TABLE 3 **C FACTORS FOR CROPLAND (Single Year)-Bismarck-(86C)-HIGH**

CROP SEQUENCE	CLEAN TILL PLOW		SPRING PLOW	MULCH TILLAGE FALL MULCH TILLAGE % COVER AFTER PLANTING							SPRING MULCH TILLAGE % COVER AFTER PLANTING							RIDGE TILL (Cultivated) % COVER AFTER PLANTING							NO-TILL % COVER AFTER PLANTING									STRIP TILL % COVER AFTER PLANTING								
	FALL	SPRING	PLANT	5	10	20	30	40	50	60	5	10	20	30	40	50	60	5	10	20	30	40	50	60	10	20	30	40	50	60	70	80	90	10	20	30	40	50	60	70	80	90
CROP TO BE PLANTED:																																										
ALFALFA																																										
Previous Crop Was:																																										
Alfalfa Dir. Seeded	.02																																									
AlfOat (Silaged)	.03																																									
Alfalfa 1st year	.007																																									
Alfalfa 2nd year	.004																																									
Alfalfa >= 3rd year	.003																																									
ALFALFA ESTABLISHMENT																																										
CROP TO BE PLANTED:																																										
DIRECT SEEDED ALFALFA																																										
Previous Crop Was:																																										
Corn	.07	.05			.04	.03	.02	.02	.01	.01		.04	.03	.02	.02	.01	.009												.007	.006	.004											
Corn Silage	.10	.09		.08	.07						.08	.07													.04																	
Grain Sorghum																																										
Sorghum/Sudan																																										
Soybeans	.09	.07		.06	.05	.04					.06	.05	.04	.03	.02												.02	.02	.01	.008												
Spring Wheat	.08	.06			.05	.04	.03	.03	.02	.02		.04	.04	.03	.02	.02	.02											.01	.01	.01	.008	.007										
Winter Wheat																																										
ALFALFA ESTABLISHMENT																																										
CROP TO BE PLANTED:																																										
ALF/OAT (SILAGE)																																										
Previous Crop Was:																																										
Corn	.02	.02			.01	.01	.008	.006	.005	.004		.01	.01	.008	.005	.004	.003												.002	.002	.001	.001	.001									
Corn Silage	.04	.04		.04	.04						.04	.03													.02	.01																
Grain Sorghum																																										
Sorghum/Sudan																																										
Soybeans	.03	.03		.02	.02	.02					.02	.02	.01	.01	.008												.006	.005	.004	.002	.002											
Spring Wheat	.04	.03			.03	.02	.02	.02	.01	.01		.02	.02	.02	.01	.01	.01											.009	.008	.008	.006	.005										
Winter Wheat																																										

NOTE: Y2 The crop to be planted is the 2nd year after alfalfa.

TABLE 3 **C FACTORS FOR CROPLAND (Single Year)-Bismarck-(86C)-HIGH**

CROP SEQUENCE	CLEAN TILL PLOW		SPRING PLOW	MULCH TILLAGE FALL MULCH TILLAGE % COVER AFTER PLANTING							SPRING MULCH TILLAGE % COVER AFTER PLANTING							RIDGE TILL (Cultivated) % COVER AFTER PLANTING							NO-TILL % COVER AFTER PLANTING									STRIP TILL % COVER AFTER PLANTING								
	FALL	SPRING	PLANT	5	10	20	30	40	50	60	5	10	20	30	40	50	60	5	10	20	30	40	50	60	10	20	30	40	50	60	70	80	90	10	20	30	40	50	60	70	80	90
CROP TO BE PLANTED: **BARLEY**																																										
Previous Crop Was:																																										
Alfalfa																																										
Barley	.05	.04			.03	.02	.02	.01	.01	.01		.03	.02	.02	.01	.009	.008										.008	.007	.006	.005	.004	.003	.002									
Corn	.05	.04			.03	.02	.02	.01	.01	.008		.03	.02	.02	.01	.008	.006										.008	.006	.005	.004	.003	.002	.001									
Corn Silage	.07	.07		.05	.04	.03	.03				.05	.04	.03	.02											.03	.02	.01	.01	.005	.004	.003											
Dry Beans																																										
Flax																																										
Grain Sorghum	.04	.04			.03	.02	.02	.01	.009	.007		.03	.02	.01	.009	.007	.006											.005	.004	.003	.003	.001	.001									
Sorghum Silage	.06	.06		.05	.04	.03	.03	.02			.05	.04	.03	.02	.02											.02	.01	.01	.008	.004	.003	.003										
Millet																																										
Oats	.05	.05			.03	.03	.02	.02	.01	.01		.03	.03	.02	.01	.01	.009											.008	.007	.006	.006	.003	.003									
Potatoes																																										
Rapeseed																																										
Rye																																										
Safflower																																										
Sorghum/Sudan	.05	.05		.04	.04	.03	.02				.04	.04	.02	.02												.03	.01	.01	.008	.004	.003	.002										
Soybeans (Narrow row	.06	.06		.05	.04	.03	.03				.05	.04	.02	.02	.01												.01	.01	.01	.006	.003	.003										
Soybeans (Wide row)	.06	.06		.05	.04	.03					.05	.04	.03	.02	.02												.01	.01	.008	.007	.003	.003										
Spring Wheat	.05	.05			.04	.03	.02	.02	.02	.01		.03	.03	.02	.01	.01	.01											.009	.008	.007	.005	.003	.003									
S. Fallow (Barley)	.13	.13		.09	.08	.05	.04				.06	.05	.05	.04												.03	.03	.02	.01	.006	.005	.004										
S. Fallow (Millet)																																										
S. Fallow (Oats)	.12	.12		.08	.07	.05	.04				.07	.06	.04	.03												.03	.02	.01	.01	.007	.004	.004	.003									
S. Fallow (Sp. Wheat	.12	.12		.09	.07	.05	.04				.08	.06	.04	.03												.03	.02	.01	.009	.006	.005	.004										
Sunflowers	.05	.05		.04	.03	.02					.04	.03	.02	.02	.01										.02	.01	.008	.007	.006	.005	.002	.002										
Winter Wheat	.05	.05			.03	.03	.02	.02	.02	.01			.03	.02	.01	.01	.01											.008	.008	.007	.006	.004	.003									

NOTE: Y2 The crop to be planted is the 2nd year after alfalfa.

