

Gasconade County SWCD

July 2019—Volume 30, Issue 1

END OF FISCAL YEAR 2019

The Gasconade County Soil & Water Conservation District has wrapped up their 2019 Fiscal Year. Some highlights for this year are:

- Welcomed new board member Luke Mangrum, as he was elected to replace retiring Vice-Chair Debra Nowack. He will be representing Area III (Clay, Third Creek and Bourbois Townships) as the Vice-Chairman.
- We hosted two farm tours for landowners—Kopp Farm (Cover Crops and WQ10 Stream Protection) and Greunke Farms (Grazing Systems and Soil Health Trail-er) and Prater/Rost Farm (Animal Waste Storage Facilities).
- We hosted our 55th Annual Meeting (194 attendees), 18th Annual 4th Grade Field Days (214 students/47 teachers and volunteers) and our 5th OMG AgriPride Women in Ag Event (365 attendees).
- We received 367 posters from 7 schools for the Annual Poster Contest—“Life in the Soil: Dig Deeper.” Garrett Schneider of Hermann Middle School placed 1st in the 2018 State Level Competition and he then placed 2nd at the National level.
- Co-Sponsored the Annual Forage/Beef Conference, Tri-county Grazing School, Central Region Envirothon, and the State Envirothon.
- Purchased a new 10’ John Deere No-till drill. The two drills have been used on 683.88 acres this fiscal year. We also provide ATV Equipment and soil testing equipment for landowner use.
- FY19 Cost-share Claimed: \$263,198.19—\$86,172.12 more than last year
 - Animal Waste Facilities (\$76,491.54)
 - Sheet/Rill/Gully (\$105,088.79)
 - Grazing System Management (\$70,015.57)
 - Woodland Erosion (\$3,932.29)
 - Nutrient/Pest Management (\$7,670.00)

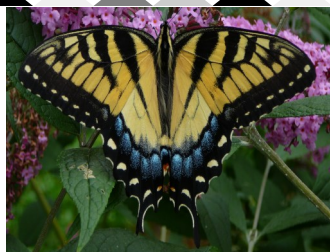
Our district is funded by the 1/10th of 1% Parks and Soils and Water Tax, as well as receiving a stipend from our local county commission. We look forward to serving you this coming fiscal year. Please contact us with any resource concerns that you may have.

Board of Supervisors:

Mike Haeffner—Chairman
Luke Mangrum—Vice-Chairman
Joel Wehmeyer—Treasurer
Harvey Hesemann—Member
Matt Herring—Secretary

District Staff:

Manager Diana Mayfield—District Specialist IV
Technician Sarah Berkemeyer—District Specialist II
Shared Technician April Duedeoeffler—District Specialist I
Shared Pest Management Specialist—Amy Neier, District Specialist IV



NRCS Staff:

Gary Applegate—District Conservationist
Mark Brandt—Lead Resource Conservationist
Adam Gottemoeller—Soil Conservationist
DJ Schroeder—Soil Conservation Technician

MDC Staff:

Seth Barrioz—Private Lands Conservationist
Scott Williams—Fisheries Biologist
Aaron Holsapple—Forester
Clayton Light—Public Lands Conservationist

Sign up for E-Alerts at <https://mosoilandwater.land/gasconade>

Like us on



FSA-Fully Staffed!

The Gasconade County Farm Service Agency is proud to announce the hiring of Hannah Heintz as the new Program Technician replacing Retiree Brenda Kurrelmeyer. She will be joining Program Technician Jayme Geisler, who replaced Retiree Debra Nowack earlier this year. Under the leadership of County Executive Director Kate Gerlemann, these young ladies are ready and willing to assist you with all your crop reports and natural resource concerns. Be sure to make an appointment with one of these ladies to report your crops by calling 573-437-4131 x 2.



