

All wildflower and grass seeding rates are specified in terms of "pounds, pure live seed" or PLS. The total weight of a seed bag is not the pounds of pure live seed because the contents will not be 100% pure nor will every seed germinate. This is not a reflection of poor business practices by the seed industry, but rather the nature of the seeds.

### **Calculating Pounds of Pure Live Seed**

To determine the amount of Pure Live Seed (PLS) in a seed bag, use the following formula: **%purity x % germination = %PLS.**

For example, a 1-pound bag of Big Bluestem grass seed might contain the following information: purity = 85% and the germination = 75%. The PLS formula for this bag of Big Bluestem grass seed would be: **0.85 x 0.75 = 0.64 PLS.**

In other words, the 1-pound bag of Big Bluestem grass seed actually contains 64% (or 0.64 pounds), of pure, live seed. It also means that 36% or 0.36 pounds is inert material.

In order to get one pound of pure live seed, use a basic proportion equation which says ".64 pounds pure live seed is to one pound, as one pound is to x pounds pure live seed." The equation would look like this:  $0.64:1 = 1:x$ . Solving the equation you would find,  $0.64x = 1$  and then,  $x = 1/.64 = 1.56$  (bulk pounds). Therefore in our example, you would need to purchase 1.56 pounds of bulk seed in order to get 1.0 pound of pure live seed.

### **Use of the Seed Calculator:**

This seed calculator is designed to help you build and construct a grass and forb mixture from scratch. If you already have a seeding mixture you would like to use, simply enter **the PLS seeding rates per acre** into the calculator and submit the file for a bid.

If you are designing a mixture from scratch, please note that this calculator will provide you with the seeding rate information for each species you enter. The "PLS Pounds per Sq FT" column in the calculator will tell you how many PLS seeds will be planted in 1 square foot of ground over the entire acre. For your entire mixture, the PLS Pounds per Sq Ft rate should be between 12 and 30. Rates that are higher than 30 seeds per square foot of ground are excessive and will generally not establish any quicker or produce quality wildlife habitat.

Good luck designing your next wildlife habitat mixture.