

(1) Section 1 of 22 (1a - Cropping System Guide) i.e., to manage Carbon-Nitrogen Inputs & Ratios, in order to Increase Active Pool of Soil Humus & Crop Yield/Quality															
(2) Producer:		Field #:			Acres:			Crop:			Variety:			Yield:	
Soil Texture:		Soil Structure:			Soil Drainage (Rapid, Moderate & Slow):						Soil Intake Family:				
Irrigation System:				GPM or CFS:			Water Source:			Water Quality (ECiw & SAR):					
Water Availability (on demand, fixed schedule, pumped, etc):								Row Spacing (in.):				Year:			
Data-Set	UNITS	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	NOTE:	
(3) Precipitation	In.													Total inches:	
(4) Mean High & Low Temperature	(⁰ F)	H:	H:	H:	H:	H:	H:	H:	H:	H:	H:	H:	H:	Total	
		L:	L:	L:	L:	L:	L:	L:	L:	L:	L:	L:	L:	GDD:	
(5) Crop Rotations	1 st yr.													Yield (tons/ac/yr) Harvested	
Major Crop	Cover Crop	2 nd yr.													
		3 rd yr.													
		4 th yr.													
(6) Major Crop ETc (water supply)	in.													Total inches:	
(7) Soil moisture monitoring	cb													0 – 6" depth	
(8) Scheduled Irrigations	in./ac.													Total inches:	
(9) Nitrogen Inputs: Manure, Fert. etc.:	lb./ac.													Total lb. N/ac.:	
(10) Surface Residues & Grazing	%													Residue Mgmt.	
	lb./ac														
(11) Tillage Operations	Type & Depth													Decomposition	
(12) Soil Temperature (0 – 4" depth)	(⁰ F)	B:	B:	B:	B:	B:	B:	B:	B:	B:	B:	B:	B:	Biological Effects	
		A:	A:	A:	A:	A:	A:	A:	A:	A:	A:	A:	A:		
(13) Soil Nitrate Tests (0 -6" depth)	ppm or mg/kg	B:	B:	B:	B:	B:	B:	B:	B:	B:	B:	B:	B:	N Mineralization	
		A:	A:	A:	A:	A:	A:	A:	A:	A:	A:	A:	A:		
(14) IPM (Insects, Disease, Weeds)	Inputs, mgmt.													Soil Biology	
(15) Field Problems: Soil crusts, salinity pH, ponding, etc.	Observations													Use Soil Quality Test Kit	
(16) Soil Test (0 – 6" depth): (Date :), (OM%:), (Nitrate-N ppm:), (pH:), (ECe mmhos/cm:), (SAR:), (P & K ppm:)															
(17) Active Carbon Test at 0 -4" depth: (mg/kg) & Aggregate Stability Test: (% Water Stable Aggregates). Test at beginning & end of growing season.															
(18) Soil Health Assessment: Fungal:Bacterial ratios & Active & Total amt's, Beneficial Nematode count, Protozoa count (flagellates, amoeba and ciliates), etc.															
(19) Explanation of sections: e.g., B = Before Tillage & A = After Tillage (i.e., this assumes soil temperature immediately before a tillage operation and soil temperature several days after a tillage operation when top few inches of soil is air-dry. In addition, this assumes soil nitrate levels immediately before a tillage operation and soil nitrate levels about two-weeks after a tillage operation to account for N mineralization (nitrification); These measurements can be done at least 3-times per year. rudy.garcia.2009															
 Sect. (20): Case Studies; Section (21): Irrigation Sys.; Sect. (22): Energy, other. Agronomy Tech Note 76 (http://www.nm.nrcs.usda.gov/technical/handbooks/lwm/nmiwm.html)															