The GLIMMIX Procedure

Model Information			
Data Set	WORK.ONETIMEA		
Response Variable	precalveBW		
Response Distribution	Gaussian		
Link Function	Identity		
Variance Function	Default		
Variance Matrix	Not blocked		
Estimation Technique	Restricted Maximum Likelihood		
Degrees of Freedom Method	Containment		

Number of Observations Read	118
Number of Observations Used	118

Dimensions	
G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z	4
Subjects (Blocks in V)	1
Max Obs per Subject	118

Optimization Information				
Optimization Technique Dual Quasi-Newton				
Parameters in Optimization	1			
Lower Boundaries	1			
Upper Boundaries	0			
Fixed Effects	Profiled			
Residual Variance	Profiled			
Starting From	Data			

Iteration History						
Iteration	Restarts	Evaluations	Objective Function	Change	Max Gradient	
0	0	4	1216.4359053		0.74632	
1	0	3	1216.4287344	0.00717084	0.198043	
2	0	2	1216.428322	0.00041240	0.02925	
3	0	2	1216.4283124	0.00000968	0.000969	
4	0	2	1216.4283123	0.0000001	4.942E-6	

Fit Statistics			
-2 Res Log Likelihood	1216.43		
AIC (smaller is better)	1220.43		
AICC (smaller is better)	1220.54		
BIC (smaller is better)	1219.20		
CAIC (smaller is better)	1221.20		
HQIC (smaller is better)	1217.73		
Generalized Chi-Square	224009.1		
Gener. Chi-Square / DF	2018.10		

Covariance Parameter Estimates			
Cov Parm	Estimate	Standard Error	

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Covariance Parameter Estimates			
Cov Parm	Estimate	Standard Error	
seasonyr	439.34	422.58	
Residual	2018.10	274.54	

Results: cows.sas

Solutions for Fixed Effects							
Effect	calfsex	cowagen	Estimate	Standard Error	DF	t Value	Pr > t
Intercept			545.13	32.7587	3	16.64	0.0005
calfsex	heifer		-1.3602	8.6019	108	-0.16	0.8747
calfsex	steer		0				
cdate			1.4366	1.9296	108	0.74	0.4582
cdate*cdate			-0.04783	0.06636	108	-0.72	0.4726
cowagen		4	-51.5386	11.5282	108	-4.47	<.0001
cowagen		5	-32.7077	10.4053	108	-3.14	0.0022
cowagen		6	0				
milkAUC			-0.02485	0.02499	108	-0.99	0.3224

Type I Tests of Fixed Effects					
Effect Num DF Den DF F Value Pr > F					
calfsex	1	108	0.14	0.7050	
cdate	1	108	0.00	0.9893	
cdate*cdate	1	108	0.68	0.4105	
cowagen	2	108	10.36	<.0001	
milkAUC	1	108	0.99	0.3224	

Model Information			
Data Set	WORK.ONETIMEA		
Response Variable	prebreedBW		
Response Distribution	Gaussian		
Link Function	Identity		
Variance Function	Default		
Variance Matrix	Not blocked		
Estimation Technique	Restricted Maximum Likelihood		
Degrees of Freedom Method	Containment		

Number of Observations Read	118
Number of Observations Used	118

Dimensions		
G-side Cov. Parameters	1	
R-side Cov. Parameters	1	
Columns in X	9	
Columns in Z		
Subjects (Blocks in V)	1	
Max Obs per Subject	118	

Optimization Information				
Optimization Technique Dual Quasi-Newto				
Parameters in Optimization	1			
Lower Boundaries	1			
Upper Boundaries	0			

Optimization Information		
Fixed Effects Profiled		
Residual Variance Profiled		
Starting From Data		

	Iteration History					
Iteration	Restarts	Evaluations	Objective Function	Change	Max Gradient	
0	0	4	1231.6431469		1.109588	
1	0	3	1231.5904555	0.05269133	0.308635	
2	0	2	1231.5813402	0.00911531	0.116453	
3	0	2	1231.5801091	0.00123110	0.023359	
4	0	2	1231.5800624	0.00004668	0.001391	
5	0	2	1231.5800623	0.00000017	0.000015	

Fit Statistics			
-2 Res Log Likelihood	1231.58		
AIC (smaller is better)	1235.58		
AICC (smaller is better)	1235.69		
BIC (smaller is better)	1234.35		
CAIC (smaller is better)	1236.35		
HQIC (smaller is better)	1232.89		
Generalized Chi-Square	249876.5		
Gener. Chi-Square / DF	2251.14		

Covariance Parameter Estimates			
Cov Parm Estimate Standard			
seasonyr	1504.72	1310.96	
Residual	2251.14	306.38	

	Solutions for Fixed Effects						
Effect	calfsex	cowagen	Estimate	Standard Error	DF	t Value	Pr > t
Intercept			553.69	38.3869	3	14.42	0.0007
calfsex	heifer		6.2031	9.0882	108	0.68	0.4964
calfsex	steer		0				
cdate			-0.00484	2.0406	108	-0.00	0.9981
cdate*cdate			0.007232	0.07026	108	0.10	0.9182
cowagen		4	-55.3266	12.2839	108	-4.50	<.0001
cowagen		5	-36.9583	11.0064	108	-3.36	0.0011
cowagen		6	0				
milkAUC			-0.03637	0.02677	108	-1.36	0.1771

Type I Tests of Fixed Effects				
Effect	Num DF Den DF F Value			Pr > F
calfsex	1	108	1.47	0.2279
cdate	1	108	0.05	0.8282
cdate*cdate	1	108	0.00	0.9737
cowagen	2	108	10.71	<.0001
milkAUC	1	108	1.85	0.1771

Model Information		
Data Set WORK.ONETIMEA		
Response Variable	breedBW	
Response Distribution	Gaussian	
Link Function	Identity	
Variance Function	Default	
Variance Matrix	Not blocked	
Estimation Technique	Restricted Maximum Likelihood	
Degrees of Freedom Method	Containment	