TABLE 3 **C FACTORS FOR CROPLAND (Single Year)-Bismarck-(86C)-HIGH**

CROP SEQUENCE	CLEAN TILL PLOW		SPRING PLOW	MULCH TILLAGE FALL MULCH TILLAGE % COVER AFTER PLANTING							SPRING MULCH TILLAGE % COVER AFTER PLANTING							RIDGE TILL (Cultivated) % COVER AFTER PLANTING							NO-TILL % COVER AFTER PLANTING									STRIP TILL % COVER AFTER PLANTING								
	FALL	SPRING	PLANT	5	10	20	30	40	50	60	5	10	20	30	40	50	60	5	10	20	30	40	50	60	10	20	30	40	50	60	70	80	90	10	20	30	40	50	60	70	80	90
CROP TO BE PLANTED:																																										
CORN FOR GRAIN																																										
Previous Crop Was:																																										
Alfalfa	.19	.15			.15	.12	.10	.09				.12	.10	.08	.06	.05												.03	.02	.02												
Barley	.20	.19			.14	.11	.08	.07	.05	.04		.13	.11	.08	.05	.04	.03				.09	.08	.07						.03	.02	.02	.01	.007			.05	.04	.03	.02	.02	.01	
Corn	.25	.26			.19	.15	.12	.10	.08			.18	.15	.12	.08	.07					.12	.11						.05	.04	.03	.02	.01				.07	.06	.05	.04	.03		
Corn Y2	.24	.23			.18	.15	.12	.10	.08			.17	.14	.11	.08	.07												.05	.04	.03	.02	.01										
Corn Silage	.32	.31		.27	.24						.27	.22						.20							.16	.09	.08	.06						.16	.12							
Dry Beans																																										
Flax																																										
Grain Sorghum	.22	.22			.16	.12	.11	.09	.07			.16	.12	.09	.08	.06				.11	.11	.09						.04	.03	.02	.02					.06	.05	.04	.03			
Sorghum Silage	.30	.29		.28	.23	.19	.15				.26	.23	.17	.14					.21	.19							.09	.06	.04													
Millet	.15	.15			.10	.08	.06	.05	.04	.03		.10	.08	.06	.04	.03	.02				.07	.06	.05					.03	.02	.02	.01	.008	.005									
Oats	.24	.23			.17	.13	.10	.08	.06	.05		.17	.13	.01	.06	.05	.04				.12	.11	.09						.04	.03	.03	.02	.01				.05	.04	.04	.03	.02	
Potatoes																																										
Rapeseed																																										
Rye																																										
Safflower	.30	.29		.25	.23						.24	.22	.17												.16	.13	.10	.07	.06													
Sorghum/Sudan	.31	.31		.27	.24	.20					.27	.24	.18						.23	.21						.14	.11	.10	.08													
Soybeans (Narrow row	.33	.32		.28	.25	.21					.28	.25	.21	.16	.13				.23	.22						.14	.12	.10	.08	.05	.03			.17	.15	.12	.10	.08				
Soybeans (Wide row)	.33	.32		.28	.25	.21					.28	.25	.20	.16	.14				.23	.21						.12	.09	.08	.06	.04	.03			.15	.14	.10	.09	.07				
Spring Wheat	.24	.23			.17	.13	.10	.08	.07			.17	.13	.10	.07	.06	.03				.12	.11						.05	.04	.03	.02	.02				.06	.05	.04	.03	.02		
S. Fallow (Barley)	.31	.31		.23	.20	.15	.12	.09			.22	.20	.15	.12	.09												.08	.06	.04	.03	.02	.01										
S. Fallow (Corn)	.38	.38		.33	.30	.23	.18				.31	.29	.23	.18	.14											.12	.11	.06	.05					.16	.14	.11	.08					
S. Fallow (Millet)																																										
S. Fallow (Oats)	.34	.34		.25	.22	.17	.13	.10			.25	.22	.17	.13	.10												.09	.07	.04	.03	.02	.01										
S. Fallow (Sp. Wheat	.34	.34		.26	.23	.18	.13	.10			.26	.22	.17	.13	.10												.09	.07	.04	.03	.02											
Sunflowers	.27	.26		.22	.20	.16					.22	.19	.14	.11					.15	.14						.08	.07	.05	.04	.03				.11	.10	.08	.06					
Winter Wheat	.25	.23			.17	.14	.11	.08	.07				.13	.10	.07	.06					.12	.11						.06	.05	.04	.03	.03				.07	.06	.05	.04	.03		
CROP TO BE PLANTED:																																										
CULTIVATED CORN FOR GRAIN																																										
Previous Crop Was:																																										
Corn	.25	.24			.19	.16	.13	.11	.09			.19	.15	.13	.09	.08											.09	.08	.07	.06	.05	.04										
Corn Silage	.31	.31		.27	.25						.27	.23													.22	.18	.15															
Grain Sorghum	.22	.21			.16	.14	.12	.09	.08			.16	.14	.11	.08	.07												.07	.06	.05	.04	.03										
Soybeans (Wide row)	.33	.32		.29	.27	.23					.28	.26	.21	.19	.16											.20	.17	.16	.13	.11	.09											
Spring Wheat	.24	.23			.18	.14	.11	.09	.07			.17	.14	.11	.08	.06	.05											.07	.05	.05	.04	.03	.02									
Sunflowers	.27	.26		.22	.21	.17					.22	.20	.15	.13	.11											.13	.11	.11	.09	.07												

NOTE: Y2 The crop to be planted is the 2nd year after alfalfa.

TABLE 3 **C FACTORS FOR CROPLAND (Single Year)-Bismarck-(86C)-HIGH**

CROP SEQUENCE	CLEAN TILL PLOW		SPRING PLOW	MULCH TILLAGE FALL MULCH TILLAGE % COVER AFTER PLANTING							SPRING MULCH TILLAGE % COVER AFTER PLANTING							RIDGE TILL (Cultivated) % COVER AFTER PLANTING							NO-TILL % COVER AFTER PLANTING									STRIP TILL % COVER AFTER PLANTING								
	FALL	SPRING	PLANT	5	10	20	30	40	50	60	5	10	20	30	40	50	60	5	10	20	30	40	50	60	10	20	30	40	50	60	70	80	90	10	20	30	40	50	60	70	80	90
CROP TO BE PLANTED:																																										
CORN SILAGE																																										
Previous Crop Was:																																										
Alfalfa	.20	.12			.12	.10	.08	.07				.09	.08	.07	.05	.04												.02	.02	.01												
Barley	.18	.17			.12	.10	.07	.06	.05				.09	.07	.06	.05					.08	.07							.03	.02	.02	.01	.008				.04	.03	.02	.02		
Corn	.22	.21			.16	.13	.10	.08	.07			.16	.13	.10	.07	.06					.11	.01								.04	.02				.08	.07	.06	.05	.04			
Corn Silage	.28	.28		.25							.24							.25							.12									.16								
Corn Silage Y2	.25	.24		.22	.20						.20	.18													.10	.07	.06															
Dry Beans																																										
Flax																																										
Grain Sorghum	.19				.14	.11	.09	.07												.10	.10						.05	.04	.03	.02	.02				.07	.06	.04	.04			
Sorghum Silage	.26	.27		.23	.21	.17					.23	.21	.16						.21							.12	.07															
Millet	.13	.13			.09	.07	.05	.04	.03	.02		.09	.07	.05	.03	.03	.02				.06	.05	.04					.02	.01	.01	.008	.005									
Oats	.21	.20			.15	.11	.09	.07	.06			.15	.11	.09	.06	.05					.11	.10						.05	.04	.03	.03	.02					.05	.04	.03	.03		
Potatoes																																										
Rapeseed																																										
Rye																																										
Safflower																																										
Sorghum/Sudan	.28	.27		.24	.22						.24	.21							.22						.18	.14																
Soybeans (Narrow row	.29	.28		.25	.23	.19					.25	.22	.18	.15					.22	.20						.16	.13	.09	.06					.19	.16	.15	.10				
Soybeans (Wide row)	.29	.28		.25	.23	.19					.25	.22	.18	.15					.22	.20						.11	.09	.07	.05					.16	.14	.10	.09				
Spring Wheat	.22	.20			.14	.12	.09	.07	.06			.14	.12	.09	.07	.06					.11	.09						.05	.04	.03	.02	.01				.06	.05	.04	.03		
S. Fallow (Corn Sil.)	.35	.35		.29	.26	.20					.28	.26	.20												.14	.10	.08							.16	.13						
Sunflowers	.23	.24		.19	.17						.19	.17							.14	.13								.07						.12	.10	.07					
Winter Wheat	.22	.20			.15	.11	.09	.07	.06			.15	.11	.09	.07	.06					.10	.09							.04	.04	.03	.03				.06	.05	.04	.04	.03	
CROP TO BE PLANTED:																																										
CULTIVATED CORN SILAGE																																										
Previous Crop Was:																																										
Corn	.21	.21			.16	.13	.11	.09	.07			.16	.13	.10	.08	.07											.09	.07	.06	.06	.04											
Corn Silage	.28	.27		.25							.24														.22																	
Spring Wheat	.21	.20			.16	.12	.10	.08	.07			.15	.12	.09	.07	.06												.07	.06	.05	.04	.03										

