

2020 Agronomic Calendar for WICST (440)

ARLINGTON RESEARCH STATION

Corn rotations					
CROP-2020 Rotation Treatment #	CORN CS1 T1	CORN CS2 T2	CORN CS3 T6	CORN CS4 T10	CORN CS5 T12
Plot #'s	109, 204, 306, 412	108, 206, 310, 408	102, 212, 313, 407	107, 205, 309, 404	103, 213, 314, 410
Primary Tillage	Disk-chisel (2x): 11/26/2019	Strip till: 11/25/2019	Disk-chisel (2") 11/26/2019	Disk-chisel: (2") 11/26/2019	Disk-chisel (2") 11/26/2019
Secondary Tillage	Field cultiv (2x): 4/25/2020	None	Field cultiv (1x): 5/13/2020 Field cultiv (sunflower) 1x :5/22/2020 Field cultiv (sunflower) 1x: 5/26/2020	Field cultiv (2x): 4/25/2020	Field cultiv (1x): 5/2/2020 Field cultiv (1x): 5/13/2020 Field cultiv (sunflower) 1x :5/22/2020 Field cultiv (sunflower) 1x: 5/26/2020
Planting Date Variety Rate	4/25/2020 Jung 53SS517RIB 36,300 seeds/ac	4/25/2020 Jung 53SS517RIB 36,300 seeds/ac	5/26/2020 Albert Lea Viking 0.84-95 UP 38,100 seeds/ac	4/25/2020 Jung 53SS517RIB 36,300 seeds/ac	5/26/2020 Albert Lea Viking 0.84-95 UP 38,100 seeds/ac
Starter Fertilizer	5/1/2020: 5-14-42 all plots 100lbs/ac	5/1/2020: 5-14-42 all plots 100lbs/ac	None	5/1/2020: 5-14-42 all plots 100lbs/ac	None
Nitrogen Fertilizer	6/9/2020: 160 lbs N/ac as 32% UAN	6/9/2020: 115 lbs N/ac 32% UAN	None	None	None
Fertilizer	4/7/2020: TSP 0-46-0 412: 140 lbs/ac 4/7/2020: KCL 0-0-60 412: 40 lbs/ac	4/7/2020: TSP 0-46-0 108: 140 lbs/ac 408: 60 lbs/ac 4/7/2020: KCL 0-0-60 108, 310, 408: 40 lbs/ac	None	None	None
Manure	None	None	4/15/2020: CPM all plots 1.5 ton/ac	11/15/2019 7,000 gpa injected (Blaine Dairy)	11/15/2019 7,000 gpa injected (Blaine Dairy)
Pesticides/ Herbicides (TBD by weed community)	5/30/2020: 1 oz Armezon/ac, 26 oz Crop oil/ac, 2 lbs AMS/ac, 7 oz fs transform plus/ac 6/3/2020: 32 oz Roundup power max/ac, 2 lbs AMS, AC, 20 oz LI 700/ac 6/19/2020: 32 oz Roundup power max/ac, 1.33 pts Dual 2 magnum/ac, 2 lbs AMS/ac, 20 oz FS transform plus/ac	5/30/2020: 1 oz Armezon/ac, 26 oz Crop oil/ac, 2 lbs AMS/ac, 7 oz fs transform plus/ac 6/3/2020: 32 oz Roundup power max/ac, 2 lbs AMS, AC, 20 oz LI 700/ac 6/19/2020: 32 oz Roundup power max/ac, 1.33 pts Dual 2 magnum/ac, 2 lbs AMS/ac, 20 oz FS transform plus/ac	None	4/24/2020 Plot 205: Roundup power max 32 oz/ac, AMS 2.5 oz/ac, Dual 2 Magnum 24 oz/ac 5/30/2020: 1 oz Armezon/ac, 26 oz Crop oil/ac, 2 lbs AMS/ac, 7 oz fs transform plus/ac 6/3/2020: 32 oz Roundup power max/ac, 2 lbs AMS/ac, 20 oz LI 700/ac 6/19/2020: 32 oz Roundup power max/ac, 1.33 pts Dual 2 magnum/ac, 2 lbs AMS/ac, 20 oz FS transform plus/ac	None
Rotary Hoe	None	None	Tine Weed: 5/30/2020 5/31/2020 Rotary Hoe: 6/4/2020 (2x) 6/5/2020 (1x) 6/7/2020 (1x)	None	Tine Weed: 5/30/2020 5/31/2020 Rotary Hoe: 6/4/2020 (2x) 6/5/2020 (1x) 6/7/2020 (1x)
