

Rodger Schneider Saline County

Composting Livestock Waste

Cooperator:

Rodger Schneider
4860 W. Crawford
Salina, Ks. 67401

Water Quality Concerns

Livestock operation run-off;
located on flood plain next to creek

Watershed:

Spring Creek

Demonstration

* Develop composting facility to utilize live-
stock waste, also using city yard wastes, for
cropland fertility

When Rodger Schneider began a Clean Water Farms demonstration in 1996, he was looking for a better way to manage the manure produced by his dairy cows. A few short years later, one of Rodger’s biggest problems is a shortage of manure for his composting business.

The Schneider farm is located in the Spring Creek flood plain at the western edge of Salina, Kansas. In 1996, the Schneiders were farming 600 acres of tillable land, milking 90

cows, and managing 300 acres of native grass. And like most dairy-
men, one of Rodger’s challenges was making use of all the manure collect-
ing in his barn lots.

The Schneiders had been cold com-
posting manure for several years. The material was partially compost-
ed before hauling to fields nearby. This method required lots of farm
ground to stockpile the manure and considerable time to keep the barn
lots bladed. Rodger was also con-
cerned about the abundance of weed



Rodger Schneider found that he could solve the problem of what to do with his livestock waste by working with the City of Salina and its residents, accepting yard waste and making compost. Due to little or no profit margins in his dairy operation, he has now quit dairying and raises replacement heifers using their manure at the composting facility.

seeds that were being transported in the manure to his cropland. And although the runoff from the piles and barn lots was filtered through sodded grassland, it was also a potential source of bacteria and nutrient pollution for Spring Creek.

In cooperation with the Saline County Conservation District, a waste system was designed that would include a lagoon to hold the run-off from the livestock lots. The second part of the plan was to develop a commercial composting facility. Rodger began negotiations with the City of Salina to receive yard waste from city residents to be used as a carbon source in the composting process. He also began working with the State Division of Water Resources to design and permit dikes and a large holding pond to contain any run-off from the composting facility.

With additional assistance from KRC's Clean Water Farms Project, the composting facility was established on ten acres near the farmstead. A large flat area 1,500 feet long and 308 feet wide is enclosed by dikes to divert the run-off from adjacent fields and to contain any run-off from the compost windrows. A large holding pond within the facility stores the run-off which can potentially be used to maintain adequate moisture in the compost.

The facility, which opened for business in May 1997, combines manure from the farm with leaves, grass clippings, and brush hauled in by the city or individuals. Schneider charges the city a tipping fee which is less than that at the landfill. This savings to the city has allowed them to create



Initially, Rodger leased a commercial sized compost turner (above) which was essential to turning the large volumes of composting material.

new jobs within the sanitation department.

Besides the containment of water and manure on site, the demonstration has an even broader impact with regard to the amount of composted materials that would have been taken to the landfill. In 1997, 6,000 to 8,000 cubic yards of grass, leaves, and brush were brought to the composting facility. During both 1998 and 1999, 22,000 cubic yards were diverted from the landfill.

Ironically, the Schneider farm began to change about the same time that the composting facility came on line. In 1997, the milking herd was sold when milk prices dropped so low that Rodger could not justify keeping the cows. Now he uses the same facilities to develop replacement heifers for other dairies.

Even more ironic is the fact that Rodger cannot afford to use any of the compost on his own farm. The demand for compost is great with the



Above is the nearly finished compost product, ready for gardens or cropland. Rodger's biggest problem now is getting enough manure to match the high volumes of available yard waste.

majority being sold locally to landscaping businesses and gardeners. Other big customers have been school districts which use compost on their football fields as a soil enhancement.

Customers have included schools in Lindsborg, Ellsworth, Ottawa, Manhattan, and Osborne, who are seeking to increase the moisture retention properties of the soil under their football fields.

Although most of the compost is used as a soil amendment during the establishment of grass stands, Kansas Wesleyan University in Salina used a one-inch layer of compost on their existing football field, aerating and watering it well to achieve incorporation.

For Rodger, the biggest obstacle at the compost facility now is a shortage of manure since he is only using the manure from his replacement heifers. He is considering using sources from other local livestock operations that are close enough to justify the trucking expenses.

Schneider Farm Characteristics

Farm Size: 540 tillable acres; 300 acres of native grass.

Crops: Alfalfa mostly. Soybeans and milo.

Livestock: About 100 replacement heifers. (Sold the dairy herd in 1997).

Equipment: Haying equipment; the usual tillage and planting equipment; composting facility has a compost turner, loader, skid steer loader. Separate trucking business for hire and delivering compost.

Livestock Management: Uses less MIG than he used to. More energy goes into the composting business.

Weed Management: Crop rotation

Water Quality Mangement: No longer uses the dairy's livestock waste system as he no longer has the dairy, but he is composting the manure from the replacement heifers.

Marketing: Heifers are resold to original dairy producer. Sells a finished compost product to area landscaping businesses. Can't afford to use his own compost.

Profit Strategy or Indicators: Composting business is successful enough that he would like to explore trucking livestock manure in from other farms in the area, as he is limited by a lack of manure.