

Bruce Buchanon Rice County

Cropland to Grass

“I just got tired of watching our top soil wash away year after year.”

Bruce Buchanon

Cooperator: Buchanon Brothers
% Bruce Buchanon
2520 Ave. I
Little River, Ks. 67457

Watershed:
Upper Little Arkansas

Demonstration:
* Convert seven acres of cropland to native grass along Little Arkansas River

Water Quality Concern:

Flood prone cropland along Little Arkansas River with a cut out where flood waters cut across field washing fertilizers, pesticides and soil downstream

"I just got tired of watching our top soil wash away year after year. The ideal situation was never to have plowed it 100 years ago."

That sentiment prompted Bruce Buchanon of Little River to return a small field along the Upper Little Arkansas River to native vegetation.

The seven acre field was situated on an ox-bow bend of the river. Although it had been farmed for

years, flooding river waters routinely cut across the ox-bow washing out crops and carrying away soil, fertilizer, and herbicides. The field had been prepared for milo planting in 1993 but washed out that year and the following year. Wheat was finally established in the fall of 1994.

After the grain was harvested the following summer, Bruce left the standing stubble to help hold the soil. A native grass mix was no-tilled into



Cropland along river bank (to the left) was prone to flooding resulting in serious soil erosion. Planting native grasses has helped slow the erosion.



Above, is the cut-out where the river starts across the field. Right, is the same spot after native grass is established..



the stubble in the winter of 1996. Weed pressure was heavy the first year but Buchanon knocked them back with a rotary mower. By the second year, the grass was well established and provided a crop of prairie hay.

In the spring of 1998, Buchanon planted additional acres to native grass. After establishment of the first planting, flood waters still rose high enough to wash into adjacent cropland. Buchanon decided the best answer was to expand the native grass planting.

Bruce admits that prairie hay cannot compare economically with a cash crop. But the economic losses associated with washed out seedlings and loss of fertilizers and herbicides meant that he was losing money trying to farm these acres.

And much as people would like to "fix" river banks, Buchanon knows that the river is dynamic. He expects that the native grasses will trap silt from upstream over time. This may in turn aggravate erosion on the opposite bank of the ox-bow.

But Buchanon knows that he has reduced a potential source of pollution even if he cannot control the flow of the river. As he stated in his application for CWFP cost share funds, "This [conversion of cropland to grass] will prevent fertilizer and herbicide and silt from entering the river. We have no control over flood water contamination upstream but we don't wish to contribute as it flows through this farm."