NOTE: Y2 The crop to be planted is the 2nd year after alfalfa.

TABLE 3 **C FACTORS FOR CROPLAND (Single Year)-Bismarck-(86C)-HIGH**

CROP SEQUENCE	CLEAN TILL PLOW		SPRING PLOW	MULCH TILLAGE FALL MULCH TILLAGE % COVER AFTER PLANTING							SPRING MULCH TILLAGE % COVER AFTER PLANTING							RIDGE TILL (Cultivated) % COVER AFTER PLANTING							NO-TILL % COVER AFTER PLANTING									STRIP TILL % COVER AFTER PLANTING								
	FALL	SPRING	PLANT	5	10	20	30	40	50	60	5	10	20	30	40	50	60	5	10	20	30	40	50	60	10	20	30	40	50	60	70	80	90	10	20	30	40	50	60	70	80	90
CROP TO BE PLANTED:																																										
GRAIN SORGHUM																																										
Previous Crop Was:																																										
Alfalfa																																										
Barley	.15	.14			.10	.08	.06	.05	.04	.03									.10	.07	.05	.04	.04	.02					.02	.02	.01	.009	.005									
Corn	.19	.20			.13	.11	.08	.07	.05			.13	.10	.08	.06	.05				.08	.07	.06						.03	.03	.02	.01	.009				.04	.04	.03	.02			
Corn Silage	.25			.21	.19						.21	.19						.18							.12	.07	.05							.13	.09							
Dry Beans																																										
Flax																																										
Grain Sorghum	.17	.17			.12	.09	.07	.06				.12	.09	.06	.05	.04				.07	.06						.04	.03	.02	.01	.01				.05	.04	.03	.02	.02			
Grain Sorghum Y2																																										
G. Sorghum Silage	.24	.24		.20	.18	.14					.19	.17	.13						.14	.12						.08	.05	.04														
Millet	.12	.11			.08	.06	.05	.04	.03	.02		.07	.06	.04	.03	.02	.02				.04	.03	.03						.01	.01	.008	.006	.003									
Oats	.19	.17			.12	.09	.07	.06	.05			.12	.09	.07	.05	.04	.03				.06	.06	.05						.02	.02	.02	.01	.007									
Potatoes																																										
Rapeseed																																										
Rye																																										
Safflower	.24	.23		.19	.17						.19	.17													.12	.10	.08	.05														
Sorghum/Sudan	.25	.25		.21	.18	.15					.21	.18	.14						.16							.10	.08	.04														
Soybeans (Narrow row	.26	.25		.21	.19	.15					.21	.19	.14	.11					.16	.14								.06	.05	.03												
Soybeans (Wide row)	.26	.25		.21	.19	.15					.21	.19	.14	.11					.15	.13						.08	.06	.04	.03	.03				.11	.10	.07	.06					
Spring Wheat	.19	.17			.13	.09	.08	.06	.05			.12	.09	.07	.05	.04					.07	.06						.03	.03	.02	.02	.009										
S. Fallow (Gr.Sorgh)	.30	.30		.25	.23	.17	.13				.24	.22	.17	.13											.11	.10	.06	.04														
Sunflowers	.21	.20		.16	.14						.16	.14	.10	.08					.10	.09						.05	.04	.03	.02	.02				.08	.07	.05	.04					
Winter Wheat	.21	.19			.14	.10	.08	.06	.05			.13	.10	.08	.06	.04	.04				.08	.07						.05	.04	.03	.03	.02				.06	.05	.04	.03			
CROP TO BE PLANTED:																																										
CULTIVATED GRAIN SORGHUM																																										
Previous Crop Was:																																										
Corn	.19	.19			.13	.11	.09	.07	.06			.13	.11	.08	.06	.05												.05	.04	.04	.03	.02										

NOTE: Y2 The crop to be planted is the 2nd year after alfalfa.

TABLE 3 **C FACTORS FOR CROPLAND (Single Year)-Bismarck-(86C)-HIGH**

CROP SEQUENCE	CLEAN TILL PLOW		SPRING PLOW	MULCH TILLAGE FALL MULCH TILLAGE % COVER AFTER PLANTING							SPRING MULCH TILLAGE % COVER AFTER PLANTING							RIDGE TILL (Cultivated) % COVER AFTER PLANTING							NO-TILL % COVER AFTER PLANTING									STRIP TILL % COVER AFTER PLANTING								
	FALL	SPRING	PLANT	5	10	20	30	40	50	60	5	10	20	30	40	50	60	5	10	20	30	40	50	60	10	20	30	40	50	60	70	80	90	10	20	30	40	50	60	70	80	90
CROP TO BE PLANTED:																																										
SORGHUM (WIDE ROW) FOR SILAGE																																										
Previous Crop Was:																																										
Alfalfa																																										
Barley	.20	.18			.13	.10	.08	.06	.05				.10	.08	.05	.04	.03				.07	.06	.05						.03	.02	.02	.01	.007									
Corn	.25	.26			.18	.14	.11	.09				.18	.14	.10	.08	.06				.12	.10	.09						.05	.04	.03	.02											
Corn Silage	.32	.32		.28							.28	.25						.26							.13																	
Dry Beans																																										
Flax																																										
Grain Sorghum	.22	.21			.15	.12	.10	.08				.15	.12	.09	.07					.10	.09							.04	.03	.02	.02											
Sorghum Silage	.31	.31		.26	.23	.19					.26	.23	.18						.21							.12	.07															
Millet																																										
Oats	.24	.22			.16	.12	.10	.08	.06			.16	.12	.09	.06	.05					.09	.08							.04	.03	.02	.02	.01									
Potatoes																																										
Rapeseed																																										
Rye																																										
Safflower																																										
Sorghum/Sudan	.33	.34		.28	.25						.28	.24							.24							.14	.09															
Soybeans (Narrow row	.34	.33		.28	.26	.21					.28	.25	.20	.16					.23	.20						.15	.12	.09	.06													
Soybeans (Wide row)	.34	.33		.29	.26						.28	.25	.20	.16					.23	.20						.12	.10	.07	.05													
Spring Wheat	.24	.22			.16	.13	.10	.08	.06			.16	.12	.10	.07	.05					.10	.09						.05	.04	.03	.02	.01										
S. Fallow (Sor. Sil.)																																										
Sunflowers	.27	.27		.22	.19						.22	.19	.14	.12					.15							.09	.07	.05	.04													
Winter Wheat	.26	.24			.17	.13	.10	.08	.07			.17	.13	.10	.08	.06	.05				.11	.09							.05	.04	.03	.03										

NOTE: Y2 The crop to be planted is the 2nd year after alfalfa.

