Biology 4605/7220 27 November 2009 NAMES for credit

Logistic Worksheet

1. Data in Box 17.16 (p 782) of Sokal and Rohlf (1995). The response variable is the number of acacia plants free of recent damage (scoring positive) in three successive months, after the removal of ants that normally protect the plants from phytophagous insects. Does the number of damage free plants N_{free} decline with time (T = March, June, August)?

Define response and explanatory variables (symbol, name, unit) and write the generalized linear model used to compare whether odds of damage declines with time.

Symbol Name Units

Model

2. Does the increase in risk of cancer in smokers relative to nonsmokers differ in men and women?

Symbol Name Units

Model: