6/10/2017 2:01:42 PM

```
Welcome to Minitab, press F1 for help.
Executing from file: C:\Program Files (x86)\Minitab\Minitab 17\English\Macros\S
tartup.mac

 This Software was purchased for academic use only.
 Commercial use of the Software is prohibited.
```

Results for: patch areas.mtw

Poisson Regression Analysis: tiger mortality versus Forest, Urban, Agriculture

Method

Link function	Natural log
Rows used	7

Deviance Table

Source	DF	Adj Dev	Adj Mean	Chi-Square	P-Value
Regression	3	24.581	8.194	24.58	0.000
Forest	1	8.152	8.152	8.15	0.004
Urban	1	5.501	5.501	5.50	0.019
Agriculture	1	14.504	14.504	14.50	0.000
Error	3	4.530	1.510		
Total	6	29.111			

Model Summary

Deviance R-Sq	Deviance R-Sq(adj)	AIC
84.44%	74.13%	47.76

Coefficients

Term	Coef	SE Coef	VIF
Constant	3.1949	0.0790	
Forest	-0.429	0.152	4.17
Urban	0.301	0.129	2.70
Agriculture	0.549	0.145	3.60

Regression Equation

tiger mortality = exp(Y')

Y' = 3.1949 - 0.429 Forest + 0.301 Urban + 0.549 Agriculture

Goodness-of-Fit Tests

Test	DF	Estimate	Mean	Chi-Square	P-Value
Deviance	3	4.53020	1.51007	4.53	0.210
Pearson	3	4.40701	1.46900	4.41	0.221

Fits and Diagnostics for Unusual Observations

Obs	tiger mortality	Fit	Resid	Std Resid	
6	26.00	33.95	-1.42	-2.18	R

R Large residual