Cultivation	None	None	Row cultivation: 6/12/2020 6/17/2020 6/25/2020 Ridge till with yetter: 7/1/2020	None	Row cultivation: 6/12/2020 6/17/2020 6/25/2020 Ridge till with yetter: 7/1/2020
Harvest	10/19/2020 200 bu/a	10/19/2020 230 bu/a	10/19/2020 164 bu/a	9/1/2020 Corn Silage 9.8 t DM/a 10/19/2020 Corn Grain 234 bu/a	9/15/2020 Corn Silage 8.6 t DM/a 10/19/2020 Corn Grain 222 bu/a
Fall Practices	10/20/2020: Stalk-chopper 11/10/2020: disc chisel (2x)	None	10/20/2020: Stalk-chopper 11/10/2020: disc chisel (2x)	10/20/2020: Stalk-chopper 11/4/2020: Manure 11,000 gpa (Blaine Dairy) 11/10/2020: disc chisel (2x)	10/20/2020: Stalk-chopper 11/4/2020: Manure 11,000 gpa (Blaine Dairy) 11/10/2020: disc chisel (2x)
Crop 2021	Corn	Soybean	Soybean	D.S. Alfalfa	Oats/Alfalfa

Soybean and Wheat Rotations			
CROP-2020 Rotation Treatment #	15", NT Soybean CS2 T3	30" Soybean/Wheat CS3 T5	Wheat/Berseem Clover – oats cover crop CS3 T4
Plot #'s	101, 214, 303, 401	106, 202, 307, 411	104, 201, 301, 402
Primary Tillage	None	11/26/2019: Disk-chisel: 2"	10/9/2019: Field cultiv 10/18/2019: Field cultiv (201)
Secondary Tillage	None	4/26/2020: 202: chisel plow, deep ripping 5/13/2020: Field cultiv (1x): 5/22/2020: Field cultiv (1x) 5/26/2020: Field cultiv (1x)	4/26/2020: 201 (188ft on North end): chisel plow, deep ripping: 5/5/2020: Field cultiv (1x) Plot 201 (188ft on north end), 8/4/2020: Cultivator(1x), plot 201(2x) 8/4/2020:Cultipacker(1x)
Planting Date	Sb: 4/25/2020	Sb: 5/26/2020 WW: 10/7/2020	10/10/2019: Drilled wheat (104, 301, 402) 10/18/2019: Drilled wheat (201) 5/5/2020: plot 201 (Wheat filler, North end) 8/4/2020: Classic laker oats and berseem clover
Variety Rate	SB: Jung 1203R2X 160,000 seeds/ac	Sb: Blue River 07DC8 209,520 seeds/ac WW:Albert Lea LCS3334 Drilled in 2 million seeds/ac	Drilled Wheat: 185 lbs/ac Plot 201 (North end): Drilled in 177 lbs/acre Organic LCS3334 SRW Wheat Albert Lea Seed Laker oats: 65 lbs/ac Berseem clover: 15 lbs/ac
Fertilizer	4/7/2020: TSP 0-46-0 101: 175 lbs/ac 214: 60 lbs/ac 303: 60 lbs/ac 401: 100 lbs/ac KCL 0-0-60: 4/7/2020 101, 303, 401: 140 lbs/ac 214: 60 lbs/ac	4/10/2020: K2SO4 0-0-50 106, 411: 220lbs/ac 202: 90 lbs/ac (only 320ft of south end 202, north end was wet)	4/10/2020: K2SO4 0-0-50 104: 160 lbs/ac, 201: 90 lbs/ac only on 320ft of south end 4/15/2020: CPM all plots: 0.75 tons/ac
Pesticides/ Herbicides	5/6/2020: Roundup power max 32oz/ac, AMS 2 lbs/ac, fs transform plus 20 oz/ac 6/3/2020: 32 oz Roundup power max/ac, 2 lbs AMS, AC, 20 oz LI 700/ac 6/19/2020: 2 oz Roundup power max/ac, 1.33 pts Dual 2 magnum/ac, 2 lbs AMS/ac, 20 oz FS transform plus/ac	None	None
