

Appendix I- NESARE 2015 management tables (Planting and harvesting information in Manure and Pest Rotation)

NESARE PLANTING & HARVESTING INFORMATION: 2016									
Rotation	Crop	Variety	Date of planting	Date of harvest / termination	Seed rate (per acre)	Seed depth (in)	Row spacing (in)	Maturity	Transgenic Traits
Manure Rotation	Alfalfa & Orchard-grass (Yr 1)	BM Alfalfa: 6422Q IM Alfalfa: 420 LG Orchardgrass: Endurance	4/19/2016	6/28/16, 8/5/16, 9/12/16	alf: 10lb grass: 4lb	1/4-1/2	7.5		
	Alfalfa & Orchard-grass (Yr 2)	BM Alfalfa: 6422Q IM Alfalfa: SW420LH Orchardgrass: Extend	4/18/2015	5/26/16, 6/28/16, 8/5/16, 9/12/16	alf: 10 lb grass: 10 lb	1/4-1/2	7.5		
	Clover Mix Interseed into Cg	An. Ryegr: KB Supreme RC: Common, Radish: CC solutions, Og:Potomac	6/24/16	Spring 2016	AR: 10 lb, RC: 10 lb, Rad: 3 lb, Og: 10 lb	1/4-1/2	7.5		
	Ssgrass, CC/R , Cg	CC:Dixie Rye: Aroostook	CC:8/30/16 Rye:10/7/16		20 lb 120 lb	1-1.25 3/4	7.5		
	Corn Silage after Alf +	TA290-18	5/17/2016	9/16/2016	35k	1.5	30	89 RM	GT
	Corn Silage after	TA290-18	06/04/2016	9/16/2016	35 k	1.5	30	89 RM	GT
	Corn grain after	MC5661	5/19/2016	10/28/16	32k	1.5	30	106 RM	GT
	Oats (after Cs after Int)	Hercules? Blaze? (check with Scott0	10/7/2016	winterkills	96 lb or 3 Bu	1-1.25	7.5		
	Rye (fall plant 2015)	Aroostock	9/24/15	rye silage was harvested on 5/4/2016	120 lb	1-1.25	7.5		
	Rye after SS	Aroostock	10/7/16		120 lb	1-1.25	7.5		
Rye after corns silage (AOg2, Cs, R)	Aroostock	9/28/16		120 lb	1-1.25	7.5			
R, SSgrass , CC/R	Ssgrass: Green Grazier	6/10/16	SS:7/15/16: 1st cut; SS: 8/8/16: 2nd cut; SS: 8/24/16 terminated in the CC splits only; SS: 9/6/16: 3rd cut; SS: 9/28/16 the other half was terminated	SS:25 lb/A		7.5			

Rotation	Crop	Variety	Date of planting	Date of harvest / termination	Seed rate (per acre)	Seed depth (in)	Row spacing (in)	Maturity	Transgenic Traits
Pest Rotation	RH: Forage Oat, alfalfa, orchardgrass Yr1	Oat: Everleaf Alfalfa: 420 LG grass:Endurance	4/19/2016	6/28/16, 8/5/16, 9/12/16	Oat: 32 lb Alfalfa:10lb grass:4 lb	1/4-1/2	7.5		
	SH: Alfalfa Og- Yr1	alfalfa: 6422Q grass: Endurance	4/19/2016	6/28/16, 8/5/16, 9/12/16	Alfalfa: 10lb grass:4 lb	1/4-1/2	7.5		
	SH: Alfalfa- Yr 2	6422Q	4/18/15	5/26/16, 6/28/16, 8/5/16, 9/12/16	18 lb	1/4-1/2	7.5		
	RH: Triticale, Alfalfa, & Og- Yr 2	Triticale: 336 Alfalfa: SW420LH Grass: Extend	4/18/15	5/26/16, 6/28/16, 8/5/16, 9/12/16	trit: 45 lb alf: 10 lb grass: 4 lb	1/4-1/2	7.5		
	Alfalfa (Yr 3)	Genoa	4/14/14	5/26/16, 6/28/16, 8/5/16	18 lb	1/4-1/2	7.5		
	Alfalfa & Orchard-grass (Yr 3)	Alfalfa: SW420LH Orchardgrass: Extend	4/14/14	5/26/16, 6/28/16, 8/5/16	alf: 10 lb grass: 4 lb	1/4-1/2	7.5		
	Canola (fall plant 2015)	Wichita	8/28/2015	6/30/2016	6.5 lb	3/4	7.5		None
	Canola (fall plant 2016)	Wichita	9/8/2016		6.5 lb	3/4	7.5		None
	Corn Silage (R,Cs,O)	TA290-18	5/11/2016	9/16/2016	35K	1 1/2	30	89 _{CRM}	None
	Oats (after Cs)	Corral?	10/7/2016	winterkills	96 lb or 3 Bu	1-1.25	7.5		
	Rye after Canola	Aroostook	10/7/2016		90 lb/A	1-1.25	7.5		
	Soybeans	TS2849-R2S	15"/SH: 5/25/16 30"/RH & SH: 5/25/16 Replant 15" (B1&2):6/24	11/2/16	200 k	1-1.5	15/30	2.8	RR2 Yield STS
	Rye after soy (R,S,R) Fall plant (2016)	Aroostock	11/10/16		120 lb				
Rye (fall plant 2015)	Aroostock	R,S,R: 10/26/15	R,S,R: 5/4/2016	120 lb	1-1.25	7.5			
Corn-Soy Rotation	Corn Grain	MC5663	5/17/2016	10/28/16	32 k	1.5	30	106	GT,CB,LL,Bt
	Soybean	TS3169-R2	5/25/2016	11/2/16	200 k	1-1.5	7.5/30	3.1	Genuity RR2 Yield

