SUMMARY   SARE PARTNERSHIP GRANT ONC15-004 JASTER

Average Gain per goat

CoverCrop   1.509090909 lbs/period
Grass   -0.009090909 lbs/period

Anova	DegreesFredom	Sum of Squares	Mean Squar	F-value	p-value	
treatment	1	63.4	63.38	4.853	0.02977	significant if less than 0.05
farm	2	151.4	75.71	5.796	0.00409	
Residuals	106	1384.6				

Tukey HSD   way to test differences between the means
difference between gain of each treatment

difference grass-covercrc	lower 95% CI	upper 95% CI	p-value
-1.518182	-2.884569	-0.151795	0.02977

Negative difference when cover crop average gain is subtracted from grass average gain indicates that cover crop gain is greater than grass gain

Average Days of Forage   Grazing Days

Cover Crop   7.924545 days/period
Grass   4.427455 days/period

Paired Sample t-test

t-value   2.5507
Degrees of Freedom   10
p-value   0.02883   significant if less than 0.05

The t-test tests to see if the null hypothesis is true or not.
Null Hypothesis = The true difference of the means (average for each treatment) is zero.
Alternative Hypothesis = True difference of means is not equal to zero.
Look at boxplot of forage days to see which is higher
Difference of means (one minus the other)
Difference   3.49709
Lower 95% Confidence Interval   0.4422335
Upper 95% Confidence Interval   6.5519483