Number of Observations Read	118
Number of Observations Used	118

Dimensions	
G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z	4
Subjects (Blocks in V)	1
Max Obs per Subject	118

Optimization Information		
Optimization Technique Dual Quasi-Newt		
Parameters in Optimization	1	
Lower Boundaries	1	
Upper Boundaries	0	
Fixed Effects	Profiled	
Residual Variance	Profiled	
Starting From	Data	

	Iteration History						
Iteration	Restarts	Objective Function	Change	Max Gradient			
0	0	4	1245.3821753		2.753712		
1	0	5	1245.3631968	0.01897846	2.314498		
2	0	2	1245.3526255	0.01057129	0.5958		
3	0	2	1245.3516121	0.00101343	0.100419		
4	0	2	1245.3515843	0.00002780	0.005525		
5	0	2	1245.3515842	0.00000008	0.000048		

Fit Statistics				
-2 Res Log Likelihood	1245.35			
AIC (smaller is better)	1249.35			
AICC (smaller is better)	1249.46			
BIC (smaller is better)	1248.12			
CAIC (smaller is better)	1250.12			
HQIC (smaller is better)	1246.66			
Generalized Chi-Square	296079.2			
Gener. Chi-Square / DF	2667.38			

Covariance Parameter Estimates					
Cov Parm	Estimate	Standard Error			
seasonyr	239.72	275.64			

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Covariance Parameter Estimates						
Cov Parm	Estimate	Standard Error				
Residual	2667.38	362.62				

Results: cows.sas

	Solutions for Fixed Effects						
Effect	calfsex	cowagen	Estimate	Standard Error	DF	t Value	Pr > t
Intercept			585.42	35.9735	3	16.27	0.0005
calfsex	heifer		14.5751	9.8839	108	1.47	0.1432
calfsex	steer		0				
cdate			-1.3222	2.2141	108	-0.60	0.5516
cdate*cdate			0.05310	0.07599	108	0.70	0.4862
cowagen		4	-60.9165	13.0813	108	-4.66	<.0001
cowagen		5	-38.9596	11.9356	108	-3.26	0.0015
cowagen		6	0				
milkAUC			-0.04534	0.02814	108	-1.61	0.1100

Type I Tests of Fixed Effects						
Effect	Num DF	Den DF	F Value	Pr > F		
calfsex	1	108	4.16	0.0438		
cdate	1	108	0.02	0.8786		
cdate*cdate	1	108	0.44	0.5088		
cowagen	2	108	11.29	<.0001		
milkAUC	1	108	2.60	0.1100		

Model Information			
Data Set	WORK.ONETIMEA		
Response Variable	weanBW		
Response Distribution	Gaussian		
Link Function	Identity		
Variance Function	Default		
Variance Matrix	Not blocked		
Estimation Technique	Restricted Maximum Likelihood		
Degrees of Freedom Method	Containment		

Number of Observations Read Number of Observations Used	118
Number of Observations Used	118

Dimensions	
G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z	4
Subjects (Blocks in V)	1
Max Obs per Subject	118

Optimization Information			
Optimization Technique Dual Quasi-Newto			
Parameters in Optimization	1		
Lower Boundaries	1		
Upper Boundaries	0		
Fixed Effects	Profiled		

Optimization Information			
Residual Variance	Profiled		
Starting From	Data		

	Iteration History					
Iteration Restarts Evaluations Objective Function Characteristics Char					Max Gradient	
0	0	4	1241.6804339		0.084264	
1	0	4	1241.6804119	0.00002192	0.050129	
2	0	2	1241.6804003	0.00001164	0.000474	
3	0	2	1241.6804003	0.00000000	2.632E-6	

Convergence criterion (GCONV=1E-8) satisfied.

Fit Statistics				
-2 Res Log Likelihood	1241.68			
AIC (smaller is better)	1245.68			
AICC (smaller is better)	1245.79			
BIC (smaller is better)	1244.45			
CAIC (smaller is better)	1246.45			
HQIC (smaller is better)	1242.99			
Generalized Chi-Square	284610.7			
Gener. Chi-Square / DF	2564.06			

Covariance Parameter Estimates				
Cov Parm Estimate Standard Error				
seasonyr	320.86	345.91		
Residual	2564.06	348.84		

Solutions for Fixed Effects							
Effect	calfsex	cowagen	Estimate	Standard Error	DF	t Value	Pr > t
Intercept			561.45	35.8100	3	15.68	0.0006
calfsex	heifer		1.2513	9.6929	108	0.13	0.8975
calfsex	steer		0				
cdate			-0.2499	2.1726	108	-0.12	0.9086
cdate*cdate			-0.00089	0.07463	108	-0.01	0.9905
cowagen		4	-46.0574	12.8968	108	-3.57	0.0005
cowagen		5	-28.0552	11.7134	108	-2.40	0.0183
cowagen		6	0				
milkAUC			-0.04162	0.02784	108	-1.49	0.1378

Type I Tests of Fixed Effects				
Effect	Num DF Den DF F Value Pr >			
calfsex	1	108	0.43	0.5119
cdate	1	108	0.16	0.6901
cdate*cdate	1	108	0.00	0.9935
cowagen	2	108	6.61	0.0020
milkAUC	1	108	2.23	0.1378

Model Information		
Data Set	WORK.ONETIMEA	

Model Information			
Response Variable prebreedBWchange			
Response Distribution	Gaussian		
Link Function	Identity		
Variance Function	Default		
Variance Matrix	Not blocked		
Estimation Technique	Restricted Maximum Likelihood		
Degrees of Freedom Method	Containment		

Number of Observations Read	118
Number of Observations Used	118

Dimensions	
Dimensions	
G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z	4
Subjects (Blocks in V)	1
Max Obs per Subject	118

