OUTPUT from PROC NESTED

Nested Analysis of Variance 11:59 Tuesday, April 1, 2003

sex=F

The NESTED Procedure

Coefficients of Expected Mean Squares

Source	bndyr	cws	Error
bndyr	66.1408451	2.0000000	1.0000000
cws	0.0000000	2.0000000	1.0000000
Error	0.0000000	0.0000000	1.0000000

Nested Random Effects Analysis of Variance for Variable tarsus_T

Variance Source	DF	Sum of Squares	F Value	Pr > F	Error Term
Total	425	442283			
bndyr	5	29190			
cws	207	378502			
Error	213	34591			

Nested Random Effects Analysis of Variance for Variable tarsus_T

Variance Source	Mean Square	Variance Component	Percent of Total
Total	1040.666009	1056.076396	100.0000
bndyr	**5838.073650**	60.621552	5.7403
cws	**1828.512975**	833.058130	78.8824
Error	**162.396714**	162.396714	15.3774

tarsus_T Mean	933.09624413
Standard Error of tarsus_T Mean	4.22531237

F tests for the significance of the variance components were not computed since the nested design is not balanced.

F_{cws} = MS(cws)/MS(error)
F_{bndyr} = MS(bndyr)/MS(cws) → this has to be adjusted due to different sample sizes.

Check Box 10.6 - Two-level Nested ANOVA with unequal sample sizes.
in Sokal, R. R., and F. J. Rohlf. 1995. Biometry. The principles and practice of statistics in biological research, 3rd edition. W. H. Freeman and Company, New York. Pp: 294