

2018 Agronomic Calendar for WICST (440)

ARLINGTON RESEARCH STATION

Corn rotations					
CROP-2018 Rotation Treatment #	CORN CS1 T1	CORN CS2 T2	CORN CS3 T4	CORN CS4 T8	CORN CS5 T13
Plot #'s	109, 204, 306, 412	108, 206, 310, 408	104, 201, 301, 402	113, 210, 311, 414	114, 211, 312, 403
Primary Tillage	Disk-chisel: 8" 11/17/2017	Strip-tilled (Blu-jet) 6" 11/29/2017	Disk-chisel: 8" 11/17/2017	Sunflower Disk-chisel: 11/3/2017	Sunflower Disk-chisel: 11/3/2017
Secondary Tillage	Field cultiv. (1x) Sunflower 4/27/2018 (1x) Case 5/1/2018 (1x) Sunflower 5/7/2018	None	Quack digger (3-4") (JD 980) (1x) 5/16/18 Field cultiv. (Case) (1x) 5/23/2018	Field cultiv. (1x) Sunflower 4/27/2018 (1x) Sunflower 5/7/2018	Sunflower Disk-chisel 5/16/2018 Field cultiv. (Case) (1x) 5/23/2018
Spring Practices	PPNT: not taken 2018	PPNT: not taken 2018			
Planting Date Variety Rate	5/7/2018 Jung 53SS517RIB, 103d 34,000 seeds/a	5/7/2018 Jung 53SS517RIB, 103d 34,000 seeds/a	5/24/2018 Blue River 38G54 38,000 seeds/ac	5/7/2018 Jung 53SS517RIB, 103d 34,000 seeds/a	5/24/2018 Blue River 38G54 38,000 seeds/ac
Starter Fertilizer	5/7/2018 100 lb/ac 5-14-42	5/7/2018 100 lb/ac 5-14-42	None	5/7/2018 100 lb/ac 5-14-42	None
Nitrogen Fertilizer	6/4/2018 All plots: 160 lbs N/ac 32% UAN	6/4/2018 Rep 1: 79 lbs N/ac Reps 2-4: 115 lbs/ac 32% UAN	None	None	None
Fertilizer	None	18-46-0: 4/24/2018 108: 198 lbs DAP/ac	None	None	
Manure	None	None	CPM (4-3-2): 4/26/2018 all plots: 1.55 ton/ac	Manure: 10/19/2017 7,000 gpa (Blaine Dairy)	Manure: 10/19/2017 7,000 gpa (Blaine Dairy)
Pesticides/ Herbicides (TBD by weed community)	Post-emrg: 5/29/2018 Tomahawk 5 (28oz/ac) Laudis (3 oz/ac) Medal II EC (20oz/ac)	Pre-emrg: 5/16/2018 Tomahawk 5 (32 oz/ac) Explorer (3 oz/ac) Medal II EC (24 oz/ac) Post-emrg: 6/12/2018 Tomahawk 5 (32 oz/ac) + AMS (3 lbs/ac)	None	Post-emrg: 5/29/2018 Tomahawk 5 (28oz/ac) Laudis (3 oz/ac) Medal II EC (20oz/ac)	None
Rotary Hoe	None	None	Rotary Hoe: 5/29/2018 6/1/2018 6/4/2018	None	Rotary Hoe: 5/29/2018 6/1/2018 6/4/2018
Cultivation	None	None	'Wilrich' 6/7/2018 'Wilrich' 6/13/2018 'Wilrich' 6/18/2018 'Yetter' 6/25/2018	None	'Wilrich' 6/7/2018 'Wilrich' 6/13/2018 'Wilrich' 6/18/2018 'Yetter' 6/25/2018
Harvest	10/15/2018 215 bu/a	10/15/2018 228 bu/a	10/15/2018 152 bu/a	9/14/2018 Corn Silage 11.36 t DM/a 10/15/2018 Grain 240 bu/a	9/14/2018 Corn Silage 6.08 t DM/a 10/15/2018 Grain 122 bu/a
Fall Practices	Balser stalk-chopper: 10/16/18 Disk-chisel: 8" 10/26/2018 RF: 10/24/2018	RF: 10/24/2018	Balser stalk-chopper: 10/16/18 Disk-chisel: 8" 10/26/2018 RF: 10/24/2018	Balser stalk-chopper: 10/16/18 Manure: 11/19/2018 11,000 gpa injected (Blaine Dairy) Disk-chisel: 8" 10/26/2018 RF: 10/17/2018	Balser stalk-chopper: 10/16/18 Manure: 11/19/2018 11,000 gpa injected (Blaine Dairy) Disk-chisel: 8" 10/26/2018 RF: 10/17/2018
Crop 2019	Corn	Soybean	Soybean	D.S. Alfalfa	Oats/Alfalfa

