**Calculating Fertilizer N, P, and K Rates**

**What's on the bag - What's on the Bog**

**Nitrogen (N)**

First number on the bag is percent N

Multiply by weight of bag and divide by 100 to get what's on the bog

example:

50 pound bag of 18-8-18

18 x 50 = 900 900/100 = 9

shortcut 1 - for a 50 pound bag, divide the first number by 2 to get pounds of N in the bag

\*\*shortcut 2 - for a 100 pound application - the first number is pounds on the bog

**Phosphorus (P)**

Middle number on the bag is percent *phosphate - P2O4*

Convert the middle number to actual P - multiply by 0.44, then follow N instructions

example:

50 pound bag of 12-24-12

24 x 0.44 = 10.56

10.56 x 50 = 528 528/100 = 5.28

shortcut 1 - for a 50 pound bag, divide the middle number by 2 and then multiply by 0.44 to get pounds of P in the bag

\*\*shortcut 2 - for a 100 pound application - the middle number multiplied by 0.44 is the pounds on the bog

NOTE: if you want less than 20 pounds actual P on the bog, limit to no more than 45 pounds of *phosphate*

**Potassium (K)**

Last number on the bag is percent *potassium oxide - K2O*

Convert the middle number to actual K - multiply by 0.83, then follow N instructions

example:

50 pound bag of 0-0-22

22 x 0.83 = 18.26

18.26 x 50 = 913 913/100 = 9.13

shortcut 1 - for a 50 pound bag, divide the last number by 2 and then multiply by 0.83 to get pounds of K in the bag

\*\*shortcut 2 - for a 100 pound application - the last number multiplied by 0.83 is the pounds on the bog