Optimization Information			
Optimization Technique Dual Quasi-Newto			
Parameters in Optimization	1		
Lower Boundaries	1		
Upper Boundaries	0		
Fixed Effects	Profiled		
Residual Variance	Profiled		
Starting From	Data		

	Iteration History				
Iteration	Restarts	Evaluations	Objective Function	Change	Max Gradient
0	0	4	1104.3804461		0.095998
1	0	2	1104.3564226	0.02402353	0.00667
2	0	2	1104.3562718	0.00015084	0.001439
3	0	2	1104.3562642	0.00000753	0.000029
4	0	2	1104.3562642	0.00000000	1.299E-7

Fit Statistics				
-2 Res Log Likelihood 1104				
AIC (smaller is better)	1108.36			
AICC (smaller is better)	1108.47			
BIC (smaller is better)	1107.13			
CAIC (smaller is better)	1109.13			
HQIC (smaller is better)	1105.66			
Generalized Chi-Square	75503.76			
Gener. Chi-Square / DF	680.21			

Covariance Parameter Estimates				
Cov Parm	Estimate	Standard Error		
seasonyr	3115.55	2566.87		
Residual	680.21	92.5652		

Solutions for Fixed Effects							
Effect	calfsex	cowagen	Estimate	Standard Error	DF	t Value	Pr > t
Intercept			7.8494	33.3760	3	0.24	0.8292
calfsex	heifer		6.9773	4.9966	108	1.40	0.1655
calfsex	steer		0				
cdate			-1.4167	1.1224	108	-1.26	0.2096
cdate*cdate			0.04736	0.03867	108	1.22	0.2233
cowagen		4	-3.3252	6.7822	108	-0.49	0.6249
cowagen		5	-4.4377	6.0548	108	-0.73	0.4652
cowagen		6	0				
milkAUC			-0.00941	0.01482	108	-0.64	0.5266

Type I Tests of Fixed Effects								
Effect Num DF Den DF F Value Pr >								
calfsex	1	108	2.44	0.1213				
cdate	1	108	0.02	0.8913				
cdate*cdate	1	108	1.59	0.2105				
cowagen	2	108	0.23	0.7942				
milkAUC	1	108	0.40	0.5266				

Model Information				
Data Set	WORK.ONETIMEA			
Response Variable	breedBWchange			
Response Distribution	Gaussian			
Link Function	Identity			
Variance Function	Default			
Variance Matrix	Not blocked			
Estimation Technique	Restricted Maximum Likelihood			
Degrees of Freedom Method	Containment			

Number of Observations Read	118
Number of Observations Used	118

Dimensions	
G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z	4
Subjects (Blocks in V)	1
Max Obs per Subject	118

Optimization Information					
Optimization Technique Dual Quasi-Ne					
Parameters in Optimization	1				
Lower Boundaries	1				
Upper Boundaries	0				
Fixed Effects	Profiled				
Residual Variance	Profiled				
Starting From	Data				

	Iteration History		
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		Iteration Hi Stbje ctive			Max
Iteration	Restarts	Evaluations	Function	Change	Gradient

Iteration	Restarts	Evaluations	Objective Function	Change	Max Gradient
0	0	4	1112.6612328		0.225576
1	0	2	1112.5910861	0.07014663	0.025715
2	0	2	1112.5907387	0.00034742	0.015743
3	0	2	1112.5905551	0.00018357	0.000589
4	0	2	1112.5905549	0.00000026	0.000013

Convergence criterion (GCONV=1E-8) satisfied.

Fit Statistics					
-2 Res Log Likelihood 1112.5					
AIC (smaller is better)	1116.59				
AICC (smaller is better)	1116.70				
BIC (smaller is better)	1115.36				
CAIC (smaller is better)	1117.36				
HQIC (smaller is better)	1113.90				
Generalized Chi-Square	83053.10				
Gener. Chi-Square / DF	748.23				

Covariance Parameter Estimates					
Cov Parm Estimate E					
seasonyr	1552.08	1290.29			
Residual	748.23	101.82			

	Solutions for Fixed Effects							
Effect calfsex		cowagen	Estimate	Standard Error	DF	t Value	Pr > t	
Intercept			43.6479	27.4911	3	1.59	0.2106	
calfsex	heifer		14.8697	5.2402	108	2.84	0.0054	
calfsex	steer		0					
cdate			-2.7017	1.1770	108	-2.30	0.0236	
cdate*cdate			0.08875	0.04055	108	2.19	0.0308	
cowagen		4	-10.5993	7.1064	108	-1.49	0.1387	
cowagen		5	-7.4900	6.3492	108	-1.18	0.2407	
cowagen		6	0					
milkAUC			-0.02069	0.01552	108	-1.33	0.1852	

Type I Tests of Fixed Effects									
Effect	Num DF Den DF F Value Pr > F								
calfsex	1	108	10.42	0.0017					
cdate	1	108	0.20	0.6547					
cdate*cdate	1	108	5.21	0.0244					
cowagen	2	108	1.21	0.3018					
milkAUC	1	108	1.78	0.1852					

Model Information					
Data Set WORK.ONETIMEA					
Response Variable	weanBWchange				
Response Distribution Gaussian					

Model Information				
Link Function	Identity			
Variance Function	Default			
Variance Matrix	Not blocked			
Estimation Technique	Restricted Maximum Likelihood			
Degrees of Freedom Method Containment				

Number of Observations Read	118
Number of Observations Used	118

Dimensions					
G-side Cov. Parameters	1				
R-side Cov. Parameters	1				
Columns in X	9				
Columns in Z	4				
Subjects (Blocks in V)	1				
Max Obs per Subject	118				

Optimization Information					
Optimization Technique Dual Quasi-Newto					
Parameters in Optimization	1				
Lower Boundaries	1				
Upper Boundaries	0				
Fixed Effects	Profiled				
Residual Variance	Profiled				
Starting From	Data				