Soybean and Wheat Rotations			
CROP-2018 Rotation Treatment #	7.5", NT Soybean CS2 T3	30" Soybean/Wheat CS3 T6	Wheat/Berseem Clover – oats cover crop CS3 T5
Plot #'s	101, 214, 303, 401	102, 212, 313, 407	106, 202, 307, 411
Primary Tillage	None	Disk-chisel: 8" 11/17/2017	Chisel Plow: 9/29/2017
Secondary Tillage	None	Quack digger (3-4") (JD 980) (1x) 5/16/18 Field cultiv.: (1x) 5/23/2018	Field Cultiv.: (1x) 9/29/2017
Planting Date	5/7/2018	Sb: 5/24/2018 WW: 10/18/2018	WW: 9/29/2017 CC: 8/14/2018
Variety Rate	Asgrow AG21X8 RR2X, 2.1 maturity Celltech inoculant 225,000 seeds/a	Sb: Blue River 13P8 190,000 seeds/a WW: Albert Lea LCS 3334 @ 2.2M seeds/ac	WW: Albert Lea Emerson 1.75M seeds/ac CC: Welter "Frosty" Berseem Clover 15lbs/ac Albert Lea Everleaf 126 Oats 65lbs/ac
Fertilizer	0-46-0: 4/27/2018 101, 303: 109 lbs TSP/ac 214: 54 lbs TSP/ac 401: 174 lbs TSP/ac 0-0-60: 4/27/2018 101: 192 lb KCl/ac 214, 303, 401: 142 lb KCl/ac (*401 has accidental double pass down middle)	0-0-50 K sulfate: 4/27/2018 102: 230 lbs/ac 212, 313: 170 lbs/ac 407: 90 lbs/ac	CPM 4/26/2018: all plots: 0.66 ton/ac 0-0-50 K sulfate: 4/27/2018 106, 202: 90 lbs/ac
Pesticides/ Herbicides	Pre-emrg: 5/10/2018 Authority First (sulfentrazone) 4 oz/ac Medal II EC (s-metolachlor) 24 oz/ac Post-harvest dandelion burndown: 11/3/2018 Low Vol 4 (2,4-D) 16 oz/ac FS Transform Plus 8 oz/ac	None	None
Rotary Hoe/ Tine Weed		Rotary Hoe: 5/29/2018 6/1/2018 6/8/2018	None
Cultivation		'Wilrich' 6/13/2018 'Wilrich' 6/18/2018 'Yetter' 6/29/2018	None
Harvest	10/17/2018 65 bu/a	10/17/2018 64 bu/a	Wheatlage cut (plot 307): 7/2/2018 Wheatlage baled (plot 307): 7/3/2018 Wheatlage (plot 307): 2.5 t DM/ac Wheat: 7/25/2018, 64 bu/ac Straw: 7/30/2018, 1.35 tons/ac
Fall Practices	RF: 10/24/2018 Strip till: 6" deep 10/25/2018	Field Cultiv: 10/17/2018 Field Cultiv: 10/18/2018 Plant Wheat: 10/18/2018 RF: 10/17/2018	Chisel Plow: 7/30/2018 Quack Digger: 8/8/2018 Field Cultivation: 8/13/2018 Cultipack: 8/14/2018 Plant berseem/oats: 8/14/2018 Undercutting: 10/11/18 RF: 10/24/2018 Chisel Plow: 10/26/2018
Crop 2019	Corn	Wheat / Clover	Corn