Appendix II- NESARE 2015 management tables (Nutrient management information in Pest and Manure Rotation)

NESARE NUTRIENT MANAGEMENT: 2016 (Green manure [CC] and cover crops [Rye] do not receive additional nutrients.)							
Rotation	Crop	Manure App Date	Actual Rate of Manure App (T/A)	Fertilizer at Planting	Sidedress N (lb N/A)	POST Fertilizer App Date	POST Rate of Fertilizer Application
Pest Rotation	Alf & Og (SH) - Yr. 1					7/6/16	80 lb K2O
	Alf (SH) - Yr. 2					7/6/16	80lb K2O
	Alf (SH) - Yr. 3	8/23/2016	IM:TBA			7/6/16	80 lb K2O
	Alf & Og, Oat (RH) - Yr. 1					7/6/16	40 lb K2O
	Alf & Og (RH) Yrs. 2					7/6/16	80lb K2O
	Alf & Og (RH) Yrs. 3	08/23/2016 (+Moldboard Plough)	BM: TBA			7/6/16	40 lb K2O (RH)
	Canola (Planted Fall 2015)	8/10/15	BM: 28.3 T/A			4-14-16	100 lb N as AMS/Urea blend; 33.5-0-0-12
	Corn Silage			10 gal 7-21-7	6/27/16: 70 lb N as UAN (RH & SH)		
	Soybeans (R,S,R)	No manure was applied in	None				
	Rye after soy (R,S,R)	11/8/16: all injected	IM:TBA				

NESARE NUTRIENT MANAGEMENT: 2016 (Green manure [CC] and cover crops [Rye] do not receive additional nutrients.)

Rotation	Crop	Manure App Date	Actual Rate of Manure App (T/A)	Fertilizer at Planting	Sidedress N (lb N/A)	POST Fertilizer App Date	POST Rate of Fertilizer Application
Manure Rotation	Alf & Og - Yr. 1					7/6/16	40 lb/A K2O
	Alf & Og - Yr. 2					7/6/16	120 lbs/A K2O
	Rye, SSgrass, Rye/CC (rye planted in fall 2015)			SS: 90lbN/A (6/7/16) & 90 lb/A K2O (6/10) at plant		4-14-16 (R,SS)	BM: 80 lbs N/A (R,SS) IM: 50 lbs N/A (R,SS)
	Corn Grain (after RC/CC)	5/9/2016	TBD	5 gal 7-21-7	No sidedress N on IM or BM.		
	Corn Silage (after interseed covers)	5/11/2016	TBD	160 lbs 12-40-0	7/15/16: BM:90 lb N as UAN; IM: 70		
	Corn silage (after AOg2)	5/9/2016	TBD				
	Rye silage after corn silage (AOg2, Cs, R)	9/26/2016	TBD				
Corn-Soy Rotation	Corn Grain	5/9/16	TBD	6/7/16: Fert: 90 lb N as UAN; 90lb/A K2O at plant	6/27/16: 70 lbs N/A (BM-NT only)		
	Soybean	-		6/10/16: Ch, BM, Fert:			

