

**Using Poultry Litter as Pasture Fertilizer**  
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Poultry Litter can be used as an alternate source of pasture fertilizer. Here are some of the factors you need to consider when applying poultry litter as a source of fertilizer.

- Cost
- Pasture Nutrient Needs
- Nutrient Run Off

From past analysis of under-cage manure it has been found that a ton of Poultry Litter contains approximately:

46.6 pounds of Nitrogen per ton

84 pounds of Phosphorus per ton

60.8 pounds of Potassium per ton

Poultry litter also contains calcium, magnesium, sulfur, and some micronutrients.

However nutrient values of litter can vary 30 to 50% depending on type of bird, feed and moisture content, and the clean-out technique and schedule of individual operations.

An additional benefit to poultry litter is that the manure and bedding material help it to build up the organic matter of the soil. Therefore improving the soil structure, water-holding capacity, aeration, pH buffering, cation exchange capacity, and microbial activity.

Poultry Litter can increase pH because of the amounts of calcium carbonate found in poultry feed. Therefore you must monitor soil pH if you make repeat applications so that you do not get Bahia grass decline because of high pH.

When making the decision you need to consider:

- 1) What nutrients (Nitrogen, Phosphorus, Potassium) does soil need based on soil test?  
<http://soilslab.ifas.ufl.edu/pdf%20files/SS18600.pdf>
- 2) What is the nutrient value of the litter being considered for application? Sampling form can be found at North Florida Research and Education Center- Suwannee Valley  
[http://nfrec-sv.ifas.ufl.edu/sample\\_form.htm](http://nfrec-sv.ifas.ufl.edu/sample_form.htm)
- 3) What is the cost of material and spreading for commercial fertilizer that will meet soil needs?
- 4) What is the per acre cost to have poultry litter delivered and spread to meet crop nutrient needs?
- 5) Compare the cost per acre of using poultry litter with cost of using commercial fertilizer.

Also if soil has adequate Phosphorus make sure you are not applying unnecessary nutrients that can harm water sources. Also be considerate of neighbors any time you are fertilizing with organic fertilizers.

Information obtained from sample taken by Cal-Main Foods, Inc. and analyzed by Clemson University. Also [Poultry Litter as a Fertilizer and Soil Amendment](#), Virginia Cooperative Extension.