**For more information
or a registration form,
please contact the
office at
573-437-3478 x 3**



**19th Annual 4th Grade Field Days
October 2nd & 3rd**

**Brenda Kurrelmeyer Farm
Celebrating her 15th year!**

**Please mark your calendars and let us
know if you would like to volunteer
your time for this special event.
573-437-3478 x 3**





WOMEN IN AGRICULTURE 6th Annual Event

Thursday, September 5, 2019

WHITE MULE WINERY

SEND RSVP & CHECK

by August 10, 2019 to:

Maries County SWCD-WIA
105 Parkway * Vienna, MO 65582

Email: sandy.stratman@swcd.mo.gov

573-422-3342

Admission: \$15 pre-paid/\$20 at the door

Limited Seating



@omg.wia

Schedule of Events

- 3:00-5:30pm Open Registration and Vendors
- 3:30-4:15 pm Tunnel Vision: Extending the Growing Season with a High Tunnel
- 4:15-5:00 pm Visit with Area Vendors with Local Products
- 5:00-5:45 pm Preserving the Harvest: Principles of Food Preservation
- 6:00 pm Dinner (Beef Brisket and Pork Loin)
- 7:15 pm Speaker, Sharon Oetting - Life on the Farm

Sharon, a tried and true farm girl from Concordia, Missouri, will share her experience of growing up on a traditional hog farm. From rubber boots to high heels, Sharon's held many roles and will discuss transitions during her life as a female in the male-dominated Ag industry. Come join us as we learn more about this quirky, hard-working, fun-loving farmHER.

Name _____

Address _____

Phone Number _____ Email Address _____

Additional Attendee Names _____

NOTE: Shirt details are on Facebook. Orders are preferred with pre-registration—paid by August 10th. The shirts are V-neck tees, with the Missouri 'Locally Grown' theme on the front.

Number of Attendees		Price, each	Subtotal
		\$15.00	
Quantity of Shirts	Size (S, M, L, XL, 2X)	Color (Green or Gold)	Price, each
			\$15.00
			\$15.00
			\$15.00
(Add additional lines if needed for shirt orders.)			TOTAL ENCLOSED

Shuttle available from SWCD office in Vienna. Advanced registration required. Call for more information.

1590 10' John Deere Drill has Arrived!

The Gasconade County Soil & Water Conservation District is pleased to announce the arrival of their NEW 1590 10' John Deere Drill. We greatly appreciate all the support we received from Local Vendors in providing items for our silent auctions over the years to help raise the funds. We are also grateful for the grants that were received from the National Wild Turkey Federation and the MFA Oil Foundation.

The John Deere drill will be managed by Gary Miller at 3325 Hwy 19 N, Owensville, MO. To schedule rental of this drill, please call Gary at 573-690-9065.

The rental for the new drill is \$12 per acre with a 10 acre minimum. The 7' Great Plains drill will continue to rent for \$10 per acre with a 10 acre minimum—\$9 per acre for everything over 50.



Thank You

Walmart Community

Thank you Glen Ely and the Walmart Community for the continued support of the Osage, Maries, and Gasconade (OMG) Counties Agri-Pride Women in Ag Events. OMG WIA has received \$1,000 in grant money from the Walmart Community for 4 years now and it is greatly appreciated. Without this kind of financial support, we would not be able to offer this quality program for lady landowners to gather together, networking and learn about programs and services that are provided through our agencies.



Conservation Family Award
Sassmann Farms LLC



Volunteer Award—Jerry Lairmore

2019 Annual Awards



Partnership Award—MDC

Aaron Holsapple, Scott Williams, Jason Eikermann, Seth Barrioz



Adding Cover Crops to a Corn-Soybean Rotation

Missouri Cover Crop Economics Case Study 1
February 2018 (Revision to original case study published March 2015)

Costs and benefits are highly variable from operation to operation. The information presented here is provided as an introduction to the economic variables associated with adding cover crops to a corn-soybean rotation. For an operation-specific analysis refer to the For More Information section.



