

1035-K1-1269 **Rodney X Sturdivant*** (Rodney.Sturdivant@usma.edu), 155A Gardiner Loop, West Point, NY 10996. *Anthrax, Killer Bees and Murder to Motivate Statistics*.

Inspired by essays about real world statistical studies found in the book "Statistics, A Guide to the Unknown, Fourth Edition" edited by Peck, Casella et. al. we created a series of problems for use in an introductory Probability and Statistics course. We will discuss the three used to develop interesting problems and projects students could solve with statistical tools taught in the first ten lessons of the course. Topics and tools used include descriptive statistics, graphical methods and probabilistic models using the EDF and the CDF and only Excel software. The problems were hugely successful in motivating students and giving them a sense of the power of what they were learning as they were able to replicate the results of the study authors. Further, in each case the studies allowed us to gain intuition helpful in learning later topics of the course such as hypothesis testing and confidence intervals, and also to discuss real issues with using statistics to analyze data. The projects we developed were largely used in class (with some small out of class assessments based on the in class work) but could easily be made into out of class projects or homework assignments. (Received September 19, 2007)