No-Till Residue and Tillage Mgt. (329) Appendix I How to Estimate Cover Crop Biomass (lbs./ac. Dry Weight)

December 18, 2015

To estimate cover crop biomass, take cuttings from several areas of the field. Clip, dry and weigh them. Use a yardstick or metal frame of known dimensions, such as 1 ft. x 2 ft., which equals 2 $ft.^2$. Clip the plants at ground level within the known area. Dry them out in the sun for a few consecutive days, or place them in an oven at about the 140 degrees F for 24 to 48 hours until they are "crunchy dry". Use the following equation to determine the yield of dry mater per acre:

$$\text{Cover (lbs./ac.)} = \frac{\text{Total weight of dried samples (lb.)}}{\text{\# Square feet you sampled}} \times 43{,}660 \text{ sq. ft./acre}$$

Sarrantonio, M. Building soil fertility and tilth with cover crops. In Clark, Andy, ed.. 2007. Managing cover crops profitably, 3rd edition. SARE/CREES/USDA. Pg. 22.