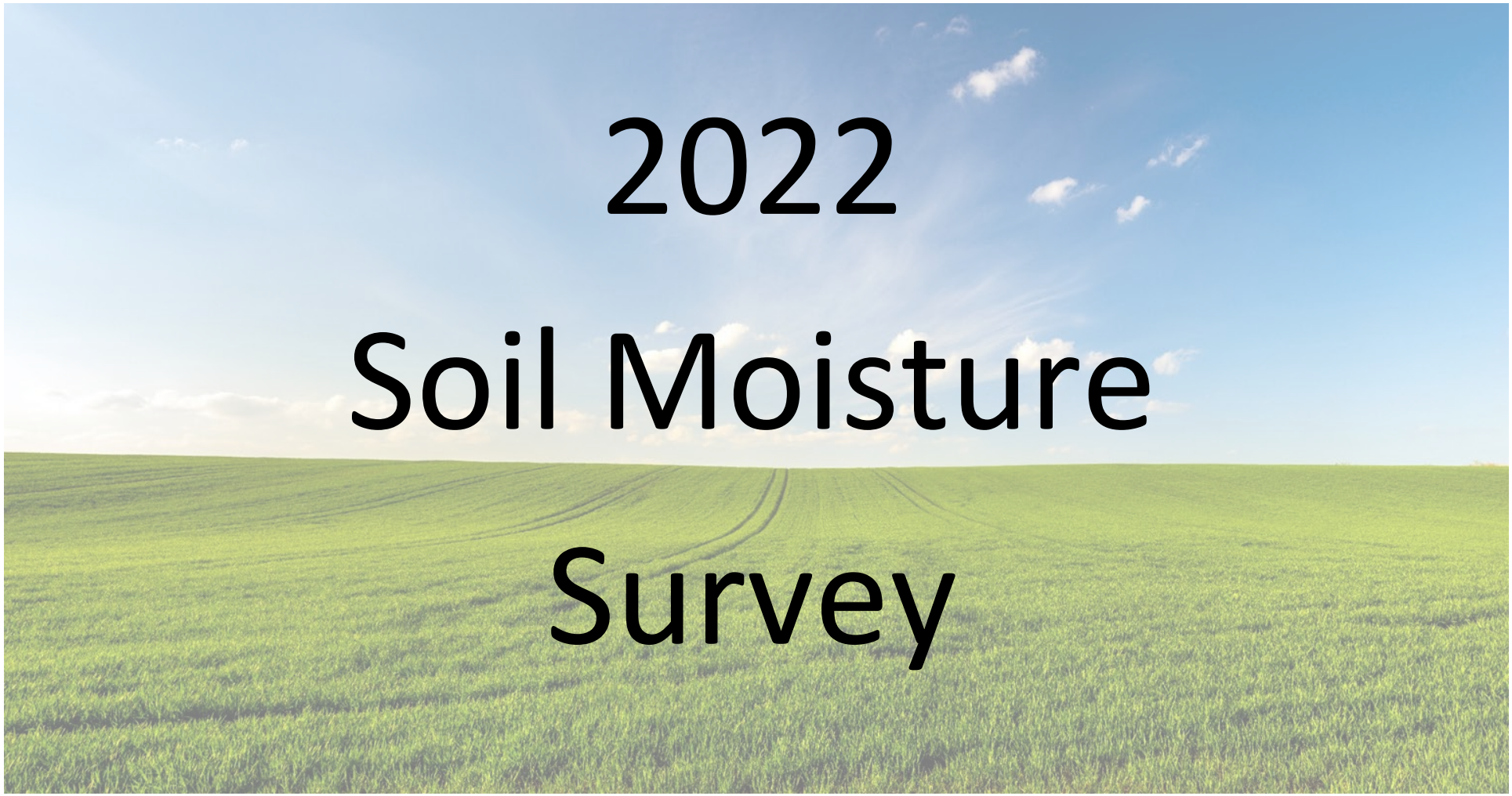
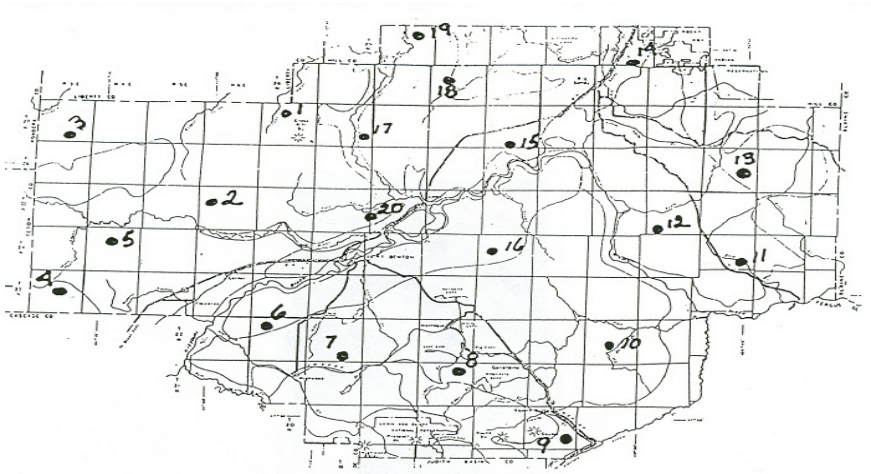

