**Harvesting Knowledge: Little Ark's Productive Producers**

In this issue, we are high-lighting the work of a father and son, Ellis and Kevin Yoder. Ellis Yoder took over the family farm in 1977. Ellis ran the farm for 44 years before he and his wife, Rita, moved to McPherson in the summer of 2021. In true family-farm-fashion, the farm is now operated by its 4th Yoder generation, Ellis’ son, Kevin. Kevin, his wife Brittney, and their two-year-old daughter, Brooklyn, now enjoy living on the farm. Although Ellis is officially retired, he said he will be helping Kevin for as long as he can, just as his father did with him.

The 1,500 acres of dryland farm-ground they currently have is in western McPherson county. The Yoder’s grow wheat, milo, and soybeans with typically 1/3rd of the farm in each. In addition, they rent a 45 acre native grass pasture and also rent milo stubble and cover crop acres for grazing.

Ellis has been a steward in the Little Arkansas River Watershed and has participated in the WRAPS Atrazine program. He says that, “it was very easy to sign up for and I learned some management practices that reduced the amount of atrazine I had been using on milo.” Ellis speaks of his years farming and the changes in management that he has made over the years. “I grew up spending many days plowing wheat stubble but when I started farming in 1977, I moved to stubble mulch farming. I got interested in no-till about 22 years ago and our farm has now been 100% no-till for 17 years. I started using cover crops in 2014 with just a few acres. The number of acres has grown gradually and in 2021, we had 300 acres of cover crops.”

When asked what his aspirations were for the future, Ellis said, “I will try to point Kevin down the road I would take if I could keep farming for another 44 years. As stewards of the soil, most farmers have neglected the health of our soils and it has been degrading for about 150 years. Between tillage, monoculture, chemicals, and the removal of grazing livestock, most of our soils are not nearly as healthy and productive as they once were. We should mimic as best we can the way mother nature made our prairie soils. Ultimately, that means no tillage, no chemicals or commercial fertilizer, multi-species of plants growing year-round, and multi species of animals grazing. Getting to that point will take time and much learning from others. I also want to start using Haney soil tests to measure soil health. It may take 4-5 years to start seeing real results but I’m confident it’s the right path to take. Instead of trying to maximize yields each year, we need to maximize profits in the long term, which will come with healthy soil.”

It’s always good to get advice from someone with so much experience and wisdom. When asked if he had any advice he’d like to share with his fellow watershed residents, Ellis said, “Make any changes to your operation relatively slowly. Don’t move your whole farm to something new all at once. Learn from others. Don’t just look at what will make you the most money this year. Look down the road at least 20 years and do now what will result in the most profitable farm then. Future generations will thank you.” Thank you Ellis and Kevin for your family’s continued dedication to improving agriculture in the Little Arkansas River Watershed!

**Cover Crops: Tools and WRAPS Funds!**

**Interested in growing Cover Crops?** Choosing the best cover crop for a particular cropping system can be difficult. The Midwest Cover Crops Council (MCCC) has released an improved cover crop selection tool to help farmers determine the best cover crops for their fields, it can be found at [https://mccc.msu.edu/covercroptool/](https://mccc.msu.edu/covercroptool/).

This tool allows users to select their farming area, cover crop goals, and provide information about any cash crops they are planting, and drainage data for their fields. The tool then offers the best cover crop options for those specified conditions.

**Need an incentive to try Cover Crops on your field?** The Little Arkansas River WRAPS program has nutrient management and livestock funding for Sand and Turkey Creek areas beginning in July 2022 that can be used just for this purpose! The program can offer you a cash incentive for planting cover crops! Contact us if you have any questions or to get signed up today!
Cover Crops: Benefits

Planting cover crops has many benefits and can boost your profits in the first year! Cover crops have been proven to:

- **Improve soil health**: Cover crops can speed up the infiltration of excess surface water, relieving compaction and improving structure of over-tilled soil, adding organic matter that encourages beneficial soil microbial life and enhances the nutrient cycle.

- **Reduce erosion**: Quick-growing cover crops hold soil in place and help protect soil from the impact of raindrops. Long-term use of cover crops increases water infiltration and reduces runoff that can carry soil away.

- **Reduce pollution and improve water quality**: Cover crops can slow down erosion and runoff, thereby reducing nonpoint source pollution caused by sediment, nutrients, and agricultural chemicals.

- **Conserve soil moisture**: Cover crops can trap surface water and add organic matter to increase infiltration to the root zone. This can result in less moisture stress during drought.

- **Cut fertilizer costs**: Cover crops can improve your bottom line by cutting fertilizer costs, by contributing N to cash crops, and by scavenging and mining soil nutrients. Legume cover crops convert nitrogen gas into soil nitrogen that plants can use.

- **Suppress weeds**: Many cover crops effectively suppress weeds by working as a smother crop that outcompetes weeds for water and nutrients. Cover crops also can block light and change soil surface temperatures that are a requirement for most weed growth.

- **Reduce damage from diseases**: Cover crops can host beneficial microbial life that discourages disease and can create an inhospitable soil environment for many soil-borne diseases.

- **Reduce insect and nematode damage**: Cover crops can encourage beneficial insect predators and parasites that can reduce insect damage below economic thresholds. Cover crops can also produce compounds that reduce nematode pest populations.

- **Offer harvest possibilities**: Cover crops can often be utilized as forage, grazing, or seed. This works well in systems with multiple crop enterprises and livestock.

- **Provide habitat for wildlife**: Cover crops can provide the habitat that smaller animals may seek in a crop field. Cover crops used for grazing can be a host to foraging animals.

You can also increase the range of cover crop benefits by:

1) increasing the diversity of cover crops grown,
2) the frequency of use, and
3) the length of time that cover crops are growing in the field.

*Sources: Managing Cover Crop Profitability, Sustainable Agriculture and Research (SARE), 2007 and the Midwest Cover Crop Council.*

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