Iteration History							
Iteration	Restarts	Evaluations	Objective Function	Change	Max Gradient		
0	0	4	1091.9882915		0.035665		
1	0	3	1091.9863838	0.00190779	0.003583		
2	0	2	1091.986366	0.00001772	0.00027		
3	0	2	1091.9863659	0.0000010	1.87E-6		

Fit Statistics					
-2 Res Log Likelihood	1091.99				
AIC (smaller is better)	1095.99				
AICC (smaller is better)	1096.10				
BIC (smaller is better)	1094.76				
CAIC (smaller is better)	1096.76				
HQIC (smaller is better)	1093.29				
Generalized Chi-Square	68439.18				
Gener. Chi-Square / DF	616.57				

Covariance Parameter Estimates						
Cov Parm Estimate Standard Error						
seasonyr	1722.67	1426.47				
Residual	616.57	83.9026				

Solutions for Fixed Effects							
Effect	calfsex	cowagen	Estimate	Standard Error	DF	t Value	Pr > t

	Solutions for Fixed Effects							
Effect	calfsex	cowagen	Estimate	Standard Error	DF	t Value	Pr > t	
Intercept			22.5732	27.0929	3	0.83	0.4659	
calfsex	heifer		1.8548	4.7570	108	0.39	0.6974	
calfsex	steer		0					
cdate			-1.4767	1.0685	108	-1.38	0.1698	
cdate*cdate			0.02843	0.03681	108	0.77	0.4417	
cowagen		4	3.8794	6.4539	108	0.60	0.5490	
cowagen		5	3.6508	5.7641	108	0.63	0.5278	
cowagen		6	0					
milkAUC			-0.02048	0.01410	108	-1.45	0.1491	

Type I Tests of Fixed Effects								
Effect	ffect Num DF Den DF F Value Pr >							
calfsex	1	108	0.55	0.4605				
cdate	1	108	2.74	0.1010				
cdate*cdate	1	108	0.97	0.3277				
cowagen	2	108	0.37	0.6894				
milkAUC	1	108	2.11	0.1491				

Model Information		
Data Set	WORK.ONETIMEA	
Response Variable	precalveBCS	
Response Distribution	Gaussian	
Link Function	Identity	
Variance Function	Default	
Variance Matrix	Not blocked	
Estimation Technique	Restricted Maximum Likelihood	
Degrees of Freedom Method	Containment	

Number of Observations Read	118
Number of Observations Used	118

Dimensions	
G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z	4
Subjects (Blocks in V)	1
Max Obs per Subject	118

Optimization Information		
Optimization Technique Dual Quasi-Newto		
Parameters in Optimization	1	
Lower Boundaries	1	
Upper Boundaries	0	
Fixed Effects	Profiled	
Residual Variance	Profiled	
Starting From	Data	

Iteration History

Ì			Iteration Hi Ωbjy ctive			Max	
1	Iteration	Restarts	Evaluations	Function	Change	Gradient	

Iteration	Restarts	Evaluations	Objective Function	Change	Max Gradient
0	0	4	168.95420638		2.950762
1	0	5	168.94321181	0.01099457	2.779484
2	0	2	168.93217209	0.01103972	0.345957
3	0	2	168.93195098	0.00022112	0.056026
4	0	2	168.9319452	0.00000578	0.001412
5	0	2	168.93194519	0.00000000	5.583E-6

Convergence criterion (GCONV=1E-8) satisfied.

Fit Statistics		
-2 Res Log Likelihood	168.93	
AIC (smaller is better)	172.93	
AICC (smaller is better)	173.04	
BIC (smaller is better)	171.70	
CAIC (smaller is better)	173.70	
HQIC (smaller is better)	170.24	
Generalized Chi-Square	18.29	
Gener. Chi-Square / DF	0.16	

Covariance Parameter Estimates			
Cov Parm Estimate Standard			
seasonyr	0.01094	0.01395	
Residual	0.1648	0.02240	

	Solutions for Fixed Effects						
Effect	calfsex	cowagen	Estimate	Standard Error	DF	t Value	Pr > t
Intercept			5.0942	0.2792	3	18.25	0.0004
calfsex	heifer		-0.05759	0.07766	108	-0.74	0.4599
calfsex	steer		0				
cdate			0.002777	0.01739	108	0.16	0.8734
cdate*cdate			0.000075	0.000596	108	0.13	0.9000
cowagen		4	0.07874	0.1022	108	0.77	0.4429
cowagen		5	-0.06878	0.09371	108	-0.73	0.4645
cowagen		6	0				
milkAUC			0.000013	0.000219	108	0.06	0.9531

Type I Tests of Fixed Effects						
Effect	Effect Num DF Den DF F Value Pr >					
calfsex	1	108	1.05	0.3071		
cdate	1	108	1.11	0.2940		
cdate*cdate	1	108	0.00	0.9442		
cowagen	2	108	1.26	0.2877		
milkAUC	1	108	0.00	0.9531		

Model Information		
Data Set WORK.ONETIMEA		
Response Variable	prebreedBCS	

Model Information		
Response Distribution	Gaussian	
Link Function	Identity	
Variance Function	Default	
Variance Matrix	Not blocked	
Estimation Technique	Restricted Maximum Likelihood	
Degrees of Freedom Method	Containment	

Number of Observations Read	118
Number of Observations Used	118

Dimensions	
G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z	4
Subjects (Blocks in V)	1
Max Obs per Subject	118

Optimization Information				
Optimization Technique Dual Quasi-Newtor				
Parameters in Optimization	1			
Lower Boundaries	1			
Upper Boundaries	0			
Fixed Effects	Profiled			
Residual Variance	Profiled			
Starting From	Data			

Iteration History					
Iteration	Iteration Restarts Evaluations Function Change				Max Gradient
0	0	4	144.02174809		0.149997
1	0	3	144.00547663	0.01627146	0.027332
2	0	2	144.00506668	0.00040995	0.006906
3	0	2	144.00504039	0.00002628	0.000238
4	0	2	144.00504036	0.0000003	1.983E-6

Convergence criterion (GCONV=1E-8) satisfied.

