

The Mixed Procedure

Model Information	
Data Set	WORK.PLANTCOVERAGE_YEARS123
Dependent Variable	log_Total_Bees
Covariance Structure	Variance Components
Estimation Method	REML
Residual Variance Method	Profile
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Satterthwaite

Class Level Information		
Class	Levels	Values
Site	11	Bowman Cretsinger Elkader Greving Kalenberg McClellan NealSmith Peckumn Plunkett Sheller Sloan
Year	3	1 2 3
Sampling_Day	5	1 2 3 4 5

Dimensions	
Covariance Parameters	3
Columns in X	46
Columns in Z	65
Subjects	1
Max Obs per Subject	131

Number of Observations	
Number of Observations Read	131
Number of Observations Used	131
Number of Observations Not Used	0

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
0	1	399.40714868	
1	2	392.05938206	0.00063679
2	1	391.98656257	0.00003286
3	1	391.98311281	0.00000010
4	1	391.98310222	0.00000000

Convergence criteria met.

The Mixed Procedure

Covariance Parameter Estimates	
Cov Parm	Estimate
Site	0.1652
Site*Sampling_Day	0.1056
Residual	0.6618

Fit Statistics	
-2 Res Log Likelihood	392.0
AIC (Smaller is Better)	398.0
AICC (Smaller is Better)	398.2
BIC (Smaller is Better)	399.2

Solution for Fixed Effects							
Effect	Year	Sampling_Day	Estimate	Standard Error	DF	t Value	Pr > |t|
Intercept			2.9685	0.4694	99.2	6.32	<.0001
Average_Coverage			0.03113	0.01372	98.2	2.27	0.0254
Sampling_Day		1	0.2216	0.5710	91.5	0.39	0.6989
Sampling_Day		2	-0.1626	0.5856	90.7	-0.28	0.7819
Sampling_Day		3	0.9792	0.6029	89.2	1.62	0.1079
Sampling_Day		4	1.1339	0.6287	88.6	1.80	0.0747
Sampling_Day		5	0	.	.	.	.
Average_C*Sampling_D		1	0.005343	0.09109	96.8	0.06	0.9534
Average_C*Sampling_D		2	0.07063	0.06182	99.5	1.14	0.2560
Average_C*Sampling_D		3	-0.03501	0.02764	91.9	-1.27	0.2084
Average_C*Sampling_D		4	-0.01306	0.02164	91.4	-0.60	0.5479
Average_C*Sampling_D		5	0	.	.	.	.
Year	1		0.8258	0.5734	69.9	1.44	0.1543
Year	2		0.1786	0.5618	62.2	0.32	0.7516
Year	3		0	.	.	.	.
Average_Coverag*Year	1		-0.01229	0.04135	94.8	-0.30	0.7670
Average_Coverag*Year	2		-0.01131	0.02121	70.6	-0.53	0.5954
Average_Coverag*Year	3		0	.	.	.	.
Year*Sampling_Day	1	2	0.7721	0.7447	68.7	1.04	0.3035
Year*Sampling_Day	1	3	-0.6533	0.7616	68.9	-0.86	0.3940
Year*Sampling_Day	1	4	-1.8280	0.8824	67.5	-2.07	0.0421
Year*Sampling_Day	1	5	0	.	.	.	.

The Mixed Procedure

Solution for Fixed Effects							
Effect	Year	Sampling_Day	Estimate	Standard Error	DF	t Value	Pr > |t|
Year*Sampling_Day	2	1	-0.7479	0.7178	63.3	-1.04	0.3014
Year*Sampling_Day	2	2	0.7047	0.7293	63.6	0.97	0.3376
Year*Sampling_Day	2	3	-0.6462	0.7712	66.2	-0.84	0.4051
Year*Sampling_Day	2	4	-0.5439	0.8209	62.7	-0.66	0.5101
Year*Sampling_Day	2	5	0	.	.	.	.
Year*Sampling_Day	3	1	0	.	.	.	.
Year*Sampling_Day	3	2	0	.	.	.	.
Year*Sampling_Day	3	3	0	.	.	.	.
Year*Sampling_Day	3	4	0	.	.	.	.
Year*Sampling_Day	3	5	0	.	.	.	.
Average*Year*Samplin	1	2	-0.08128	0.09290	99.5	-0.87	0.3837
Average*Year*Samplin	1	3	0.03099	0.09252	89.4	0.33	0.7384
Average*Year*Samplin	1	4	0.1092	0.1070	93.9	1.02	0.3102
Average*Year*Samplin	1	5	0	.	.	.	.
Average*Year*Samplin	2	1	0.1391	0.1149	63.1	1.21	0.2307
Average*Year*Samplin	2	2	-0.07096	0.09114	70.9	-0.78	0.4388
Average*Year*Samplin	2	3	0.01936	0.03652	74.3	0.53	0.5976
Average*Year*Samplin	2	4	-0.01114	0.03224	66.3	-0.35	0.7307
Average*Year*Samplin	2	5	0	.	.	.	.
Average*Year*Samplin	3	1	0	.	.	.	.
Average*Year*Samplin	3	2	0	.	.	.	.
Average*Year*Samplin	3	3	0	.	.	.	.
Average*Year*Samplin	3	4	0	.	.	.	.
Average*Year*Samplin	3	5	0	.	.	.	.

Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Average_Coverage	1	66.7	3.86	0.0536
Sampling_Day	4	41.3	1.58	0.1965
Average_C*Sampling_D	4	70	0.56	0.6952
Year	2	66.1	1.24	0.2969
Average_Coverag*Year	2	83.4	0.09	0.9148
Year*Sampling_Day	7	66.5	1.95	0.0755
Average*Year*Samplin	7	80.6	0.67	0.6973

The Mixed Procedure

Conditional Studentized Residuals for log_Total_Bees