Appendix III- NESARE 2015 management tables (Pest management information in Manure and Pest Rotation)

Rotation	Crop	Date of planting	Seed Treatments	Pre-emergence Treatment(s) or Burn-downs	Post-emergence Treatment(s)
Manure Rotation	Alfalfa and Orchardgrass (Year 1)	4/19/2016	Alf/6422Q- Apron XL fung, Optimize and Nitragin Gold	4/16/16: 32 oz/A Roundup before planting alfalfa	6/15/16: 2,4-DB (2 qt/A) and Warrior (3 fl. oz./A) 7/27/16: Warrior (3 fl. oz./A)(BM) 7/29/16: Warrior (3 fl. oz./A)(IM)
	Alfalfa and Orchardgrass (Year 2)	4/18/15	Alf/6422Q - Mefenoxam fung ; Alf/ SW420LH - aquabond	was burnt down on 4/27/16 with 44 oz roundup, 16 oz 24D, 8 oz banvel	
	RC, Cg, Int	RC: 4/18/15?	RC: none	RC was burnt down on 4/27/16 with 44 oz roundup, 16 oz 24D, 8 oz banvel	
	CC, Cg, Int	?	CC: none	CC was burnt down on 4/27/16 with 44 oz roundup, 16 oz 24D, 8 oz banvel	
	Rye, fall plant 2015	Fall 2015	None	Rye was burnt down on 4/27/16 with 32 oz Rndup and 16 oz 24D	
	Corn silage (after alf + orchard grass)	5/17/16	None	4/26/16: burn down of alfalfa 44 oz RPM+16 oz 2,4-DLVE + 8 oz Banvel	6/15/16: 5 oz Status + 1.5 oz Steadfast Q + NIS + AMS (or combination product) 6/25: Roundup (1qt./A)
	Corn Silage (after interseeded CCs)	6/4/16	None	4/27: Interseed CCs burndown of 44 oz RPM+16 oz 2,4-DLVE + 8 oz Banvel	6/18/16: 5 oz Status + 1.5 oz Steadfast Q + NIS + AMS (or combination product) 6/28: 5oz/a Status, 1.5oz/a Steadfast Q, AMS and NIS
	Corn grain (after RC/CC)	5/19/16	None	4/27: RC/CC burndown of 44 oz RPM+16 oz 2,4-DLVE + 8 oz Banvel	6/18/16: RoundupPM at 22 fl oz
	R, SS grass, CC/R	6/10/16	None	8/24/16: SS grass was terminated (CC splits only) Roundup @ 44 fl. oz. per acre new 9/28/16: SS was terminated (Rye silage splits) with Roundup 1 qt. per acre.	

