# SSWIG Demo Plots – Year End Summary 2024



Drone image taken on April 18, 2024.

# **2024 Precipitation**

Month	Total Rainfall (inches)	<b>Deviation from Normal</b>
April	4.39	+1.19
May	6.26	+2.33
June	9.45	+4.75
July	6.58	+2.54
August	2.07	-1.83
September	2.73	-0.86
October	2.19	-0.82
November	3.92	+1.93

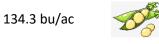
<sup>\*</sup>Data from WiscoNet Prairie du Sac location

- 2024 started very wet but had a timely dry out for fall harvest.
- November rain gave a late boost for cover crops and pastures.
- Different story than 2023.

# Yield and Economic Data – per acre basis

Plot	Crop	Yield (bu/ac)	\$ / bu	Revenue (ac)	Expenses (ac) *avg for corn plots	Net (ac)	2-yr Net (ac)
101	Soybean	57.7	10.50	466.04	471.65	-5.61	+12.62
102	Soybean	54.5	10.50	440.19	396.23	+43.96	+18.58
103	Corn E/L	217.3/142.3	4.25	923.53/604.78	859.86	+63.67/-255.08	Same as net
104	Corn E/L	162.0/84.3	4.25	688.50/358.28	685.87	-2.63/-327.59	Same as net
105	Wheat	86.6	4.77	315.33	426.15	-110.82	+220.40
106	Wheat	61.8	4.77	226.76	309.38	-82.62	+228.27

2023 Yield



51.3 bu/ac

#### **Soil Data**

#### **Routine Nutrient Samples**

\*Samples taken August 19, 2024. No spring to summer comparison as in 2023.

Plot	ОМ	рН	P (ppm)	K (ppm)	Ca (ppm)	Mg (ppm)	B (ppm)	Zn (ppm)
101	3.2	7.2	85	50	2116	317	0.5	4.6
102	3.5	6.9	76	69	1763	282	0.5	4.9
103	3.6	6.9	94	62	2046	277	0.6	5.4
104	3.4	7.0	92	88	1978	315	0.6	5.4
105	3.1	6.9	65	84	2165	456	0.6	5.4
106	3.3	7.1	186	149	2198	373	0.5	7.2

- Similar between all plots.
- 106 exception slope.
- P <u>excessively</u> high.

Key: LOW; OPTIMUM; HIGH

## **Soil Health Samples**

Plot	Soil Health Score	CO <sub>2</sub> Respiration	Organic C:N Ratio
101	12.8	96.3	13.7
102	13.4	99.5 ↓	13.0
103	13.3	99.8	14.6
104	15.5	122.3	14.7
105	13.5	100.7	14.3
106	13.1	94.0	12.8

- C:N all in desirable range.
- Room for improvement for soil health score.
- Used a different lab this year, so only comparable result is CO<sub>2</sub> respiration (arrows = change from 2023)
- Soil Health Score: calculated from the rate of microbial respiration and water extractable C & N (Scores range: 0-9 low; 10-29 medium; 30-50 high)
- Soil CO<sub>2</sub> Respiration: respiration rate of soil microorganisms (Scores range: 0-60 low; 61-150 medium; 151-300 high)
- Organic C:N: ratio of organic carbon to organic nitrogen in the soil (Scores range: <8 low; 8-17 desired; 18-30 high)

## What is Next?

Plot	2023	2024	2025
101 (Check)	Corn	Soybean	Corn
102	Corn – interseeded	Soybean – rye	Corn – interseeded
103	Red clover	Corn – rye	Soybean
104 *Low fertility	Red clover	Corn – rye	Soybean
105	Soybean	Winter wheat – Maize Pro	Corn – rye
106 *Low fertility	Soybean	Winter wheat – Maize Pro	Corn – rye

<sup>\*</sup>No plant tissue samples collected in 2024