A Historical Look at Milewski Farm Soil Tests

Milewski Farm, Thorp Wisconsin Soil Tests 1967—2020

Compiled and Commented on by Vicki Milewski & Mike Milewski

In our last post *Soil Testing for Cropping Decisions* (By Vicki Milewski & Mike Milewski) we explored how a scientific approach to soil testing could assist in land management decisions like which crops to plant and even when to harvest. Now we turn our attention to a collection of sporadic soil tests that were done over a 50 year time span. There is not much science in how these tests were done but there is quite a bit of information about the soils on our farm and the history of soil testing.

We offer this initial look at the soil tests for field #5 focusing on the idea of Organic Matter and how it is tested in soils. We have more questions than answers and the main question is how were each of these tests administered and how were they calculated to arrive at the numbers placed on each test? We called a couple of labs and found each one did things differently so expect to see more info on this soil testing dilemma but we wanted to share this intial look at Organic Matter results over the years. Enjoy!

Soil Tests
June 29, 2020 Midwest Lab
April 26, 2017 Dairyland Lab
October 30, 2012 Dairyland Lab
November 2008 Soil and Forage Analysis Lab http://uwlab.soils.wisc.edu/reports lab # 5464
May 16, 2005 Soil and Forage Analysis Lab
Dec 10, 2004 Midwest Lab

Base test 8/16/1967

Milewski Farm Field 5

2020

						NEUT	RAL AMMONIUM ACE	TATE (EXCHANGEAB	LE)			IN	FO SHEET:	52832			
LAB SAMPLE IDENTIFICATION *362*	SAMPLE	ORGANIC	PHOSPHORUS			POTASSIUM	MAGNESIUM	CALCIUM	SODIUM	p	рН		PERCENT	BASE SATURATION (COMPUTED)			
	MATTER L.O. I. percent RATE	P ₁ (WEAK BRAY) 1:7 ppm RATE	P ₂ (STRONG BRAY) 1:7 ppm RATE	OLSEN BICARBONATE P ppm RATE	Manage Sh	Mg ppm RATE	Ca ppm RATE	Na ppm RATE	SOIL pH 1:1	BUFFER INDEX	CAPACITY C.E.C. meq/100g	% K	% Mg	% Ca	% H	% Na	
96473	M2-13.2A-5	3.0 M	15 м	21 м		128 м	220 vH	1982 н	28	6.6	6.9	13.0	2.5	14.1	76.2	6.3	0.9

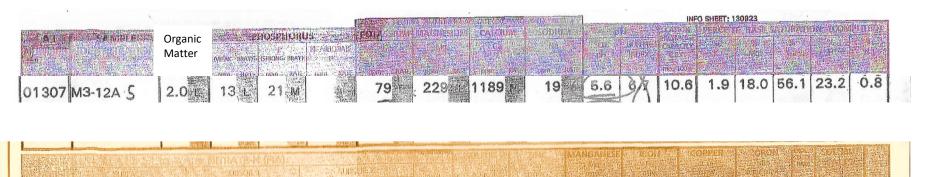
	ox 159 I, WI 5444	6				THORP,	WI 54771				Soil Nam Plow De Irrigated Tiled:	pth:	Loyal 6.0 N N		
						Lab	orator	y Anal	ysis				100		
Sample No.	Text Code	Est CEC	Soil pH	O.M. %	P ppm	K ppm	Ca ppm	Mg ppm	B ppm	Mn ppm	Zn ppm	SO4-S ppm	Density	Buffer pH	60-69 Lime
19	2	15	7.0	2.9	18	84	1720	230					0.82	N.R.	0.0
20	2	12	7.0	3.0	16	79	1280	130	300				0.74	N.R.	0.0
21	2	13	7.1	3.1	15	95	1310	120	0.4	14	2.3	10.0	0.68	N.R.	0.0
Adj. A	Avg:	13	7.0	3.0	16	86	1437	160	0.4	14	2.3	10.0			100

		35.8	_			IELD 12		ACE 13		SLOPE %	LOYA		r subso	il group)	PLOW 7	DEPTH 0
		553					LAI	BORATOR	Y ANALY	rsis			á			
Sample	Text	Est CEC	Soil pH	0.M. %	ppm	K	Ca ppm	Mg ppm	P P	Mn ppm	Zn ppm	SO4-S ppm	SAI	Density	Buffer pH	60-69 Lime
47 48 49	2 2 2 2	13	7.3 7.3 7.1	3.1 3.1 3.2	21 20 18	84 91 109	1700	170	0.6	20	3.6	7.5	49	0.92 0.92 0.92	N.R. N.R. N.R.	0.0
Adj i	Avg:	13	7.2	3.2	19	95	1700	170	0.6	20	3.6	7.5	49	0.92	7.2	

Sample Identification	Soil pH	O.M %	Phosphorus ppm	Potassium ppm	60-69 Lime Reg (T/a)	Calcium	LABORA Magnesium	Estimated CEC	Boron ppm	Manganese	Zinc	Sulfate-Sulfur	Sulfur Avail.	Texture	Sample	Buffe
47	6.9	3.0	27	81	0	2300				ppm	ppm	ppm	Index	Code	Density	pH
48	7.1	3.2	32	84	0	2300	290	13	1.1	16	3.8	14.2	75	2	0.91	N.R
Susted irages	7.0	3.1	30	83		2300	290	13	1.1	16	3.8	14.2	75	2	0.92	N.R
reges	7.0	3.1	30	83	SECO				15000	16 MMENDATI	3.8	14.2	75			
-1	e				OLCO			MULKIEN	I HECO	MMENDATI	IONS		100	- TOTAL	1000000	(contract
interpretat	ions		>			Ca-H	Mg-OPT		B-OPT	Mn-OPT	Zn.ODT	-	SAI-H			0.0000

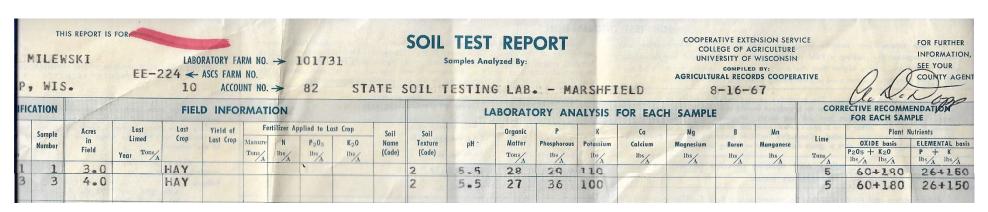
			letter and a		LABORATORY ANALYSIS										LAB USE			
Sample Identification	Soil pH	O.M. %	Phosphorus pam	Potassium ppm	Calcium ppm	Magnesium ppm	Estimated CEC	Baron ppm	Manganese ppm	Zinc ppm	Sulfate-Sulfur ppm	Sulfur Avail. Index	Texture Code	Sample Density	Buffer Code			
7 B	6.4	2.8	22	55 46			1						2 2	0.92 0.93	6.8			
ed Avg.	6.4	2.7	(21)	51		<u> </u>												

2004



1967

01307



1967 Organic Matter 56,000 lbs per acre About 3% OM