Rotary Hoe/ Tine Weed	None	Tine Weed: 5/30/2020 Rotary Hoe: 6/4/2020 (1x) 6/5/2020 (2x) 6/7/2020 (1x) 6/8/2020 (1x) 6/13/2020 (1x)	None
Cultivation	None	'JD' 6/12/2020 'JD' 6/17/2020 'JD' 6/25/2020 'JD' 7/1/2020 'Yetter' 7/6/2020	7/31/2020: chisel 7/31/2020: disc
Harvest	10/6/2020 77 bu/a	10/6/2020 62 bu/a	7/20/2020: Combining small grains 7/22/2020: Haybine 7/23/2020: Tedding(1x) 7/24/2020: Raking 7/24/2020: Baled small squares, plot 201 = 920lbs, 301 = 640lbs, 402 = 480lbs, 104 = 620lbs Wheat grain: 7/20/20 59 bu/ac Wheat straw: 7/24/2020 1.9 ton/ac
Fall Practices	10/7/2020: Strip tillage	10/7/2020: Field cultiv (2x)	11/10/2020: Disc (2x)
Crop 2021	Corn	Wheat/Clover	Corn

Forage rotations						
CROP-2020 Rotation Treatment #	D.S. Alfalfa CS4 T9	Alfalfa I CS4 T8	Alfalfa II CS4 T7	Oats/Alfalfa CS5 T11	Alfalfa I CS5 T13	Pasture CS6 T14
Plot #'s	105, 203, 308, 406	113, 210, 311, 414	111, 209, 305, 409	110, 208, 304, 413	114, 211, 312, 403	112, 207, 302, 405
Primary Tillage	Sunflower Disk-chisel: 5" 12/5/2019 (203 could not do north end)	None	None	Sunflower Disk-chisel: 5" 12/5/2019	None	
Secondary Tillage	4/17/2020: Field cultiv (1x) 4/19/2020 Field cultiv (1x) 4/20/2020: cultipack (brillion)	None	None	4/17/2020: Field cultiv (1x) 4/19/2020: Field cultiv (1x) 4/20/2020: Field cultipack (brillion)	None	None
Planting Date Variety	4/20/2020: Alfalfa Dekalb DKA40- 21HVXRR	4/25/2019: Dekalb DKA40-21HVXRR Roundup Ready, HarvXtra alfalfa	4/30/2018 Dekalb DKA40-21HVXRR Roundup Ready, HarvXtra alfalfa	4/20/2020: Blue river Bluebird alfalfa, Laker Oats	4/25/2019: Blue River Blue Jay 4HR alfalfa 4/25/2019: Albert Lea Hayden Oats	3/26/2019 Lacrosse Seed Forage First 9615 medium red clover 5/7/2019 Lacrosse Seed Forage First "Endo-Graze XL" tetraploid perennial ryegrass
Rate	16 lbs/ac	16.4 lbs/ac	16.2 lbs/ac	Alfalfa: 18 lbs/ac Oats: 45 lbs/ac	Alfalfa: 20 lbs/ac Oats: 44 lb/ac	Red clover: Reps 2 and 4: ~8 lbs/ac Reps 1 and 3: ~19 lbs/ac (Gandy spreader error) Ryegrass: hand broadcast on bare ground in all pastures
Fertilizer	4/7/2020: KCL 0-0-60 all plots: 40 lbs/ac	6/4/2020: KCL 0-0-60 Plot 113, 311, 414 - 250 lbs/ac 6/4/2020: SuperCal 0-0- 0-17s Plot: 113, 311, 414 - 75 lbs/ac 7/2/2020: KCL 0-0-60: Plot 113: 325 lbs/ac	6/4/2020: KCL 0-0-60 All plots - 250 lbs/ac 6/4/2020: SuperCal 0-0- 0-17s All plots - 75 lbs/ac 7/2/2020: KCL 0-0-60: Plot 305 - 250 lbs/ac	None	6/5/2020: K2SO4 0-0-50 Plots 114, 211, 312: 110 lbs/ac 7/2/2020: K2SO4 0-0-50 Plots 114, 211, 312: 110 lbs/ac	6/4/2020: KCL 0-0-60 All plots - 250 lbs/ac 6/4/2020: SuperCal 0-0- 0-17s All plots - 75 lbs/ac