TABLE 3 **C FACTORS FOR CROPLAND (Single Year)-Bismarck-(86C)-HIGH**

CROP SEQUENCE	CLEAN TILL PLOW		SPRING PLOW	MULCH TILLAGE FALL MULCH TILLAGE % COVER AFTER PLANTING							SPRING MULCH TILLAGE % COVER AFTER PLANTING							RIDGE TILL (Cultivated) % COVER AFTER PLANTING							NO-TILL % COVER AFTER PLANTING									STRIP TILL % COVER AFTER PLANTING								
	FALL	SPRING	PLANT	5	10	20	30	40	50	60	5	10	20	30	40	50	60	5	10	20	30	40	50	60	10	20	30	40	50	60	70	80	90	10	20	30	40	50	60	70	80	90
CROP TO BE PLANTED:																																										
MILLET																																										
Previous Crop Was:																																										
Alfalfa																																										
Barley																																										
Corn	.13	.13			.09	.06	.05	.04	.03			.08	.06	.05	.03	.02	.02									.03	.03	.02	.01	.01	.007	.006										
Corn Silage	.17	.17		.13	.11	.09	.07				.13	.11	.07	.06											.07	.05	.04	.03	.02													
Dry Beans																																										
Flax																																										
Grain Sorghum	.11	.11			.07	.06	.04	.03	.02			.07	.06	.04	.03	.02	.01										.02	.02	.01	.009	.005	.003	.003									
Sorghum Silage																																										
Millet																																										
Oats																																										
Potatoes																																										
Rapeseed																																										
Rye																																										
Safflower	.16	.16		.12	.11	.08	.07				.12	.11	.07	.06											.07	.05	.04	.03	.02													
Sorghum/Sudan	.17	.17		.13	.11	.09	.07				.13	.11	.07	.06											.08	.05	.04	.02	.01	.01	.009											
Soybeans (Narrow row)																																										
Soybeans (Wide row)																																										
Spring Wheat	.13	.12			.08	.06	.05	.04	.03	.02		.08	.06	.05	.03	.02	.02									.03	.03	.02	.02	.01	.007	.005	.005									
S. Fallow (Barley)	.20	.20		.13	.11	.08	.06				.13	.11	.08	.06												.05	.04	.03	.02	.009	.007	.006	.005									
S. Fallow (Millet)	.21	.21		.16	.14	.09	.07	.05			.16	.14	.09	.06	.04										.08	.06	.04	.03	.02	.009	.007	.005										
S. Fallow (Oats)	.22	.22		.14	.12	.09	.07				.14	.12	.09	.06												.06	.05	.03	.02	.01	.008	.007										
S. Fallow (Sp. Wheat	.22	.22		.15	.13	.10	.07				.15	.13	.09	.07												.06	.05	.03	.02	.01	.009	.007										
Sunflowers	.14	.14		.10	.09	.07					.10	.09	.05	.04											.04	.04	.03	.02	.02	.008	.006	.005										
Winter Wheat	.12	.11			.07	.05	.04	.03	.03	.02		.07	.05	.04	.02	.02	.02									.02	.02	.02	.01	.01	.007	.004	.003									

NOTE: Y2 The crop to be planted is the 2nd year after alfalfa.

TABLE 3 **C FACTORS FOR CROPLAND (Single Year)-Bismarck-(86C)-HIGH**

CROP SEQUENCE	CLEAN TILL PLOW		SPRING PLOW	MULCH TILLAGE FALL MULCH TILLAGE % COVER AFTER PLANTING							SPRING MULCH TILLAGE % COVER AFTER PLANTING							RIDGE TILL (Cultivated) % COVER AFTER PLANTING							NO-TILL % COVER AFTER PLANTING									STRIP TILL % COVER AFTER PLANTING								
	FALL	SPRING	PLANT	5	10	20	30	40	50	60	5	10	20	30	40	50	60	5	10	20	30	40	50	60	10	20	30	40	50	60	70	80	90	10	20	30	40	50	60	70	80	90
CROP TO BE PLANTED:																																										
OATS																																										
Previous Crop Was:																																										
Alfalfa																																										
Barley	.05	.04			.03	.03	.02	.02	.01	.01		.03	.02	.02	.02	.009	.008											.007	.006	.006	.005	.004	.003									
Corn	.04	.04			.03	.02	.02	.01	.01	.008		.03	.02	.02	.01	.009	.006										.009	.007	.005	.004	.004	.003	.003									
Corn Silage	.07	.07		.05	.05	.03	.03				.05	.05	.03	.02											.03	.02	.02	.02	.01	.009	.004											
Dry Beans																																										
Flax																																										
Grain Sorghum	.04	.04			.03	.02	.02	.01	.01	.007		.02	.02	.01	.009	.007	.005											.006	.005	.004	.003	.001	.001									
Sorghum Silage	.06	.06		.05	.04	.03	.03	.02			.05	.04	.03	.02	.02											.02	.02	.01	.009	.005	.004	.003										
Millet																																										
Oats																																										
Potatoes																																										
Rapeseed																																										
Rye																																										
Safflower	.06	.06		.05	.04	.03					.04	.04	.03												.02	.02	.02	.01	.008	.006												
Sorghum/Sudan	.05	.05		.04	.04	.03	.02				.04	.04	.02	.02												.02	.02	.01	.007	.004	.003											
Soybeans (Narrow rov	.06	.06		.05	.04	.03					.05	.04	.03	.02	.02											.02	.02	.01	.01	.007	.004	.003										
Soybeans (Wide row)	.06	.06		.05	.04	.03					.05	.04	.03	.02												.02	.02	.01	.009	.007	.004	.003										
Spring Wheat	.06	.05			.04	.03	.02	.02	.02	.01		.03	.03	.02	.01	.01	.01											.01	.009	.008	.005	.004	.003									
S. Fallow (Oats)	.14	.14		.10	.08	.06	.05				.06	.05	.05	.04												.04	.03	.02	.01	.007	.006	.005										
Sunflowers	.05	.06		.04	.03	.02					.04	.03	.02	.02	.01											.01	.01	.008	.006	.004	.003	.002										
Winter Wheat	.06	.05			.04	.03	.02	.02	.02	.02		.03	.03	.02	.02	.01	.01											.01	.009	.008	.008	.005	.004									

NOTE: Y2 The crop to be planted is the 2nd year after alfalfa.