NESARE PEST MANAGEMENT INFORMATION: 2016

Rotation	Crop	Date of planting	Seed Treatments	Pre-emergence Treatment(s) or burn down	Post-emergence Treatment(s)
Pest Rotation	Alfalfa orchardgrass(SH) Establish-Year 1)	4/19/16		4/16/16: 32 oz/A Roundup before planting alfalfa	6/15/16: 2,4-DB (2 qt/A) and Warrior (3 fl. oz./A) 7/27/16: Warrior (3 fl. oz./A)
	Alfalfa orchardgrass(RH) Establish-Year 1)	4/19/16		4/16/16: 32 oz/A Roundup before planting alfalfa	7/27/16: Warrior (3 fl. oz./A)
	Alfalfa (SH) (Year 2)	4/18/15	Alf/6422Q - Mefenoxam fungicide	4/19: 22 oz Roundup Powermax	5/4: Rotary harrow to break up soil crust and improve seedling emergence; 5/22: 2 qts Butyrac; 6/12: 3 oz Warrior (above econ threshold) 07/11/15: Warrior (3 fl. oz./acre); 7/27/16: Warrior
	Alf+Og, Trit (RH), (Year 2)	4/18/15	Alf/SW420LH - Aquabond Og: none Trit: none	4/19: 22 oz Roundup Powermax	5/4: Rotary harrow to break up soil crust and improve seedling emergence 5/22: 2 qts Butyrac 07/11/15: Warrior (3 fl. oz./acre)
	Alfalfa (SH) (Year 3)	See 2014 table.	Alf - Mefenoxam fungicide	N/A	Terminated on :08/18/16: 32 fl oz RPM, 8 fl oz 2,4-D ester, and 8 fl oz Clarity
	Alf+Og (RH) (Year 3)	See 2014 table.	Alf(Yr2)-Aquabond Alf(Yr3)-Mefenoxam Og: none	N/A	was plowed on 8/23/16
	Canola (fall plant 2016)	9/8/2016	None	TBD.	10/26/16: Volunteer alfalfa was sprayed in the SH side with (8 oz of Stinger/acre)
	Corn Silage	5/11/16	None	4/27/16: Rye burndown of 22 oz RPM+16 oz 2,4-DLVE; 5/12/16, RH: 3 oz Callisto + 26.7 oz Dual II Mag (Band) at planting; 5/12/16, SH: 3 oz Callisto + 26.7 oz Dual II Mag (Broadcast)	6/15/16: 5 oz Status + 1.5 oz Steadfast Q + NIS + AMS (or combination) in SH and PH (RH) 6/13/16 and 6/22/16: RH: Cultivation 6/18/16 :5 oz Status + 1.5 oz Steadfast Q + NIS + AMS (or combination product) (SH and RH Post)
	Rye (fall plant 2015)	Ca,R: R,S,R: 10/26/15	none	5/4/16: Rye before soybean (R,S,R) was burnt down with 32 oz Rdup and 16 oz of 24D 9/12/16: Voluntier canola before rye was sprayed with Rndp + 24D (32+16) 9/21/16: volunteer canola and weeds were mowed (both RH and SH)	
	Soybeans	30" : 5/25/16 15" : 5/25/16	None	4/27/16: Rye burn down of 22 oz RPM+16 oz 2,4-DLVE; 5/25/16: RH: BANDED 3.75 oz Fierce; SH:Broadcast 3.75 oz Fierce + 22 fl. oz. Roundup to both treatments	6/24/16: RH-HR: Cultivation 6/24/16: 22 oz RPM (RH-PH and SH) 7/6/16: RH-HR: Cultivation

NESARE PEST MANAGEMENT INFORMATION: 2016

Corn-Soy Rotation	Corn Grain	5/17/16	Fludioxonil, mefenoxam, & azoxystrobin fungicides + clothianidin & thiamexotham insecticides, +	Surestart/Atrazine/Warrior (Pre emerg) 4/27/16: 22 oz RPM+16 oz 2,4-DLVE 5/19/16: 1.75 pt SureStart + 1 qt Aatrex + 3.5 oz Warrior at planting	6/18/16:RoundupPM at 22 fl oz
	Soybean	5/25/16	Cruiser Maxx: Thiamexotham insecticide & mefenoxam + fludioxonil fungicides	5/25/16: 32 oz Rdup and 16 oz of 24D (Pre-emerg) 5/25/16: Fierce at 3.75 oz/A 4/27/16:22 oz RPM+16 oz 2,4-DLVE	6/24: 22 oz RPM

Cg: Cruiser Extreme 250: thiamexotham insecticide + 3 fungicides (Apron [mefanoxam], Maxim [mefanoxam + fludioxonil], Dynasty [azoxystrobin])

2,4 D LVE: 2,4 D

Accent: nicosulfuron

AAatrex 4L: atrazine

Buctril: bromoxynil

Butyrac: 2,4 DB

Cadet: Fluciathet methyl

Callisto: mesotrione

Dual II Mag: S-metolachlor

Fierce: flumioxizan + pyroxasulfone

Ignite: glufosinate

Permit: halosulfuron

Prowl H2O: pendimethalin

Status: dicamba + diflufenzopor

Stinger: clopyralid + monoethalomine salt

SureStart: acetochlor + flumetsulam + clopyralid

Valor XLT: fumioxazin + cloransulam methyl

Roundup Powermax: glyphosate

* 22 oz (0.75 lb/A)

* 32 oz (1.125 lb/A glyphosate + 2 lb AMS/A)

Warrior Insecticide: lambda-cyhalothrin