Manure	11/19/2019: 308, 406 11/20/2019: 105, 203 11,000 gpa injected (Blaine Dairy)	None	None	11/20/2019 11,000 gpa injected (Blaine Dairy)	None	None
Pesticides/ Herbicides (Per scout report)	5/27/2020: 32 oz Roundup power max/ac, 2 lbs AMS/ac, 20 oz FS transform/ac 6/19/2020: 32 oz Roundup power max/ac, 2 lbs AMS/ac, 20 oz fs transform plus/ac PLH spray: 7/3/2020 Warrior II (1.6 oz/ac)	PLH spray: 7/3/2020 Warrior II (1.6 oz/ac)	5/6/2020: 32 oz Roundup power max/ac, 2 lbs AMS/ac, 20 oz FS transform/ac PLH spray: 7/3/2020 Warrior II (1.6 oz/ac) 10/6/2020: 36 oz/ac Durango, 3 pint/ac 2.4.D	None	None	None
Harvest	Cut: 1st: 6/30/2020 2nd: 7/29/2020 3rd: 8/26/2020 Merged: 1st 7/1/2020 2nd 7/30/2020 3rd 8/26/2020 Chopped: 1st: 7/2/2020 2nd: 7/30/2020 3rd: 8/27/2020 1.8 t DM/a	Cut: 1st: 6/1/2020 2nd: 6/30/2020 3rd: 7/29/2020 4th: 8/26/2020 Merged: 1st 6/1/2020 2nd 7/1/2020 3rd 7/30/2020 4th 8/26/2020 Chopped: 1st: 6/2/2020 2nd: 7/2/2020 3rd: 7/30/2020 4th: 8/27/2020 4.7 t DM/a	Cut: 1st: 6/1/2020 2nd: 6/30/2020 3rd: 7/29/2020 4th: 8/26/2020 Merged: 1st 6/1/2020 2nd 7/1/2020 3rd 7/30/2020 4th 8/26/2020 Chopped: 1st: 6/2/2020 2nd: 7/2/2020 3rd: 7/30/2020 4th: 8/27/2020 4.3 t DM/a	Cut: 1st: 6/30/2020 2nd: 7/29/2020 3rd: 8/26/2020 Merged: 1st 7/1/2020 2nd 7/30/2020 3rd 8/26/2020 Baled: 1st: 7/2/2020 Chopped: 2nd: 7/30/2020 3rd: 8/27/2020 3.6 t DM/a	Cut: 1st: 6/1/2020 2nd: 6/30/2020 3rd: 7/29/2020 4th: 8/26/2020 Merged: 1st 6/1/2020 2nd 7/1/2020 3rd 7/30/2020 4th 8/26/2020 Chopped: 1st: 6/2/2020 2nd: 7/2/2020 3rd: 7/30/2020 4th: 8/27/2020 4.5 t DM/a	5/29/2020: Mowing 5/29-6/1/2020: Tedding (4x) 6/2/2020: hay raked, small squares baled 7/16/2020: Mowing 7/17/2020: Tedding (1x) 7/19/2020: Tedding (1x) 7/20/2020: hay raked, small squares baled 9/2/2020: Mowing 9/3/2020: Tedding (1x) 9/4/2020: Tedding(1x) 9/5/2020: hay raked, round baled 3.3 t DM/a
Fall Practices	None	None	11/5/2020: Manure 7,000 gpa (Blaine Dairy) 11/10/2020: disc (2x)	None	11/5/2020: Manure 7,000 gpa (Blaine Dairy) 11/10/2020: disc (2x)	None
Crop 2021	Alfalfa I	Alfalfa II	Corn	Alfalfa 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	none in 2020 due to COVID-19, DNR not issuing permits	none in 2020 due to COVID-19, DNR not issuing permits	Never
Fertilizer	None	None	+N plots: 44-0-0 114 lbs/ac
Pesticides (as needed)	None	None	6/25/2020: Plot 504: AMS (2lbs/ac), Diablo dicamba (7oz/ac), weedone 650 (19oz/ac), fs aqualight (3oz/ac), fs transform plus (8oz/ac)
Grazing or Harvest	None in 2020	None	6/9/2020: Plot 504 +N and -N, mowed (3 inch) (to remove ragweed) 11/16/2020: All plots mowed (6 inch)
Other Practices			