TABLE 3 **C FACTORS FOR CROPLAND (Single Year)-Bismarck-(86C)-HIGH**

CROP SEQUENCE	CLEAN TILL PLOW		SPRING PLOW	MULCH TILLAGE FALL MULCH TILLAGE % COVER AFTER PLANTING							SPRING MULCH TILLAGE % COVER AFTER PLANTING							RIDGE TILL (Cultivated) % COVER AFTER PLANTING							NO-TILL % COVER AFTER PLANTING									STRIP TILL % COVER AFTER PLANTING								
	FALL	SPRING	PLANT	5	10	20	30	40	50	60	5	10	20	30	40	50	60	5	10	20	30	40	50	60	10	20	30	40	50	60	70	80	90	10	20	30	40	50	60	70	80	90
CROP TO BE PLANTED:																																										
SAFFLOWER																																										
Previous Crop Was:																																										
Alfalfa																																										
Barley																																										
Corn	.20	.20		.16	.15	.12	.09	.08			.16	.15	.12	.08	.07											.08	.07	.05	.05	.04	.02											
Corn Silage																																										
Dry Beans																																										
Flax																																										
Grain Sorghum	.18	.18		.14	.13	.10	.08				.14	.13	.10	.07	.06											.07	.06	.05	.04	.03												
Sorghum Silage																																										
Millet	.13	.12		.09	.08	.06	.05	.04			.09	.08	.06	.04	.03											.04	.03	.02	.02	.01	.01	.008										
Oats	.20	.19		.15	.14	.11	.08	.07			.15	.13	.11	.07	.06												.05	.04	.04	.03	.02											
Potatoes																																										
Rapeseed																																										
Rye																																										
Safflower																																										
Sorghum/Sudan	.25	.25		.22	.20						.22	.19													.17	.14																
Soybeans (Narrow row)																																										
Soybeans (Wide row)																																										
Spring Wheat	.20	.19		.15	.14	.11	.09	.07			.15	.14	.11	.07	.06												.06	.05	.04	.02	.02											
S. Fallow (Safflower)	.31	.31		.25							.25														.18	.09																
Sunflowers																																										
Winter Wheat	.20	.19		.15	.14	.11	.08	.07			.14	.13	.11	.07	.06	.05											.06	.05	.04	.03	.03											

NOTE: Y2 The crop to be planted is the 2nd year after alfalfa.

TABLE 3 **C FACTORS FOR CROPLAND (Single Year)-Bismarck-(86C)-HIGH**

CROP SEQUENCE	CLEAN TILL PLOW		SPRING PLOW	MULCH TILLAGE FALL MULCH TILLAGE % COVER AFTER PLANTING							SPRING MULCH TILLAGE % COVER AFTER PLANTING							RIDGE TILL (Cultivated) % COVER AFTER PLANTING							NO-TILL % COVER AFTER PLANTING									STRIP TILL % COVER AFTER PLANTING								
	FALL	SPRING	PLANT	5	10	20	30	40	50	60	5	10	20	30	40	50	60	5	10	20	30	40	50	60	10	20	30	40	50	60	70	80	90	10	20	30	40	50	60	70	80	90
CROP TO BE PLANTED:																																										
SORGHUM/SUDAN (DRILLED)																																										
Previous Crop Was:																																										
Alfalfa																																										
Barley	.18	.17			.11	.09	.07	.05				.11	.09	.05	.04												.04	.03	.03	.02	.01	.008										
Corn	.23	.22		.18	.15	.12	.09				.17	.15	.12	.08													.06	.05	.04	.04	.03											
Corn Silage	.29	.29		.25							.24														.17																	
Dry Beans																																										
Flax																																										
Grain Sorghum	.19	.19		.15	.13	.10	.08				.15	.13	.10	.07													.06	.04	.03	.02	.01											
Sorghum Silage	.25	.25		.21	.19						.21	.17													.14	.11	.06															
Millet	.14	.13		.10	.09	.07	.05	.04			.09	.09	.07	.04	.03											.04	.03	.02	.02	.01	.007	.005	.004									
Oats	.22	.20			.14	.11	.08					.14	.10	.07	.05												.06	.04	.03	.03	.01	.01	.01									
Potatoes																																										
Rapeseed																																										
Rye																																										
Safflower	.27	.27		.22	.21						.20	.18													.17	.14																
Sorghum/Sudan	.29	.28		.24	.22						.24	.21													.19	.10																
Sorghum/Sudan Y2																																										
Soybeans (Narrow row	.30	.30		.25	.22						.25	.22	.17												.18	.15	.12	.06	.05													
Soybeans (Wide row)	.30	.30		.25	.22						.25	.20													.18	.14	.11	.06														
Spring Wheat	.22	.20			.14	.11	.09						.09	.07	.06												.06	.05	.04	.02	.02	.01										
S. Fallow (Barley)	.28	.28		.20	.17	.13	.09				.20	.17	.12	.09												.09	.07	.05	.04	.02	.01											
S. Fallow (Millet)																																										
S. Fallow (Oats)	.31	.31		.23	.19	.14	.10				.22	.19	.14	.10												.10	.08	.06	.03	.02	.02											
S. Fallow (Sor/Sudan	.36	.35		.28	.25	.21					.28	.25	.19												.21	.09	.08															
S. Fallow (Sp. Wheat	.30	.30		.23	.20	.15	.11				.23	.19	.14	.11												.11	.08	.06	.03	.02	.02											
Sunflowers	.24	.24		.19	.16						.18	.14													.12	.09	.07	.04														
Winter Wheat	.20	.19			.13	.10	.08	.06	.05			.12	.09	.07	.05	.04	.03										.05	.04	.03	.02	.01	.01										

NOTE: Y2 The crop to be planted is the 2nd year after alfalfa.

TABLE 3 **C FACTORS FOR CROPLAND (Single Year)-Bismarck-(86C)-HIGH**

CROP SEQUENCE	CLEAN TILL PLOW		SPRING PLOW	MULCH TILLAGE FALL MULCH TILLAGE % COVER AFTER PLANTING							SPRING MULCH TILLAGE % COVER AFTER PLANTING							RIDGE TILL (Cultivated) % COVER AFTER PLANTING							NO-TILL % COVER AFTER PLANTING									STRIP TILL % COVER AFTER PLANTING								
	FALL	SPRING	PLANT	5	10	20	30	40	50	60	5	10	20	30	40	50	60	5	10	20	30	40	50	60	10	20	30	40	50	60	70	80	90	10	20	30	40	50	60	70	80	90
CROP TO BE PLANTED:																																										
SOYBEANS (NARROW ROW)																																										
Previous Crop Was:																																										
Alfalfa																																										
Barley	.15	.15			.11	.08	.06	.06	.05			.11	.08	.06	.04	.03													.03	.02	.01	.009	.008									
Corn	.22	.21			.16	.12	.10	.08				.15	.12	.08	.07	.06												.05	.04	.02	.02											
Corn Silage	.25	.25		.22							.21														.15																	
Dry Beans																																										
Flax																																										
Grain Sorghum	.16	.16			.12	.09	.07	.06				.11	.09	.07	.05													.04	.03	.01	.01											
Sorghum Silage	.23	.23		.20	.18	.14					.20	.17	.14													.10	.06															
Millet																																										
Oats	.18	.17			.13	.10	.08	.06	.05			.13	.10	.08	.05	.04													.03	.03	.02	.01											
Potatoes																																										
Rapeseed																																										
Rye																																										
Safflower																																										
Sorghum/Sudan	.25	.24		.21	.19						.21	.18														.08	.07															
Soybeans (Narrow row	.25	.24		.21	.19						.21	.19	.14														.10	.06	.05													
Soybeans (Wide row)	.26	.25		.21	.19						.21		.15														.09	.06	.04													
Spring Wheat	.18	.18			.13	.10	.08	.07	.05			.13	.10	.08	.06	.05												.04	.04	.02	.02	.01										
S. Fallow (Soybeans)																																										
Sunflowers	.20	.20		.16	.14						.16	.12	.10													.08	.06	.04	.03													
Winter Wheat	.19	.17			.13	.10	.08	.06				.12	.10	.07	.06	.04	.04											.05	.04	.03	.03	.02										

NOTE: Y2 The crop to be planted is the 2nd year after alfalfa.