Fit Statistics			
-2 Res Log Likelihood	144.01		
AIC (smaller is better)	148.01		
AICC (smaller is better)	148.12		
BIC (smaller is better)	146.78		
CAIC (smaller is better)	148.78		
HQIC (smaller is better)	145.31		
Generalized Chi-Square	13.54		
Gener. Chi-Square / DF	0.12		

Covariance Parameter Estimates				
Cov Parm Estimate Standard Error				
seasonyr	0.2154	0.1797		
Residual	0.1220	0.01660		

Solutions for Fixed Effects

		Solutio	ns for Fixed	Effect ard			
Effect	calfsex	cowagen	Estimate	Error	DF	t Value	Pr > t
Effect	calfsex	cowagen	Estimate	Standard Error	DF	t Value	Pr > t
Intercept			5.7046	0.3373	3	16.91	0.0005
calfsex	heifer		0.03968	0.06690	108	0.59	0.5543
calfsex	steer		0				
cdate			-0.00837	0.01503	108	-0.56	0.5785
cdate*cdate			0.000213	0.000518	108	0.41	0.6817
cowagen		4	-0.1122	0.09070	108	-1.24	0.2189
cowagen		5	-0.1084	0.08106	108	-1.34	0.1840
cowagen		6	0				
milkAUC			-0.00013	0.000198	108	-0.65	0.5175

Type I Tests of Fixed Effects						
Effect	t Num DF Den DF F Value Pr > F					
calfsex	1	108	0.82	0.3683		
cdate	1	108	0.16	0.6883		
cdate*cdate	1	108	0.16	0.6907		
cowagen	2	108	1.03	0.3594		
milkAUC	1	108	0.42	0.5175		

Model Information			
Data Set WORK.ONETIMEA			
Response Variable	breedBCS		
Response Distribution	Gaussian		
Link Function	Identity		
Variance Function	Default		
Variance Matrix	Not blocked		
Estimation Technique	Restricted Maximum Likelihood		
Degrees of Freedom Method	Containment		

Number of Observations Read	118
Number of Observations Used	118

Dimensions	
G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z	4
Subjects (Blocks in V)	1
Max Obs per Subject	118

Optimization Information		
Optimization Technique	Dual Quasi-Newton	
Parameters in Optimization	1	
Lower Boundaries	1	
Upper Boundaries	0	
Fixed Effects	Profiled	
Residual Variance	Profiled	
Starting From	Data	

		Iterati	on Hi stojy ctive		Max
Iteration	Restarts	Evaluations	Function	Change	Gradient
Iteration	Restarts	Evaluations	Objective Function	Change	Max Gradient
0	0	4	115.0080239		0.819868
1	0	4	115.00675397	0.00126993	0.022169
2	0	2	115.00675311	0.00000086	0.001344
3	0	2	115.00675311	0.00000000	2.047E-6

Convergence criterion (GCONV=1E-8) satisfied.

Fit Statistics		
-2 Res Log Likelihood	115.01	
AIC (smaller is better)	119.01	
AICC (smaller is better)	119.12	
BIC (smaller is better)	117.78	
CAIC (smaller is better)	119.78	
HQIC (smaller is better)	116.31	
Generalized Chi-Square	11.27	
Gener. Chi-Square / DF	0.10	

Covariance Parameter Estimates			
Cov Parm	Estimate	Standard Error	
seasonyr	0.006233	0.008391	
Residual	0.1015	0.01380	

	Solutions for Fixed Effects						
Effect	calfsex	cowagen	Estimate	Standard Error	DF	t Value	Pr > t
Intercept			5.9907	0.2185	3	27.42	0.0001
calfsex	heifer		0.08262	0.06095	108	1.36	0.1780
calfsex	steer		0				
cdate			-0.03078	0.01364	108	-2.26	0.0261
cdate*cdate			0.000967	0.000468	108	2.07	0.0410
cowagen		4	-0.1868	0.08012	108	-2.33	0.0216
cowagen		5	-0.1513	0.07353	108	-2.06	0.0421
cowagen		6	0				
milkAUC			-0.00010	0.000172	108	-0.60	0.5516

Type I Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
calfsex	1	108	3.62	0.0597
cdate	1	108	0.72	0.3989
cdate*cdate	1	108	4.06	0.0465
cowagen	2	108	3.13	0.0475
milkAUC	1	108	0.36	0.5516

Model Information		
Data Set	WORK.ONETIMEA	
Response Variable	weanBCS	
Response Distribution	Gaussian	
Link Function	Identity	

Model Information		
Variance Function	Default	
Variance Matrix	Not blocked	
Estimation Technique	Restricted Maximum Likelihood	
Degrees of Freedom Method	Containment	

Number of Observations Read	118
Number of Observations Used	118

Dimensions	
G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z	4
Subjects (Blocks in V)	1
Max Obs per Subject	118

Optimization Information			
Optimization Technique	Dual Quasi-Newton		
Parameters in Optimization	1		
Lower Boundaries	1		
Upper Boundaries	0		
Fixed Effects	Profiled		
Residual Variance	Profiled		
Starting From	Data		

Iteration History							
Iteration	Restarts	Evaluations	Objective Function	Change	Max Gradient		
0	0	4	180.83045271		0.138975		
1	0	4	180.83009898	0.00035373	0.012224		
2	0	2	180.83009633	0.00000265	0.000385		
3	0	2	180.83009632	0.00000000	1.028E-6		

Fit Statistics						
-2 Res Log Likelihood	180.83					
AIC (smaller is better)	184.83					
AICC (smaller is better)	184.94					
BIC (smaller is better)	183.60					
CAIC (smaller is better)	185.60					
HQIC (smaller is better)	182.14					
Generalized Chi-Square	19.77					
Gener. Chi-Square / DF	0.18					