Forage rotations						
CROP-2018 Rotation Treatment #	D.S. Alfalfa CS4 T7	Alfalfa I CS4 T10	Alfalfa II CS4 T9	Oats/Alfalfa CS5 T12	Alfalfa I CS5 T11	Pasture CS6 T14
Plot #'s	111, 209, 305, 409	107, 205, 309, 404	105, 203, 308, 406	103, 213, 314, 410	110, 208, 304, 413	112, 207, 302, 405
Primary Tillage	Disk-chisel: 8" 11/17/2017	None	None	Disk-chisel: 8" 11/17/2017	None	Heifers on: 5/8/2018 8930: 604 lbs 8962: 543 lbs 8933: 656 lbs 8937: 606 lbs 8936: 643 lbs 8943: 616 lbs Heifers fly tag weigh in: 6/8/2018 8930: 646 lbs 8962: 566 lbs 8933: 690 lbs 8937: 638 lbs 8936: 628 lbs 8943: 648 lbs Heifers off: 10/9/18 8930: 850 lbs 8962: 794 lbs 8933: 903 lbs 8937: 886 lbs 8936: 852 lbs 8943: 901 lbs AVG Daily Gain: 1.71 lbs
Secondary Tillage	Sunflower field cultivator (2x) 4/27/2018 Case 200 field cultivator (1x) 4/30/2018	None	None	Sunflower field cultivator (2x) 4/27/2018	None	
Planting Date Variety	4/30/2018 Dekalb DKA40-21HVXRR Roundup Ready, HarvXtra alfalfa	4/19/2017 DS Hybriforce 3430 Lot# 17009ANG AMS-5061	4/15/2016 DS Hybridforce 3400 replant: 5/23/2016 DS Hybridforce 3400	4/28/2018 Blue River Blue Jay 4HR alfalfa 4/27/2018 Albert Lee Everleaf 126 oats	4/25/2017 Blue River Blue Jay 4HR alfalfa Welter Seed 'Deon' oats	None
Rate	16.2 lbs/ac	15 lbs/ac	12 lb PLS/a replant: 18 lb PLS/a	Alf: 18 lbs/ac Oats: 45 lb/ac	Alf ~22 lbs/a Oats: ~35 lb/a	None
Fertilizer	0-0-60: 4/27/2018 305, 409: 45 lbs KCl/ac	0-46-0: 4/27/2018 107: 174 lbs TSP/ac 404: 84 lbs TSP/ac 0-0-60: 6/1/2018 107, 309, 404: 300 lbs/ac 205: 150 lbs/ac 0-0-60: 8/1/2018 309: 300 lbs/ac	0-0-60: 6/1/2018 105, 203, 406: 250 lbs/ac 308: 125 lbs/ac 0-0-60: 8/1/2018 105, 203: 250 lbs/ac		0-0-50: 6/1/2018 All plots: 300 lbs/ac 0-0-50: 8/1/2018 All plots: 300 lb/ac	18-46-0: 4/24/2018 112: 65lbs DAP/ac
Manure	11/14/2017 14,000 gpa (Blaine Dairy)	None	None	11/14/2017 14,000 gpa (Blaine Dairy)	None	Grazing 6 heifers
Pesticides/ Herbicides (Per scout report)	Post-emrg: 6/1/2018 Tomahawk 5 (32 oz/ac) + AMS 2.5 lbs/ac PLH spray: 7/13/2018 Warrior II	PLH spray: 7/13/2018 Warrior II	PLH spray: 7/13/2018 Warrior II Burndown: 10/9/2018 Tomahawk 5 (32 oz/ac) Shredder (10 oz/ac)	None	None	
Harvest	Cut: 1 st : 6/29/2018 2 nd : 7/30/2018 3 rd : 9/8/2018 Chopped: 1 st : 6/30/2018 2 nd : 7/31/2018 3 rd : 9/9/2018 2.54 t DM/a	Cut: 1 st : 5/28/2018 2 nd : 6/29/2018 3 rd : 7/30/2018 4 th : 9/8/2018 Chopped: 1 st : 5/29/2018 2 nd : 6/30/2018 3 rd : 7/31/2018 4 th : 9/9/2018 5.46 t DM/a	Cut: 1 st : 5/28/2018 2 nd : 6/29/2018 3 rd : 7/30/2018 4 th : 9/8/2018 Chopped: 1 st : 5/29/2018 2 nd : 6/30/2018 3 rd : 7/31/2018 4 th : 9/9/2018 5.15 t DM/a	Cut: 1 st : 7/2/2018 2 nd : 8/8/2018 3 rd : 9/8/2018 Chopped/Baled: 1 st : 7/3/2018 2 nd : 8/9/2018 3 rd : 9/9/2018 3.51 t DM/a	Cut: 1 st : 5/28/2018 2 nd : 6/29/2018 3 rd : 7/30/2018 4 th : 9/8/2018 Chopped: 1 st : 5/29/2018 2 nd : 6/30/2018 3 rd : 7/31/2018 4 th : 9/9/2018 5.29 t DM/a	Exclosure harvest: all plots: 6/1/2018 all plots: 6/28/2018 all plots: 8/2/2018 all plots: 9/13/2018 3.68 t DM/a
Fall Practices	RF: 10/24/2018	RF: 10/24/2018	Manure: 10/18/2018 7,000 gpa injected (Blaine Dairy) Undercutting: 10/9/2018 RF: 10/17/2018 Disk-chisel: 8" 10/26/2018	RF: 10/24/2018	Manure: 10/18/2018 7,000 gpa injected (Blaine Dairy) Undercutting: 10/9/2018 RF: 10/17/2018 Disk-chisel: 8" 10/26/2018	RF: 10/24/2018
Crop 2019	Alf I	Alf II	Corn	Alf I	Corn	Pasture

NATIVE PLOTS			
Treatments Switchgrass (sg): 501, 504, 508 High diversity prairie (hdp): 502, 506, 509 Low diversity prairie (ldp): 503, 505, 507			
Forage management	Grazing	Control	Biofuel Research
Area of Plots	fenced North	unfenced middle	unfenced south
Prescribed Burn	5/7/2018	5/7/2018	Never
Fertilizer	None other than manure from grazing heifers	None	ESN: 6/7/2018 sg & ldp: 50 lb N/a on main plot hdp: 50 lb N/a on micro plot
Pesticides (as needed)	None	None	
Grazing or Harvest	Block 1 (501, 502, 503): 7/1/2018-7/7/2018 Block 2 (504, 505, 506): 7/12/2018-7/17/2018 Block 3 (507, 508, 509): 7/7/2018-7/12/2018	None	Harvest: 10/30/2018
Other Practices	None	RF: 10/24/2018	None