2022
Soil Moisture
Survey

MSU Extension Chouteau County 2022 Soil Moisture Survey

Testing for soil moisture took place from March 30-31. All stubble locations rated in the poor range. Across the entire county, the Paul Brown Probe went from 8-20 inches in the stubble which calculates to less than four inches of moisture in the soil. To get a 25 bushel yield for barley, we would need four inches of precipitation during the growing season. To get a 25 bushel yield for spring wheat, we would need five inches of rain during the growing season.

Sincerely,

Tyler Lane
MSU Extension Chouteau County



DEPTH OF MOISTURE INCHES IN STUBBLE

#	Soil	93	94	95	96	97	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2010	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	AVG
1	Med	42	26	10	32	23	15	13	12	11	12	11	15	23	18	36	8	42	16	19	42	25	41	35	20	28	25	12	**22.67**
2	Modc	14	26	10	32	27	12	10	11	12	4	22	20	19	28	14	12	42	14	17	42	12	34	33	28	26	19	10	**20.37**
3	Modf	42	26	10	40	24	22	9	15	12	12	12	14	31	13	23	24	42	16	20	42	18	42	34	22	42	22	10	**23.67**
4	Modf	24	30	10	26	24	14	16	20	16	18	13	12	26	20	13	12	42	19	24	42	20	42	42	22	42	20	9	**22.89**
5	Modf	24	24	10	24	18	14	12	15	13	4	12	14	24	24	18	12	22	14	16	42	16	23	33	18	30	22	8	**18.74**
6	Modf	18	24	30	28	36	12	19	24	13	12	14	20	24	20	25	12	15	19	42	42	42	42	42	42	42	34	18	**26.33**
7	Modf	30	42	30	24	28	16	18	18	30	11	11	20	20	25	24	14	34	22	35	42	42	42	42	42	42	34	20	**28.07**
8	Modf	20	22	26	38	24	12	26	11	12	12	14	22	34	23	24	10	24	27	38	42	20	42	42	42	42	30	10	**25.52**
9	Modf	16	16	22	36	22	12	12	12	19	12	15	26	18	25	24	10	27	15	42	42	42	42	42	42	34	26	12	**24.56**
10	Modf	24	22	24	32	25	15	12	28	8	9	20	26	34	28	38	24	26	14	20	42	42	42	42	42	34	26	13	**26.37**
11	Modc	20	26	16	30	24	16	15	15	12	10	12	14	26	24	17	5	17	16	16	42	24	42	42	42	27	24	8	**21.56**
12	Modc	30	22	30	32	18	14	23	14	20	18	12	22	16	24	20	3	20	16	28	42	17	42	40	20	34	25	10	**22.67**
13	Modc	20	20	18	34	23	14	22	12	12	7	14	22	20	30	25	3	24	15	15	42	20	42	42	22	20	20	11	**21.07**
14	Modc	21	28	16	32	27	10	25	16	24	10	20	22	18	30	30	6	24	17	37	42	24	42	42	23	34	20	14	**24.22**
15	Modf	42	30	14	34	23	14	18	5	12	7	12	12	18	20	14	4	24	11	20	42	20	38	27	25	25	24	12	**20.26**
16	Med	42	24	30	32	30	32	26	22	12	6	20	36	42	36	38	24	42	19	42	42	42	42	42	42	42	42	13	**31.93**
17	Modc	22	22	22	30	30	12	14	6	11	6	17	22	23	28	24	6	21	13	18	42	18	38	24	20	22	18	11	**20.00**
18	Modf	18	20	22	42	24	10	18	18	16	7	20	42	19	38	24	4	40	13	22	42	42	42	42	26	42	26	10	**25.52**
19	Modf	22	26	12	36	24	6	20	15	18	11	14	26	24	20	12	3	34	13	15	42	24	42	25	30	24	19	12	**21.07**
20	Modc	22	30	18	32	22	29	20	18	14	8	12	18	26	18	25	8	20	16	18	42	10	39	42	29	30	22	14	**22.30**

MSU Extension Chouteau County 2021 Soil Moisture Survey

Testing for soil moisture took place from March 30-31. All winter wheat locations except one (east of Geraldine) rated in the poor to fair range. Excluding the site east of Geraldine, the Paul Brown probe went from 13-24 inches in winter wheat which calculates to less than 5 inches of moisture in the soil. To get a 40 bushel winter wheat yield, we need five inches of rain during the growing season.

Winter wheat yield potential:

Excellent potential: site 10

Fair potential: sites 3-8-9 and 16

Poor potential: sites 1-2-4-5-6-7-11-12-13-14-15-17-18-19 and 20

Poor winter wheat yield potential is less than 3.9 inches of available water.