Covariance Parameter Estimates					
Cov Parm	Estimate	Standard Error			
seasonyr	0.04980	0.04675			
Residual	0.1781	0.02423			

Solutions for Fixed Effects								
Effect calfsex cowagen Estimate Error DF t Value Pr >							Pr > t	
Intercept			5.9302	0.3130	3	18.94	0.0003	

Solutions for Fixed Effects								
Effect	calfsex	cowagen	Estimate	Standard Error	DF	t Value	Pr > t	
calfsex	heifer		-0.03224	0.08081	108	-0.40	0.6907	
calfsex	steer		0					
cdate			0.008288	0.01813	108	0.46	0.6485	
cdate*cdate			-0.00046	0.000624	108	-0.74	0.4594	
cowagen		4	-0.2179	0.1086	108	-2.01	0.0473	
cowagen		5	-0.02670	0.09779	108	-0.27	0.7854	
cowagen		6	0					
milkAUC			-0.00058	0.000236	108	-2.45	0.0157	

Type I Tests of Fixed Effects						
Effect	Num DF	Den DF	F Value	Pr > F		
calfsex	1	108	0.01	0.9422		
cdate	1	108	0.44	0.5105		
cdate*cdate	1	108	0.25	0.6194		
cowagen	2	108	3.26	0.0421		
milkAUC	1	108	6.02	0.0157		

Model Information				
Data Set	WORK.ONETIMEA			
Response Variable	calfbirth			
Response Distribution	Gaussian			
Link Function	Identity			
Variance Function	Default			
Variance Matrix	Not blocked			
Estimation Technique	Restricted Maximum Likelihood			
Degrees of Freedom Method	Containment			

Number of Observations Read	118
Number of Observations Used	118

Dimensions	
G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z	4
Subjects (Blocks in V)	1
Max Obs per Subject	118

Optimization Information				
Optimization Technique	Dual Quasi-Newton			
Parameters in Optimization	1			
Lower Boundaries	1			
Upper Boundaries	0			
Fixed Effects	Profiled			
Residual Variance	Profiled			
Starting From	Data			

Iteration History						
Iteration	Restarts	Evaluations	Objective Function	Change	Max Gradient	

Iteration History						
	Iteration Restarts		Evaluations	Objective Function	Change	Max Gradient
	0	0	4	669.93417703		0

Convergence criterion (ABSGCONV=0.00001) satisfied.

Estimated G matrix is not positive definite.

Fit Statistics			
-2 Res Log Likelihood	669.93		
AIC (smaller is better)	671.93		
AICC (smaller is better)	671.97		
BIC (smaller is better)	671.32		
CAIC (smaller is better)	672.32		
HQIC (smaller is better)	670.59		
Generalized Chi-Square	1712.72		
Gener. Chi-Square / DF	15.43		

Covariance Parameter Estimates				
Cov Parm Estimate Standard				
seasonyr	0			
Residual	15.4299	2.0712		

Solutions for Fixed Effects							
Effect	calfsex	cowagen	Estimate	Standard Error	DF	t Value	Pr > t
Intercept			36.4042	2.5120	3	14.49	0.0007
calfsex	heifer		-2.2936	0.7498	108	-3.06	0.0028
calfsex	steer		0				
cdate			0.2371	0.1671	108	1.42	0.1588
cdate*cdate			-0.00322	0.005684	108	-0.57	0.5717
cowagen		4	-1.4925	0.9448	108	-1.58	0.1171
cowagen		5	-0.6989	0.8995	108	-0.78	0.4389
cowagen		6	0				
milkAUC			-0.00223	0.001966	108	-1.14	0.2584

Type I Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
calfsex	1	108	13.52	0.0004
cdate	1	108	7.62	0.0068
cdate*cdate	1	108	0.26	0.6121
cowagen	2	108	1.38	0.2555
milkAUC	1	108	1.29	0.2584

Model Information			
Data Set WORK.ONETIMEA			
Response Variable	calf30		
Response Distribution	Gaussian		
Link Function	Identity		
Variance Function	Default		
Variance Matrix	Not blocked		
Estimation Technique	Restricted Maximum Likelihood		

Model Information		
Degrees of Freedom Method	Containment	

Number of Observations Read	118
Number of Observations Used	118

Dimensions	
G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z	4
Subjects (Blocks in V)	1
Max Obs per Subject	118

Optimization Information			
Optimization Technique Dual Quasi-Newto			
Parameters in Optimization	1		
Lower Boundaries	1		
Upper Boundaries	0		
Fixed Effects	Profiled		
Residual Variance	Profiled		
Starting From	Data		

	Iteration History					
Iteration	Restarts	Evaluations	Objective Function	Change	Max Gradient	
0	0	4	845.09209232		0.013907	
1	0	3	845.09172284	0.00036948	0.000299	
2	0	2	845.09172266	0.0000018	9.24E-6	

Fit Statistics			
-2 Res Log Likelihood	845.09		
AIC (smaller is better)	849.09		
AICC (smaller is better)	849.20		
BIC (smaller is better)	847.86		
CAIC (smaller is better)	849.86		
HQIC (smaller is better)	846.40		
Generalized Chi-Square	7364.47		
Gener. Chi-Square / DF	66.35		

Covariance Parameter Estimates			
Cov Parm Estimate Standard Error			
seasonyr	223.62	184.78	
Residual	66.3466	9.0285	

Solutions for Fixed Effects								
Effect	calfsex	cowagen	Estimate	Standard Error	DF	t Value	Pr > t	
Intercept			63.3489	9.4109	3	6.73	0.0067	
calfsex	heifer		-2.8964	1.5605	108	-1.86	0.0662	
calfsex	steer		0					
cdate			-0.02561	0.3505	108	-0.07	0.9419	
cdate*cdate			-0.01875	0.01208	108	-1.55	0.1235	

