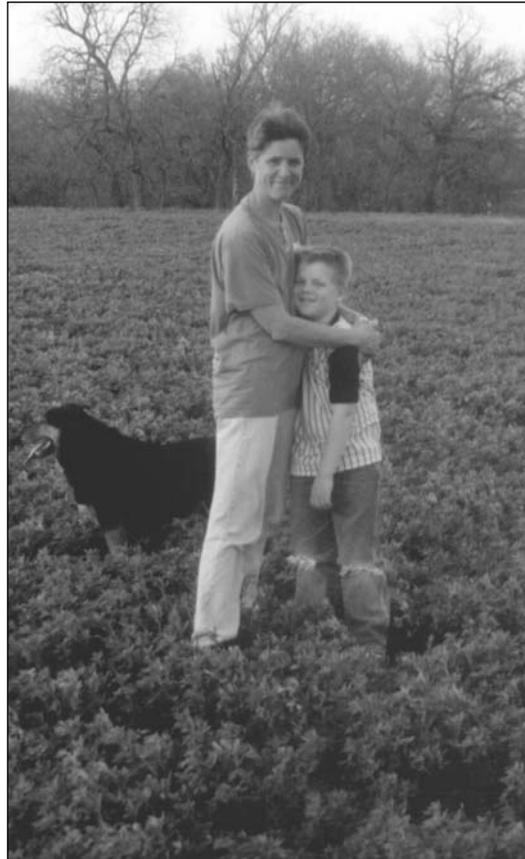


Nancy Vogelsberg-Busch Marshall County



Nancy Vogelsberg-Busch operates a 320 acre diversified grain and beef cattle farm in northern Marshall County. Her two college age children help out in summers and on weekends, while her eight year old son lends a hand throughout the year. Nancy's approach to farming has been to improve the land through soil conservation and soil building practices, while thoroughly integrating beef cattle production with the cropping system. At the same time she is working to develop more direct, alternative markets to improve the prices she receives and the profitability of her farm.

Alternative Livestock Watering System & Crop Rotation

Cooperator:

Nancy Vogelsberg-Busch
896 15 th Road
Home, Ks. 66438

Watershed:

Spring Creek

Water Quality Concerns:

Livestock waste run-off into creek, and nutrient and soil run-off from cropland

Demonstration:

- * Move cattle corrals away from creek, and fence creek
- * Develop an alternative livestock watering system
- * Develop an extended legume based crop rotation

Vogelsberg-Busch's farm consists of about 100 crop acres and about 200 pasture acres, with the remaining 20 acres in timber, waterways and hay meadow. She raises corn, soybeans, alfalfa, oats and wheat. Nancy maintains a cow herd of about 25 brood cows, and she finishes her steers for direct market meat sales. Both Nancy's crops and livestock are certified organic. Organic certification gives her access to value-added niche markets, while at the same time the elimination of chemical fertilizers and pesticides reduces production costs and provides water quality protection.

For her Clean Water Farm project, Nancy developed and implemented a written, long term crop rotation plan to improve her organic cropping system, and she relocated a cattle wintering/feeding area away from the creek to prevent polluted runoff into the creek. During this same time she secured an Environmental Quality Incentive Program (EQIP) contract through USDA's Natural Resource Conservation Service to complete some additional soil conservation work and to develop an additional watering site for cattle when they are fall grazing crop residues.

These projects permit Nancy to keep her cattle away from the creek and spread out over more of the farm, distributing manure over a much larger area and away from the creek. The land, the cattle and the water all benefit.

Nancy's basic crop rotation is oats/alfalfa, alfalfa, alfalfa, corn, bean, corn, beans. This rotation includes plenty of legumes for nitrogen production and for cattle feed, along with annual grain crops that can be used either for cash sales or feed. Manure from Nancy's cattle operation goes back on the fields to provide soil fertility.

Organic certification standards require substantial use of soil building crops, such as alfalfa, and generally prohibit planting the same grain crop on the same field more than one or two years in a row. A written crop rotation plan is an important tool for planning and implementing an acceptable crop rotation.