TABLE 3 **C FACTORS FOR CROPLAND (Single Year)-Bismarck-(86C)-HIGH**

CROP SEQUENCE	CLEAN TILL PLOW		SPRING PLOW	MULCH TILLAGE FALL MULCH TILLAGE % COVER AFTER PLANTING							SPRING MULCH TILLAGE % COVER AFTER PLANTING							RIDGE TILL (Cultivated) % COVER AFTER PLANTING							NO-TILL % COVER AFTER PLANTING									STRIP TILL % COVER AFTER PLANTING								
	FALL	SPRING	PLANT	5	10	20	30	40	50	60	5	10	20	30	40	50	60	5	10	20	30	40	50	60	10	20	30	40	50	60	70	80	90	10	20	30	40	50	60	70	80	90
CROP TO BE PLANTED:																																										
SOYBEANS (WIDE ROW)																																										
Previous Crop Was:																																										
Alfalfa	.16	.12			.12	.10	.08	.07				.09	.08	.06	.05	.04														.01	.01											
Barley	.20	.19			.13	.10	.08	.06	.05			.13	.10	.08	.05	.04	.04				.08	.07									.02	.02	.009				.04	.03	.03			
Corn	.24	.24			.17	.14	.11	.09				.17	.14	.10	.08	.06					.12	.11	.09							.03	.02							.04	.03			
Corn Y2	.21	.20			.15	.12	.10	.08	.06			.14	.12	.09	.07	.05												.04	.03	.02	.02	.01										
Corn Silage	.31	.31		.28							.27	.24						.28							.13									.17								
Dry Beans																																										
Flax																																										
Grain Sorghum	.21	.20			.15	.12	.10	.08				.15	.12	.07	.07					.11	.10								.03	.02	.02						.04	.04			
Sorghum Silage	.30	.29		.26	.23	.19					.26	.23	.18						.22								.08														
Millet																																										
Oats	.24	.22			.16	.13	.10	.08	.06			.16	.12	.10	.07	.06					.09	.08								.03	.02	.02						.04	.03	.02		
Potatoes																																										
Rapeseed																																										
Rye																																										
Safflower																																										
Sorghum/Sudan	.31	.31		.27	.25						.27	.23						.26	.24							.14																
Soybeans (Narrow row)	.33	.32		.28	.25	.20					.27		.19	.16					.24	.21								.10	.06							.12	.10				
Soybeans (Wide row)	.33	.32		.28	.25	.20					.27		.19	.16					.24	.21								.07	.06						.14	.11	.09				
Soybeans (WR) Y2	.28	.26		.23	.21	.17					.22	.20	.15	.12														.05	.04	.03											
Spring Wheat	.24	.22			.16	.13	.10	.08				.16	.13	.10	.07	.06					.11	.09								.03	.03							.04	.03			
S. Fallow (Soybeans)																																										
Sunflowers	.26	.26		.24	.24						.21	.19	.14	.11					.16								.07	.05	.04							.08	.07				
Winter Wheat	.23	.22			.16	.12	.10	.08	.06			.15	.12	.10	.07	.05	.05				.10	.09								.04	.03	.03						.05	.04			
CROP TO BE PLANTED:																																										
CULTIVATED SOYBEANS (WIDE ROW)																																										
Previous Crop Was:																																										
Corn	.24	.23			.18	.14	.12	.09	.08			.17	.14	.11	.09	.07														.05	.04	.03										

NOTE: Y2 The crop to be planted is the 2nd year after alfalfa.

TABLE 3 **C FACTORS FOR CROPLAND (Single Year)-Bismarck-(86C)-HIGH**

CROP SEQUENCE	CLEAN TILL PLOW		SPRING PLOW	MULCH TILLAGE FALL MULCH TILLAGE % COVER AFTER PLANTING							SPRING MULCH TILLAGE % COVER AFTER PLANTING							RIDGE TILL (Cultivated) % COVER AFTER PLANTING							NO-TILL % COVER AFTER PLANTING									STRIP TILL % COVER AFTER PLANTING								
	FALL	SPRING	PLANT	5	10	20	30	40	50	60	5	10	20	30	40	50	60	5	10	20	30	40	50	60	10	20	30	40	50	60	70	80	90	10	20	30	40	50	60	70	80	90

CROP TO BE PLANTED:

SPRING WHEAT

Previous Crop Was:

Alfalfa	.04	.03			.03	.02	.02	.02	.01			.02	.02	.01	.01	.01											.007	.005	.004	.003												
Barley	.05	.05				.03	.02	.02	.01	.01			.02	.02	.02	.01	.009											.008	.007	.006	.006	.003	.003									
Corn	.05	.05			.04	.03	.02	.02	.01	.01		.03	.03	.02	.01	.01	.008										.01	.008	.006	.005	.004	.002	.002									
Corn Silage	.08	.08		.06	.05	.04					.06	.05	.04												.03	.03	.02	.01	.007	.005												
Dry Beans																																										
Flax																																										
Grain Sorghum	.04	.04			.03	.02	.02	.01	.01	.008		.03	.02	.02	.01	.008	.007											.007	.005	.004	.003	.002	.001									
Sorghum Silage	.07	.07		.06	.05	.04	.03				.06	.05	.03	.03	.02											.02	.02	.01	.01	.006	.004											
Millet	.04	.03			.02	.02	.01	.01	.007	.005		.02	.02	.01	.009	.005	.004										.006	.004	.004	.003	.002	.001	.001									
Oats	.06	.06			.04	.03	.03	.02	.02	.02			.03	.03	.02	.01	.01											.01	.01	.008	.006	.004	.004									
Potatoes																																										
Rapeseed																																										
Rye																																										
Safflower	.07	.07		.05	.05	.04					.05	.05	.03	.03											.03	.02	.02	.009	.007													
Sorghum/Sudan	.06	.06		.05	.04	.04	.03				.05	.04	.03	.02												.02	.02	.01	.006	.005	.004											
Soybeans (Narrow rov	.07	.07		.06	.05	.04					.06	.05	.03	.02	.02												..02	.02	.01	.006	.005	.003										
Soybeans (Wide row)	.07	.07		.06	.05	.04					.06	.05	.03	.03	.02											.02	.02	.01	.01	.007	.005	.003										
Spring Wheat	.07	.06			.04	.03	.03	.02	.02	.02		.04	.03	.03	.02	.01	.01										.02	.01	.01	.009	.006	.004	.004									
Spring Wheat Y2	.08	.08			.05	.04	.03	.03	.02			.05	.04	.03	.02	.02											.02	.01	.01	.009	.007											
S. Fallow (Barley)	.12	.12		.08	.07	.05	.04				.07	.06	.04	.03												.03	.02	.01	.009	.006	.004	.004	.003									
S. Fallow (Millet)																																										
S. Fallow (Oats)	.13	.13		.09	.08	.05	.04				.08	.07	.05	.03												.03	.02	.02	.01	.007	.005	.004										
S. Fallow (Sp. Wheat	.15	.15		.12	.10	.07	.05				.08	.06	.06	.05												.04	.03	.02	.01	.009	.007											
Sunflowers	.06	.06		.04	.04	.03					.04	.04	.02	.02												.02	.01	.009	.008	.004	.003											
Winter Wheat	.06	.05			.04	.03	.03	.02	.02	.02			.03	.03	.02	.02	.01											.01	.01	.009	.009	.005	.004									