Solutions for Fixed Effects								
Effect	calfsex	cowagen	Estimate	Standard Error	DF	t Value	Pr > t	
cowagen		4	-5.1836	2.1175	108	-2.45	0.0160	
cowagen		5	-0.3367	1.8909	108	-0.18	0.8590	
cowagen		6	0					
milkAUC			0.01808	0.004626	108	3.91	0.0002	

Type I Tests of Fixed Effects							
Effect	Num DF	Den DF	F Value	Pr > F			
calfsex	1	108	0.10	0.7568			
cdate	1	108	31.61	<.0001			
cdate*cdate	1	108	4.04	0.0469			
cowagen	2	108	2.66	0.0747			
milkAUC	1	108	15.27	0.0002			

Model Information				
Data Set	WORK.ONETIMEA			
Response Variable	calf60			
Response Distribution	Gaussian			
Link Function	Identity			
Variance Function	Default			
Variance Matrix	Not blocked			
Estimation Technique	Restricted Maximum Likelihood			
Degrees of Freedom Method	Containment			

Number of Observations Read	118
Number of Observations Used	118

Dimensions	
G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z	4
Subjects (Blocks in V)	1
Max Obs per Subject	118

Optimization Information					
Optimization Technique	Dual Quasi-Newton				
Parameters in Optimization	1				
Lower Boundaries	1				
Upper Boundaries	0				
Fixed Effects	Profiled				
Residual Variance	Profiled				
Starting From	Data				

Iteration History							
Iteration	Restarts	Evaluations	Objective Function	Change	Max Gradient		
0	0	4	882.75807409		0.087475		
1	0	2	882.73746506	0.02060903	0.014606		
2	0	2	882.73708726	0.00037781	0.00379		
3	0	2	882.73705833	0.00002892	0.000124		

		Iterati	on History		
Iteration	Restarts	Evaluations	Objective Function	Change	Max Gradient
4	0	2	882.7370583	0.00000003	1.094E-6

Convergence criterion (GCONV=1E-8) satisfied.

Fit Statistics				
-2 Res Log Likelihood	882.74			
AIC (smaller is better)	886.74			
AICC (smaller is better)	886.85			
BIC (smaller is better)	885.51			
CAIC (smaller is better)	887.51			
HQIC (smaller is better)	884.04			
Generalized Chi-Square	10337.82			
Gener. Chi-Square / DF	93.13			

Covariance Parameter Estimates					
Cov Parm	Estimate	Standard Error			
seasonyr	313.98	259.32			
Residual	93.1335	12.6736			

Solutions for Fixed Effects							
Effect	calfsex	cowagen	Estimate	Standard Error	DF	t Value	Pr > t
Intercept			84.0945	11.1508	3	7.54	0.0048
calfsex	heifer		-4.7840	1.8488	108	-2.59	0.0110
calfsex	steer		0				
cdate			-0.3535	0.4153	108	-0.85	0.3966
cdate*cdate			-0.01091	0.01431	108	-0.76	0.4476
cowagen		4	-5.9602	2.5089	108	-2.38	0.0193
cowagen		5	0.2494	2.2403	108	0.11	0.9116
cowagen		6	0				
milkAUC			0.02318	0.005481	108	4.23	<.0001

Type I Tests of Fixed Effects						
Effect	Num DF	Den DF	F Value	Pr > F		
calfsex	1	108	1.16	0.2844		
cdate	1	108	33.14	<.0001		
cdate*cdate	1	108	1.51	0.2223		
cowagen	2	108	2.62	0.0777		
milkAUC	1	108	17.89	<.0001		

Model Information				
Data Set	WORK.ONETIMEA			
Response Variable	calf90			
Response Distribution	Gaussian			
Link Function	Identity			
Variance Function	Default			
Variance Matrix	Not blocked			
Estimation Technique	Restricted Maximum Likelihood			
Degrees of Freedom Method	Containment			

Number of Observations Read	118
Number of Observations Used	118

Dimensions					
G-side Cov. Parameters	1				
R-side Cov. Parameters	1				
Columns in X	9				
Columns in Z	4				
Subjects (Blocks in V)	1				
Max Obs per Subject	118				

Optimization Information				
Optimization Technique	Dual Quasi-Newton			
Parameters in Optimization	1			
Lower Boundaries	1			
Upper Boundaries	0			
Fixed Effects	Profiled			
Residual Variance	Profiled			
Starting From	Data			

Iteration History						
Iteration	Restarts	Evaluations	Objective Function	Change	Max Gradient	
0	0	4	936.64904943		0.224201	
1	0	3	936.62777827	0.02127116	0.063109	
2	0	2	936.62650688	0.00127139	0.019865	
3	0	2	936.62638298	0.00012390	0.001226	
4	0	2	936.6263825	0.00000049	0.000022	

Fit Statistics	
Fit Statistics	ı
-2 Res Log Likelihood	936.63
AIC (smaller is better)	940.63
AICC (smaller is better)	940.74
BIC (smaller is better)	939.40
CAIC (smaller is better)	941.40
HQIC (smaller is better)	937.93
Generalized Chi-Square	17216.02
Gener. Chi-Square / DF	155.10

Covariance Parameter Estimates					
Cov Parm Estimate Error					
seasonyr	207.01	173.90			
Residual	155.10	21.1049			

Solutions for Fixed Effects							
Effect	calfsex	cowagen	Estimate	Standard Error	DF	t Value	Pr > t
Intercept			103.07	11.3054	3	9.12	0.0028
calfsex	heifer		-6.0944	2.3857	108	-2.55	0.0120
calfsex	steer		0				
cdate			-0.4486	0.5358	108	-0.84	0.4043
cdate*cdate			-0.00289	0.01846	108	-0.16	0.8760
cowagen		4	-6.3830	3.2324	108	-1.97	0.0509