Cereal Rye planted in corn residue

Use Partial Budget Analysis to Assess the Economics of Cover Crops

- Focus only on what changes (adding cover crops).
- Focus on the Costs and Benefits realized on-farm.
- Focus on benefits that can be easily monetized.

In General

- Keep your cover crop seed and planting costs as low as possible to meet your objectives.
- Good management is the key to maximizing the benefits of cover crops.

For More Information

To assess the costs and benefits for your farm a spreadsheet based tool is available to download from the [NRCS Missouri Soil Health Website](#)

Contact

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MO NRCS State Economist
lauren.cartwright@mo.usda.gov
(573) 876-9415



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Introduction

Utilizing cover crops provides many benefits to soil and water resources. However, some farmers may question the affordability of incorporating cover crops into their operations. Partial budgeting is a tool to help answer that question.

In a partial budget analysis the focus is on changes in the operation. To keep the analysis relevant to the operation, the focus of this assessment is on the on-farm cover crop costs and benefits. Additionally, only benefits that can be easily expressed in dollar terms are assessed.

When assessing the economics of cover crops, time horizon matters. The short term (typically less than 10 years) assesses the immediate economic impact of adding cover crops. The long term assesses the continued long term utilization of cover crops which may lead to additional economics benefits (aka: Soil Health).

Case Study

A farmer raises 1,300 acres of soybeans and corn, and has been no-tilling for 40 years. He is adding winter cover crops into the rotation to reduce erosion and improve soil health. His goal is to have all acres in winter cover crops each year. The farm is terraced with average slopes of 6 percent. Before adding cover crops, even with no-till and terraces, the farmer experienced an annual erosion rate of 5 tons per acre on this farm. The cover crops utilized are as follows:

Cover Crop Species	Seeding Rate	Cash Crop Following Cover Crop
Winter Cereal Rye	30 lb/acre	Soybeans and Corn

When cover crops can be planted before October 1, an air seeder is used. For fields where the cover crops cannot be seeded until after October 1 a no-till drill is utilized to improve germination and establishment. Over the past few years, the farmer has tried different cover crops and seeding rates. He has found that Cereal Rye at the 30lb/ac rate is the most reliable for achieving a good stand and the most cost effective for meeting his goals.

Where cover crops are planted, the farmer has achieved excellent control of water hemp in the soybean crop. As a result, he has reduced herbicide use by 25 percent. In addition, he has experienced a soybean yield increase of 10 percent. With cover crops, he saves five days of field work each spring because he no longer has to address erosion collection points and ephemeral gullies.

Analysis

Costs

Cover Crop Before Soybean		Cover Crop Before Corn	
Cover Crop Seed (\$/acre) - Cereal Rye, 30 lbs/acre, \$0.25/lb	\$7.50	Cover Crop Seed (\$/acre) - Cereal Rye, 30 lbs/acre, \$0.25/lb	\$7.50
Cover Crop Planting (\$/acre)	\$20.00	Cover Crop Planting (\$/acre)	\$20.00
Total Cost (\$/acre)	\$27.50	Total Cost (\$/acre)	\$27.50

Benefits

Cover Crop Before Soybean		Cover Crop Before Corn	
Herbicide Reduction (\$/acre) - \$21/acre reduced by 25%	\$5.25	Reduced Erosion (\$/acre) - equipment and labor ^{1/}	\$6.50
Yield Increase (\$/acre) - 45 bu/acre *10% increase @\$10/bu	\$45.00		
Reduced Erosion (\$/acre) - equipment and labor ^{1/}	\$6.50		
Total Benefits (\$/acre)	\$56.75	Total Benefits (\$/acre)	\$6.50

Results

Short Term

Cereal Rye Cover Crop before Soybean net benefit \$29.25/ac
 Cereal Rye Cover Crop before Corn net cost -\$21.00/ac
 Rotation Net Benefit \$4.13/ac