CROP TO BE PLANTED:

SPRING WHEAT

Previous Crop Wa ***(CULTIVATED)***

Corn	.05	.05			.04	.03	.02	.02	.01	.009		.04	.03	.02	.01	.01	.008										.01	.009	.008	.007	.005	.004	.003									
Corn Silage	.08	.08		.06	.05	.04					.06	.05	.04	.03											.04	.03	.02	.02	.01	.01												
Sunflowers	.06	.06		.04	.04	.03					.04	.04	.02	.02												.02	.02	.01	.01	.007	.006											

NOTE: Y2 The crop to be planted is the 2nd year after alfalfa.

TABLE 3 **C FACTORS FOR CROPLAND (Single Year)-Bismarck-(86C)-HIGH**

CROP SEQUENCE	CLEAN TILL PLOW		SPRING PLOW	MULCH TILLAGE FALL MULCH TILLAGE % COVER AFTER PLANTING							SPRING MULCH TILLAGE % COVER AFTER PLANTING							RIDGE TILL (Cultivated) % COVER AFTER PLANTING							NO-TILL % COVER AFTER PLANTING									STRIP TILL % COVER AFTER PLANTING								
	FALL	SPRING	PLANT	5	10	20	30	40	50	60	5	10	20	30	40	50	60	5	10	20	30	40	50	60	10	20	30	40	50	60	70	80	90	10	20	30	40	50	60	70	80	90
CROP TO BE PLANTED:																																										
SUMMER FALLOW																																										
Crop before / after:																																										
Alfalfa / WW																																										
Barley / Barley	.42	.36			.19	.14	.11	.08	.06	.05		.18	.14	.11	.08	.06	.05										.03	.03	.02	.02	.01	.01									
Barley / Corn	.45	.40			.20	.16	.12	.09	.07	.06		.17	.13	.10	.09	.07	.06											.02	.02	.02	.01	.01									
Barley / Millet	.33	.29			.14	.11	.08	.06	.05	.04		.11	.09	.07	.06	.05	.04											.02	.02	.01	.009	.007									
Barley / Sorghum Suda	.47	.41			.23	.18	.14	.09	.08	.06		.19	.15	.12	.09	.08	.06										.04	.04	.03	.03	.02	.01									
Barley / Sp. Wheat	.35	.30			.14	.11	.09	.06	.05	.04		.12	.09	.07	.06	.05	.04											.02	.02	.01	.009	.008									
Barley / WW	.33	.29			.13	.10	.08	.06	.05	.04		.11	.09	.07	.05	.04	.04											.02	.02	.01	.009	.007									
Corn / Corn	.59	.55		.33	.30	.29	.20	.14	.11	.09	.30	.25	.23	.19	.14	.11	.09									.05	.05	.04	.03	.03											
Corn / WW	.36	.36			.20	.19	.13	.08	.07	.05	.17	.15	.11	.10	.08	.07	.05										.03	.02	.02	.02	.01										
Corn Silage/Corn Silag	.71	.69		.63	.60	.41	.34	.29			.63	.55	.41	.34	.29										.26	.21	.18	.12													
Dry Beans / Dry Beans																																										
Flax / Flax																																										
Grain Sorg / Grain Sor	.51	.48		.30	.27	.26	.16	.14	.11	.09	.28	.23	.20	.16	.13	.10	.09									.05	.04	.03	.02											
Grain Sorg / WW	.32	.31			.20	.17	.10	.08	.07	.05	.16	.14	.10	.10	.08	.06	.05									.03	.03	.02	.02	.01	.009									
Sorg Silage/Sorg Silage																																										
Millet / Millet	.34	.34			.16	.15	.14	.08	.06	.05		.16	.11	.10	.08	.06	.05										.03	.03	.02	.02	.01	.007									
Millet / WW	.24	.23			.14	.12	.10	.07	.04	.04		.09	.07	.05	.05	.04	.03											.01	.01	.009	.008	.006									
Oats / Oats	.51	.42			.24	.18	.15	.10	.08	.07		.23	.17	.14	.10	.08	.07										.04	.03	.03	.03	.02										
Oats / Barley	.38	.33			.16	.12	.09	.07	.05	.04		.13	.10	.08	.07	.05	.04											.02	.02	.01	.01	.009									
Oats / Corn	.53	.46			.25	.19	.15	.11	.08	.08		.21	.16	.13	.11	.08	.07										.03	.03	.03	.02	.02	.01									
Oats / Millet	.39	.34			.17	.13	.10	.07	.06	.05		.14	.11	.09	.07	.06	.05											.02	.02	.02	.01	.009									
Oats / Sorg Sudan	.56	.48			.28	.21	.16	.12	.09	.08		.23	.18	.14	.12	.09	.08										.05	.05	.04	.03	.02										
Oats / Sp. Wheat	.41	.35			.18	.14	.11	.08	.06	.05		.14	.12	.09	.08	.06	.05											.02	.02	.02	.02	.01									
Potatoes / Potatoes																																										
Rapeseed / Rapeseed																																										
Rye / Rye																																										
Safflower / Safflower	.68	.67		.54	.49	.36	.31				.49	.46	.36	.31											.27	.21	.18	.10													
Safflower / WW	.35	.34		.30	.25						.30	.23													.22																
Sorg Sudan/Sorg Sudar	.70	.69		.57	.56	.45	.35	.29			.56	.52	.44	.34	.28										.27	.25	.22	.10													
Sorg Sudan / WW	.44	.44		.31	.26	.20	.19	.15	.13		.29	.24	.20	.19	.14	.11										.11	.09	.08	.04	.03	.02										
S.beans(NR)/S.beans(NR)																																										
S.beans(WR)/S.beans(WR)																																										
Sp. Wheat / Sp. Wheat	.48	.43			.24	.19	.13	.11	.09	.08		.24	.18	.13	.11	.09	.08										.04	.04	.03	.03	.02										
Sp. Wheat / Barley	.38	.33			.17	.13	.10	.07	.06	.05		.14	.11	.08	.07	.06	.05										.02	.02	.02	.01	.01	.009									
Sp. Wheat / Corn	.53	.46			.27	.20	.15	.11	.09	.08		.23	.17	.13	.11	.09	.08										.04	.03	.02	.02	.02										
Sp. Wheat / Millet	.39	.34			.18	.13	.10	.08	.06	.06		.15	.12	.09	.08	.06	.05										.03	.03	.02	.02	.01	.009									
Sp. Wheat / Sorg Sudar	.54	.47			.29	.22	.17	.12	.10	.09		.25	.19	.15	.12	.10	.08										.06	.05	.04	.03	.02										
Sp. Wheat / WW	.39	.33			.18	.13	.10	.08	.06	.06		.14	.11	.08	.07	.06	.05										.03	.03	.02	.02	.01	.009									
Sunflowers / Sunflowe	.62	.59		.44	.38	.31	.26				.42	.37	.31	.25											.11	.10	.08	.06													
W. Wheat / W. Wheat	.45	.38			.21	.16	.13	.11	.07	.06		.19	.14	.11	.09	.07											.03	.03	.02	.02	.02	.01									

NOTE: Crop before / after describes the crop before summer fallow and the crop to be planted after summer fallow.