The water quality benefits from a good organic crop rotation include the elimination of highly soluble fertilizers and pesticides that can pose

Vogelsberg-Busch Crop Rotation Summary							
95 crop acres							
Yr. in Rotation	1	2	3	4	5	6	7
Basic Rotation	Oats/Alfalfa	Alfalfa	Alfalfa	Corn	Soybeans	Corn	Soybeans
Yield Goal:	Oats - 75 bu. Alf/ 1.5 T.	4 Ton	4 Ton	100 bu.	35 bu.	100 bu.	35 bu.
Seeding Rate	Oats - 2 bu. Alf. - 14#	None	None	18,000 seeds/ac.	175,000 seeds/ac.	18,000 seeds/ac.	175,000 seeds/ac.
Tillage:	Light Disc - 1	None or lt. springtooth	—	Plow Green manure, Disc - 1 Cult. - 1	Disc - 1, Field Cult. - 1-2	Field Cult - 1-2	Disc - 1, Field Cult 1-2
Fertility	Soybean N, 5 Ton manure	None added	—	Alfalfa green manure	Soil Test (for P) Supplement as needed	Legume N carryover, 5 ton manure	None added; Soil test: Lime if needed
Weed Control	Cut hay	—	—	Crop rotation Pre-plant tillage Hoe 1-2. Cult. 1-2	—	—	—
Cover Crop	Alfalfa	—	—	Stubble	—	—	—
Other Practices	Fall and	Winter Graze	cattle	—	—	—	—



Nancy's old cattle feeding area and corral was convenient to the house, but bordered the creek that runs behind her farmstead. With CWFPP help, she moved the corral to a new area away from the creek (left), and trenched a waterline to provide several watering and feeding options on her farm. Below, manure is a valuable resource on Nancy's farm and is applied to cropland.



leaching and runoff threats to surface and ground water. In non-organic cropping systems, a good crop rotation can help reduce the use of fertilizers and pesticides, both reducing the threats to water quality and lowering production costs.

Of course, good management of livestock manures in an integrated crop and livestock operation is as critical on an organic farm as on any other. Timely application of manures from the lots is also important to the fertility program and helps protect water quality.

Nancy has relocated her cattle feeding area with relatively low costs. By laying water line and a hydrant to the new area that drained away from the creek, installing temporary electric fence for a large corral

area, and locating two small sheds and a row of hay bales for calf shelter and wind protection, Nancy was able to begin using the area without spending a lot of money on fixed fence structures. This allows her to see just how well the area will work and to make changes as needed.

Once she determines the design she prefers, she can begin building more permanent fence and shelter. Nancy's plan shows that the decision and determination to make changes in livestock management can go a long way to protect water quality without having to initially spend a lot of money.

Nancy's profit strategy is to use the organic practices to control production costs and use the organic certification as a value added marketing

component. She has put her main focus on direct marketing her certified organic finished beef under her farm label, "Bossie's Best". Through this endeavor she works closely with her local Frankfort, Kansas, meat locker, to obtain organic certification for the meat processing plant, and to develop cuts, processed meat products and marketing strategies.

Soybeans are Nancy's principle cash grain. She sells these into organic food or feed markets, based on bean quality and market demand.

Marketing can play an important role in water quality protection because marketing is critical to the economic viability of a farm, and economically viable farms are better able to conduct the practices and management necessary for water quality protection. In addition, some farms, such as Nancy's, are able to turn their farming practices into a plus or edge with the environmentally conscious consumer.



Networking with other farmers in the Clean Water Farms Project was an important aspect of the project. Above, Pat and Russ Brehm and Nancy Vogelsberg-Busch share information and a good time at the project's wrap-up conference on August 19, 2000.

Vogelsberg-Busch Farm Characteristics

Farm Size: 320 acres, including 95 crop acres and 220 pasture acres.

Crops: Corn, soybeans, oats and alfalfa.

Livestock: 25 cow-calf pairs. Finishes 12-15 head each year.

Equipment: Conventional tillage, planting & haying equipment. Picks corn in the ear. Hires combining and hay baling.

Labor: Self with help from children.

Crop Management: Certified organic crop production.

Livestock Management: Spring calving, conventional graze summer pasture, wean calves in the fall. Sells about half the calves as feeders, and finishes steers certified organic.

Weed Management: Crop rotation and cultivation, some hand roguing.

Insect Management: Winter graze alfalfa residue for weevil control.

Disease Management: Crop Rotation.

Soil Fertility: Systematically uses alfalfa, green manure, and livestock manure. Soil tests periodically. Lime as needed.

Water Quality Management: Eliminate chemical fertilizers and pesticides from cropping system. Fenced creek and developed alternative watering sites for cattle. Timely application of manures.

Crop Yields: 75 - 100 bu./acre; Corn; 30 -40 bu./acre Soybeans; 65 bu./acre Oats.

Profit Strategy: Reduce production costs by elimination of commercial fertilizers and herbicides. Sell organic soybeans at a price premium. Direct markets finished organic beef.

Marketing: Market organic soybeans through Kansas Organic Producers Marketing Cooperative; Direct market beef in both sides and cuts to individuals and restaurants.