Long Term

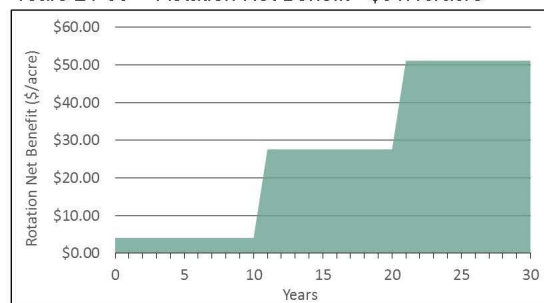
If the farmer continues to utilize cover crops in his rotation he will experience improvements in the physical and biological properties of the soil. One way to measure this improvement is through soil organic matter. For each 1 percent increase in soil organic matter (based on increasing the active carbon content in the soil) approximately 20lb/ac of plant available nitrogen becomes available. Additionally, the water-holding capacity of the soil increases, reducing the risk of drought-induced yield reductions in dryland farming systems. Assuming it takes this farmer 10 years to increase soil organic matter 1 percent, the additional benefits after year 10 are \$23.50/ac/yr.

Long Term Benefits

Soil Fertility (\$/acre/year) - 20 lbs/acre plant available N at \$0.55/lb	\$11.00
Water Storage (\$/acre/year) - avoided yield reduction due to drought ^{2/}	\$12.50
Total Long Term Benefits (\$/acre/yr)	\$23.50

Combining the Short Term and Long Term Results

Years 1-10 Rotation Net Benefit \$4.13/acre
 Years 11-20 Rotation Net Benefit \$27.63/acre
 Years 21-30 Rotation Net Benefit \$51.13/acre



Conclusion

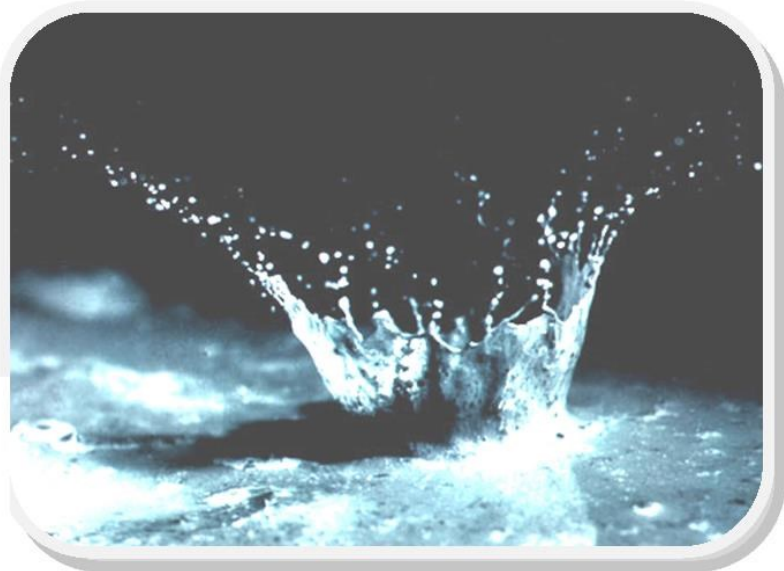
As a result of this farmer's adaptive approach to cover crops on his operation, he has successfully found a way to minimize the cover crop costs to meet his goals in a manner that results in a net benefit to his operation in the short run while also improving his soil health in the long run which will result in increased profits for this operation.

^{1/} Equipment and Labor Calculation details: Approximately 1/4 of the 1,300 acre operation is treated annually. Tractor: \$20/ac tractor cost (includes fixed and variable costs) * 325 acres = \$6,500/yr. Labor: Using producer estimate of 5 days field work saved, at \$25/hr * 40 hrs (5-8 hour days) = \$1,000/yr. \$7,500/yr / 1,300ac = \$6.50/ac/yr

^{2/} Assuming a possibility in any given year of a 2% yield reduction due to a drought period. Soybeans at 45bu/ac * \$10/bu * 2%=\$9.00/ac/yr. Corn at 160bu/ac * \$5/bu * 2%=\$16.00/ac/yr. \$9.00 + \$16.00 = \$25.00/2 = \$12.50 average annual benefit from avoided yield reduction.