	Solutions for Fixed Effects							
Effect	calfsex	cowagen	Estimate	Standard Error	DF	t Value	Pr > t	
cowagen		5	1.3258	2.8903	108	0.46	0.6474	
cowagen		6	0					
milkAUC			0.03419	0.007055	108	4.85	<.0001	

Type I Tests of Fixed Effects						
Effect Num DF Den DF F Valu				Pr > F		
calfsex	1	108	2.38	0.1258		
cdate	1	108	16.57	<.0001		
cdate*cdate	1	108	0.43	0.5111		
cowagen	2	108	1.82	0.1673		
milkAUC	1	108	23.49	<.0001		

Model Information				
Data Set	WORK.ONETIMEA			
Response Variable	calf120			
Response Distribution	Gaussian			
Link Function	Identity			
Variance Function	Default			
Variance Matrix	Not blocked			
Estimation Technique	Restricted Maximum Likelihood			
Degrees of Freedom Method	Containment			

Number of Observations Read	118
Number of Observations Used	118

Dimensions	
G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z	4
Subjects (Blocks in V)	1
Max Obs per Subject	118

Optimization Information			
Optimization Technique	Dual Quasi-Newton		
Parameters in Optimization	1		
Lower Boundaries	1		
Upper Boundaries	0		
Fixed Effects	Profiled		
Residual Variance	Profiled		
Starting From	Data		

Iteration History						
Iteration Restarts Evaluations		Objective Function	Change	Max Gradient		
0	0	4	968.86201758		0.344835	
1	0	5	968.84345198	0.01856560	0.137367	
2	0	2	968.84143266	0.00201932	0.033111	
3	0	2	968.84129085	0.00014181	0.002462	
4	0	2	968.84129008	0.00000077	0.000049	

Convergence criterion (GCONV=1E-8) satisfied.

Fit Statistics				
-2 Res Log Likelihood	968.84			
AIC (smaller is better)	972.84			
AICC (smaller is better)	972.95			
BIC (smaller is better)	971.61			
CAIC (smaller is better)	973.61			
HQIC (smaller is better)	970.15			
Generalized Chi-Square	23304.87			
Gener. Chi-Square / DF	209.95			

Covariance	Covariance Parameter Estimates			
Cov Parm	Estimate	Standard Error		
seasonyr	172.56	147.45		
Residual	209.95	28.5679		

Solutions for Fixed Effects							
Effect	calfsex	cowagen	Estimate	Standard Error	DF	t Value	Pr > t
Intercept			134.56	12.0711	3	11.15	0.0015
calfsex	heifer		-7.8019	2.7756	108	-2.81	0.0059
calfsex	steer		0				
cdate			-0.5538	0.6233	108	-0.89	0.3762
cdate*cdate			0.006467	0.02146	108	0.30	0.7638
cowagen		4	-8.7603	3.7549	108	-2.33	0.0215
cowagen		5	1.2870	3.3618	108	0.38	0.7026
cowagen		6	0				
milkAUC			0.04077	0.008188	108	4.98	<.0001

1	Type I Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F	
calfsex	1	108	4.27	0.0411	
cdate	1	108	8.94	0.0035	
cdate*cdate	1	108	0.05	0.8302	
cowagen	2	108	2.58	0.0805	
milkAUC	1	108	24.80	<.0001	

The GLIMMIX Procedure

Model Information		
Data Set	WORK.ONETIMEA	
Response Variable	calfwean	
Response Distribution	Gaussian	
Link Function	Identity	
Variance Function	Default	
Variance Matrix	Not blocked	
Estimation Technique	Restricted Maximum Likelihood	
Degrees of Freedom Method	Containment	

Number of Observations Read	118
Number of Observations Used	118

Dimensions

Dimensions	
G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z	4
Subjects (Blocks in V)	1
Max Obs per Subject	118

Optimization Information				
Optimization Technique	Dual Quasi-Newton			
Parameters in Optimization	1			
Lower Boundaries	1			
Upper Boundaries	0			
Fixed Effects	Profiled			
Residual Variance	Profiled			
Starting From	Data			

Iteration History						
Iteration	Restarts	Evaluations	Objective Function	Change	Max Gradient	
0	0	4	1012.0794827		1.741229	
1	0	2	1011.7600673	0.31941543	0.01002	
2	0	4	1011.7600333	0.00003394	0.00004	
3	0	2	1011.7600333	0.00000000	3.834E-7	

Fit Statistics					
-2 Res Log Likelihood	1011.76				
AIC (smaller is better)	1015.76				
AICC (smaller is better)	1015.87				
BIC (smaller is better)	1014.53				
CAIC (smaller is better)	1016.53				
HQIC (smaller is better)	1013.07				
Generalized Chi-Square	33868.02				
Gener. Chi-Square / DF	305.12				

Covariance Parameter Estimates					
Cov Parm	Estimate	Standard Error			
seasonyr	411.13	347.73			
Residual	305.12	41.5267			

Solutions for Fixed Effects							
Effect	calfsex	cowagen	Estimate	Standard Error	DF	t Value	Pr > t
Intercept			191.49	15.8877	3	12.05	0.0012
calfsex	heifer		-7.6613	3.3462	108	-2.29	0.0240
calfsex	steer		0				
cdate			-0.8864	0.7515	108	-1.18	0.2408
cdate*cdate			0.02411	0.02589	108	0.93	0.3538
cowagen		4	-11.8181	4.5339	108	-2.61	0.0104
cowagen		5	0.7561	4.0539	108	0.19	0.8524
cowagen		6	0				
milkAUC			0.05086	0.009895	108	5.14	<.0001

Type I Tests of Fixed Effects					
Effect	Num DF	Den DF	F Value	Pr > F	
calfsex	1	108	2.99	0.0864	
cdate	1	108	4.42	0.0379	
cdate*cdate	1	108	0.15	0.6972	
cowagen	2	108	3.08	0.0501	
milkAUC	1	108	26.42	<.0001	