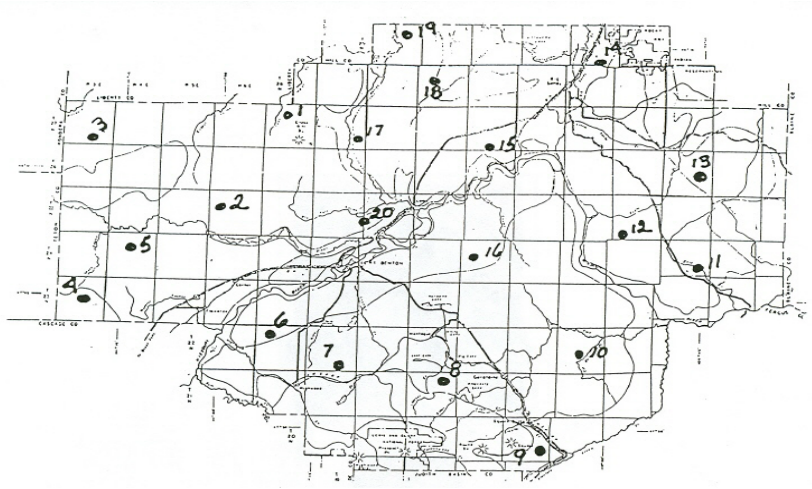
Fair winter wheat yield potential is 4-4.9 inches of available water.

Excellent winter wheat yield potential is greater that 5 inches of available water.

Sincerely,

Tyler Lane

MSU Extension Chouteau County



DEPTH OF MOISTURE INCHES IN FALLOW OR WINTER WHEAT

#	Soil	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08	10	13	14	15	16	17	18	19	20	21	22	Average
1	Med	28	42	24	36	18	20	12	14	16	6	12	20	30	22	34	25	40	26	19	42	42	42	42	42	42	42	24	**28.22**
2	Modc	19	32	8	42	21	16	10	14	10	4	22	22	30	30	30	4	40	44	42	42	22	42	42	42	42	42	21	**27.22**
3	Modf	23	30	20	42	30	12	13	26	14	17	26	34	37	24	36	24	42	20	42	42	42	42	42	42	42	42	23	**30.70**
4	Modf	20	27	20	36	20	26	22	30	18	11	14	24	25	24	34	15	42	26	42	42	20	42	42	42	42	42	18	**28.37**
5	Modf	30	28	16	32	22	15	15	12	12	4	6	20	40	33	22	6	42	30	42	42	26	42	42	42	42	42	13	**26.59**
6	Modf	16	22	24	24	42	16	18	30	10	10	26	24	30	39	26	12	20	42	42	42	42	42	42	42	42	42	22	**29.22**
7	Modf	24	36	30	24	30	19	24	24	24	11	20	25	39	20	34	6	42	42	42	42	42	42	42	42	42	42	20	**30.74**
8	Modf	15	24	26	42	23	26	15	20	14	10	12	22	36	26	24	10	38	42	42	42	25	42	42	42	42	42	24	**28.44**
9	Modf	12	24	30	42	28	28	20	11	24	12	21	32	40	18	42	10	27	42	42	42	42	42	42	42	42	42	26	**30.56**
10	Modf	30	20	22	42	27	24	12	33	16	6	25	20	42	36	26	34	42	42	42	42	42	42	42	42	42	42	40	**32.41**
11	Modf	16	24	14	39	26	31	22	24	20	9	13	16	26	22	24	6	38	42	42	42	42	42	42	42	42	32	18	**28.00**
12	Modf	30	32	28	40	36	23	23	30	18	15	24	12	21	20	14	3	38	42	42	42	42	42	42	42	42	42	13	**29.56**
13	Modc	20	20	16	26	14	35	28	10	15	6	22	24	38	14	28	16	38	42	42	42	42	42	42	42	42	38	24	**28.44**
14	Modc	30	35	24	32	23	26	30	24	17	8	12	16	26	35	26	18	40	42	42	42	42	42	42	42	42	42	25	**30.56**
15	Modf	26	32	26	32	33	18	13	14	6	9	30	14	25	23	20	4	38	42	42	42	30	42	42	42	42	36	22	**27.59**
16	Med	26	36	42	36	33	24	28	26	13	8	12	34	37	36	30	26	42	42	42	42	42	42	42	42	42	42	25	**33.04**
17	Modc	18	24	26	32	24	20	10	18	14	12	30	22	36	24	32	8	42	42	18	42	42	42	42	42	42	38	23	**28.33**
18	Modf	24	30	20	36	30	19	34	22	20	14	25	34	42	30	39	6	42	42	42	42	42	42	42	42	42	40	18	**31.89**
19	Modf	27	24	20	32	26	22	26	11	14	12	17	32	30	24	23	4	42	42	26	42	42	42	42	42	42	42	20	**28.44**
20	Modc	24	26	24	34	26	22	14	24	14	14	23	30	30	20	32	4	38	30	20	42	17	42	42	42	42	42	24	**27.48**