NOTE: Y2 The crop to be planted is the 2nd year after alfalfa.

TABLE 3 **C FACTORS FOR CROPLAND (Single Year)-Bismarck-(86C)-HIGH**

CROP SEQUENCE	CLEAN TILL PLOW		SPRING PLOW	MULCH TILLAGE FALL MULCH TILLAGE % COVER AFTER PLANTING							SPRING MULCH TILLAGE % COVER AFTER PLANTING							RIDGE TILL (Cultivated) % COVER AFTER PLANTING							NO-TILL % COVER AFTER PLANTING									STRIP TILL % COVER AFTER PLANTING								
	FALL	SPRING	PLANT	5	10	20	30	40	50	60	5	10	20	30	40	50	60	5	10	20	30	40	50	60	10	20	30	40	50	60	70	80	90	10	20	30	40	50	60	70	80	90
CROP TO BE PLANTED:																																										
SUNFLOWERS																																										
Previous Crop Was:																																										
Alfalfa																																										
Barley	.21	.20			.14	.11	.08	.07	.05			.13	.11	.08	.05	.04					.07	.06							.03	.02	.02	.01	.008									
Corn	.28	.28			.19	.15	.12	.09				.19	.15	.10	.08	.07				.12	.11							.05	.04	.02	.02					.07	.06	.04	.03			
Corn Silage	.35	.35		.31							.30							.28							.20									.20								
Dry Beans																																										
Flax																																										
Grain Sorghum	.24	.24			.17	.13	.11	.08			.27	..23	.13	.09	.08					.11	.10							.03	.02					.08	.07	.04	.04				
Sorghum Silage	.34	.33		.28	.25						.28	.23	.19						.23							.12	.07															
Millet	.17	.16			.11	.08	.06	.05	.04			.11	.08	.06	.04	.03	.03			.07	.06	.05	.04				.03	.03	.02	.02	.01	.009	.005									
Oats	.25	.24			.17	.13	.10	.08	.06			.16	.13	.10	.06	.05					.10	.08						.04	.04	.03	.02	.02										
Potatoes																																										
Rapeseed																																										
Rye																																										
Safflower																																										
Sorghum/Sudan	.35	.35		.30	.27						.30	.25						.28	.25							.14	.08															
Soybeans (Narrow row	.37	.36		.30	.27						.30	.27	.20						.24	.20						.15	.12	.09	.05													
Soybeans (Wide row)	.38	.36		.30	.22						.30	.22	.20					.25	.24							.12	.10	.07	.05					.18	.14	.10						
Spring Wheat	.25	.24			.17	.13	.11	.08				.17	.13	.09	.07	.06					.10	.09						.04	.04	.03	.02	.01										
S. Fallow (Sunflower	.43	.43		.35	.31						.35	.31													.14	.10	.09															
Sunflowers																																										
Winter Wheat	.28	.26			.17	.14	.11	.08	.07			.17	.14	.10	.08	.06	.05				.10	.09								.04	.03	.03				.08	.06	.05	.04			
CROP TO BE PLANTED:																																										
CULTIVATED SUNFLOWERS																																										
Previous Crop Was:																																										
Corn	.28	.27			.19	.15	.13	.10				.19	.15	.11	.09	.07												.08	.06	.05	.04											
Spring Wheat	.25	.24			.18	.14	.11	.09	.07			.17	.13	.09	.07	.06												.06	.05	.04	.03	.03										

NOTE: Y2 The crop to be planted is the 2nd year after alfalfa.

TABLE 3 **C FACTORS FOR CROPLAND (Single Year)-Bismarck-(86C)-HIGH**

CROP SEQUENCE	CLEAN TILL PLOW		SPRING PLOW	MULCH TILLAGE FALL MULCH TILLAGE % COVER AFTER PLANTING							SPRING MULCH TILLAGE % COVER AFTER PLANTING							RIDGE TILL (Cultivated) % COVER AFTER PLANTING							NO-TILL % COVER AFTER PLANTING									STRIP TILL % COVER AFTER PLANTING								
	FALL	SPRING	PLANT	5	10	20	30	40	50	60	5	10	20	30	40	50	60	5	10	20	30	40	50	60	10	20	30	40	50	60	70	80	90	10	20	30	40	50	60	70	80	90
CROP TO BE PLANTED:																																										
			WINTER WHEAT																																							
Previous Crop Was:																																										
Alfalfa																																										
Barley	.04					.02	.01	.01	.008	.006																		.004	.003	.002	.002	.001	.001									
Corn Silage																																										
Dry Beans																																										
Flax																																										
Sorghum Silage																																										
Previous Crop Wa	.03				.02	.01	.009	.007	.005	.004																	.004	.003	.002	.002	.001	.001	.001									
Alfalfa	.05					.02	.02	.01	.009	.007																			.004	.003	.003	.001	.001									
Rapeseed																																										
Rye																																										
Sorghum/Sudan	.05			.04	.04	.03	.02	.02																		.02	.01	.01	.006	.004	.003	.002										
Spring Wheat	.05				.03	.02	.02	.01	.01	.008																		.006	.004	.004	.003	.001	.001									
S. Fallow (Barley)	.09			.05	.05	.04	.03	.02	.02																	.02	.02	.01	.008	.007	.004	.002	.002									
S. Fallow (Corn)	.12			.08	.08	.06	.04	.03	.02																	.03	.02	.02	.01	.007	.006											
S. Fallow (Corn Sil.)																																										
S. Fallow (Gr.Sorgh.)	.11			.08	.07	.05	.04	.03	.02																	.03	.02	.01	.01	.006	.005											
S. Fallow (Millet)	.08				.05	.04	.02	.02	.01	.009																.02	.01	.01	.007	.006	.003	.002	.002									
S. Fallow (Sor/Sudan	.13			.10	.09	.06	.04	.03																	.06	.04	.03	.01	.01	.009												
S. Fallow (Soybeans)																																										
S. Fallow (Sunflower)																																										
S. Fallow (S. Wheat)	.10			.07	.06	.04	.03	.02	.02																	.03	.02	.01	.008	.006	.004	.003										
S. Fallow (W. Wheat)	.11			.08	.06	.05	.03	.03																		.03	.02	.02	.01	.008	.004	.003										
Winter Wheat	.05				.03	.02	.02	.01	.009																		.008	.007	.006	.005	.004	.003	.002									
Winter Wheat Y2																																										

NOTE: Y2 The crop to be planted is the 2nd year after alfalfa.