EROSION, COMPLIANCE, AND SOIL HEALTH OH MY... WHAT DOES ALL THIS MEAN TO YOU?

SPONSORS:



Agenda

Revisit the issues of Soil Erosion and Compliance
Farm Bill and State Cost–Share Programs
Soil Health Rain Fall Simulator with
NRCS Soil Health Specialist, David Doctorian
Dinner provided by the Gasconade County SWCD

When: February 5, 2020—9 am till 12:00

**Where: James E. Decker Farm
1627 Hwy Y, Owensville MO**

Please RSVP to the Gasconade County SWCD by calling 573-437-3478 Ext 3 no later than January 29, 2020.

Persons with disabilities who require accommodations to attend or participate in this meeting should contact us at 573-437-3478 ext 3 or Federal Relay Service at 1-800-877-8339.

Helping People Help the Land

USDA is an EQUAL OPPORTUNITY PROVIDER, EMPLOYER, and LENDER

Gasconade County SWCD

314 Olive Street
Owensville, MO 65066
(573) 437-3478 ext. 3
FAX: 855-842-7890

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2019 Dates to Remember

Aug 6	Board Mtg, USDA Service Center, 6:30 p.m.
Sept 2	Labor Day Holiday, Office Closed
Sept 3	Board Mtg, USDA Service Center, 6:30 p.m.
Sept 5	OMG WIA Event, White Mule Winery 3 p.m. pg 3
Sept 16-18	State WIA Conference, St. Charles, MO pg2
Oct 1	Board Mtg, USDA Service Center, 6:30 p.m.
Oct 2-3	19th Annual 4th Grade Field Days, Kurrelmeyer Farm
Oct 14	Columbus Day, Office Closed
Nov 5	Board Mtg, USDA Service Center, 6:30 p.m.
Nov 11	Veteran's Day, Office Closed
Nov 28	Thanksgiving Day, Office Closed
Dec 2-4	Annual Training Conf, Tan-Tar-A, Staff out of office
Dec 10	Board Mtg, Farm Bureau Bldg, 6:00 p.m.
Dec 25	Christmas Day Holiday, Office Closed
Jan 1, 2020	New Years Day, Office Closed
Jan 7, 2020	Board Mtg, USDA Service Center, 6:30 p.m.

The GCSWCD is now on Facebook. Search for Gasconade County MO Soil & Water Conservation District. Be sure to like us on Facebook, so you don't miss out on any important updates!

Visit us on the web at <https://mosoilandwater.land/gasconade>

Gasconade County SWCD Equipment

A NEW LEASE AGREEMENT MUST BE SIGNED THIS YEAR AND ON FILE AT THE SWCD OFFICE BEFORE EQUIPMENT CAN BE RENTED.

Drills: Minimum of 10 acres applies. Proof of vehicle insurance is required at the time of pickup.

NEW

1590 John Deere 10 ft no-till drill! \$12 per acre charge. Located at 3325 Hwy 19 Owensville. Call Gary Miller at 573-690-9065 to schedule.

◇ Great Plains 7 ft no-till drill with warm season box is located at the SWCD office. \$10 acre, \$9 per acre over 50. To schedule call 573-473-3478

Located at the SWCD Office:

- ◇ Burn Equipment - \$50 deposit, \$10 use charge
- ◇ ATV Equipment (Seeder, Sprayer) - \$100 deposit, \$20 a day each piece
- ◇ ATV Warm Season Grass Seeder—no charge—Donated by Quail Unlimited
- ◇ Soil Probe - no charge