticide use for corn production increased the potential to wash nutrients, bacteria and chemicals into local streams along with the soil.

Barber's objective was to develop a model for other small family farms and ranches. Specifically he wanted to create a profitable and environmentally-friendly operation using management intensive grazing and value-added marketing.

The grazing system would consist of planted forages on 34 acres in addition to 90 acres of existing native pasture. An additional 80 acres of

native grass would be cooperatively grazed with a neighbor's herd during the 45-day breeding season.

Barber began by planting a mix of Eastern gamagrass, clover and lespedeza on 34 acres of cropland in May 1996. The planting date was late due to drought. The stand was thin at first with heavy weed pressure. Mowing in July and September at a height of 8 inches kept the pigweed down and allowed the grass to grow and thicken during establishment.

High tensile fencing was installed to create paddock divisions in both the native pasture and the gamagrass. The fencing also limits access to Timber Creek. Watering points were created in each gamagrass paddock with a pressurized water line and pop-up risers.

In June 1997, Barber hayed the gamagrass which yielded 1.5 tons per acre. He then grazed it with 18 cow-calf pairs for 30 days from mid-August. In June of 1997, Barber hayed the gamagrass which yielded 1.5 tons per acre. He then grazed it with 18 cow-calf pairs for 30 days from mid-August. In April 1998, the gamagrass residue was burned, then hayed in July. Barber grazed cattle on the native grasses early in the season and moved to the gamagrass in mid-summer.

Because he had planted the gamagrass, which is similar to corn, into continuous corn ground, he had a strong infestation of Johnson grass. It was not affected by the mowing and he was concerned about it dominating the seeded forages. By using management intensive grazing techniques, he found the cattle ate the Johnson grass first, the legumes second, and then the gamagrass. In each paddock, he moved the cattle when they started eating the gamagrass.

He nearly eradicated the Johnson grass by the summer of 1999 using this technique.

In the spring of 1999, he overseeded birdsfoot trefoil into the gamagrass. That summer it yielded 4 tons of hay per acre and supported eleven cow-calf pairs and eight yearlings from August 20th to the end of the season.

Barber typically hays the gamagrass in mid-June leaving it at a height of eight inches. Once the grass comes back on, he begins paddock grazing. Because they prefer the legumes, the cattle get primarily legumes with some gamagrass. He feels this is an especially useful system for finishing calves that he markets in late October. The gamagrass hay is stored for winter feeding.

Barber is excited about what he terms "a natural, sustainable system". He feels one of the economic advantages is the ability to produce forages with minimal fertilizer inputs. "It takes a person who is knowledgeable about gamagrass and is willing to manage it well. We hayed some at 8" and some at 5". The 8" gama outproduced the 5" because the regrowth was so strong. We harvested two tons per acre and then grazed ten pairs and eight 700-800 pound calves for 75-80 days on 36 and 34 acres. And that was a drought year."

Barber's management practices protect water quality by reducing erosion with permanent grasses planted on crop ground and grazing management to improve or maintain good range condition. Less fertilizer and pesticide is needed under this system than under a cropping system so any runoff should have reduced nutrients and chemicals. Water quality is also affected by the fencing of surface waters.

**"...one of the economic advantages is the ability to produce forages with minimal fertilizer inputs."**

Barry Barber



*As a District Conservationist in Cowley County, Barber is excited about the possibilities his model may present for others. Above he explains the watering system to tour participants.*

When he was quizzed about changes in water quality after establishing the grazing system, Barber said, "There is nothing you can really see. But you just know that with a reduction in fertilizer and chemicals, you have to be losing less into the surface waters. You can see that

there is less runoff. The gamagrass really slows it down, and the soil soaks up the water like a sponge."

As a District Conservationist for the Natural Resources Conservation Service in Cowley County, Barber works daily with many small farms and ranches. He is excited about the possibilities his model may present for his neighbors.

"It's a dynamic approach to management. I'm not managing the grass the same way this year that I did last year because I could see things that I wanted

to change. A person needs a good technical background to study the grass and recognize what is happening. And then you use the heart."

## Barber Farm Characteristics

**Farm Size:** 200 acres (80 acres native grass, 80 acres gamagrass, 40 acres cool season grass such as fescue/alfalfa.

**Primary Crops:** Native grass, gamagrass with legumes interseeded, fescue/alfalfa.

**Livestock:** Cow/calf (1999- 12 cows, 4 heifers; 2000 - 16 cows; eventually 20 cows; Finished Calves: 1999- 8 head; 2000 - 12 head; eventually 20 head.

**Equipment:** Pickup, Oliver 35 hp Tractor, mower (Hay work is custom hired; some equipment borrowed)

**Labor & Management:** MIG, modified early intensive grazing on native grass before going to the fescue or gamagrass

**Weed Management:** Committed to not using chemicals. Weeds are controlled with intensive grazing patterns.

**Insect & Disease Management:** Flies are the worst problem for cattle. Rotation helps some. Hereford cross animals are also prone to pinkeye. Uses Shaklee Basic H with mineral oil in an oiler. For internal parasites, also uses Basic H in the water.

**Water Quality Management:** Reduced soil, fertilizer and herbicide run-off by converting cropland to perennial grasses; fenced surface waters; decreased time cattle spend in lots.

**Soil Fertility:** Has not used any fertilizers since planting to perennials. Cattle recycle minerals and nutrients through manure which they transport via the MIG system.

**Crop Yields:** Calves are gaining 2 to 2.5 # /day.

**Marketing:** Direct markets quarters, halves, and whole beeves. Processed locally in Mulvane. Has sold some in Wichita. Sells some cuts at Farmers' Markets.

**Profitability indicators:** Was able to pay off a 5 year loan in 3 years using his alternative marketing system.