

# Food Plots, Good Planning & Smart Planting Can Combat High Fertilizer Costs

Contributed by Johnny McRight

Fertilizer costs have soared to over twice the cost of last Summer, but there are ways to offset and reduce these costs without putting our food plots at risk.

## Plants Need Fertilizer!

There is no question that food plots, just like a farmer's crop or a home garden must receive fertilizer to grow and flourish. Whether planting to produce seed and fruit or simply trying to grow forage to attract deer for harvest, advance planning can help reduce costs of production. When planting food plots, we need to set our goals and understand what it is that we are trying to accomplish. Plants that are grown to reproduce seed or fruit must have all of the normal nutrition of any other crop. However, if our goal is simply to grow forage to attract or bring deer in for harvest, we really need to focus on Nitrogen fertilizer alone. When can it be planted? How long will it actually be hunted? How long do we need it to be attractive to the deer? Once our goals are determined, we can then decide how much fertilizer we need, and the best method for acquiring this fertilizer.

## Soybeans With & Without Protection

Planting to Produce Seed, Grain or Fruit: Brassica crops produce carbohydrates, chufa produces a nut in the soil and perennial clover supplies protein and seed production, all of which aid wildlife nutrition. These type crops require ample Nitrogen (N), Phosphorous (P) and Potassium (K) as well as secondary and micronutrients to reach full maturity. These crops will need a full ration of all three primary nutrients. The basic function of nutrients as they apply to food plots are Nitrogen for stalk growth, Phosphate for strength and Potash for seed production. Today we will strictly consider the basic N-P-K needs of these type food plots.

## Don't Guess; Soil Test

The smartest thing we can do is pull a six inch deep Soil Sample to determine exactly what is needed. In many states the Extension Service provides Soil Testing for nominal fees. With a Soil Test we will know exactly what is needed in a specific food plot to grow a specific crop. Be sure and pull a sample in each area to be planted and fill out the submission forms completely so you can get the correct recommendations. Without a soil test, you are at best shooting in the dark and will most likely spend more money than necessary or get poor results because you didn't have enough fertilizer. At DeltAg, we focus on the soil by always reviewing soil tests as well as studying the soil itself.

## Manage Your Soil

The most valuable asset we have is the soil. The residual nutrients in your soils can and should be very beneficial to the growth and production of the next crop. Residual nutrients come not only from past applied fertilizer but most importantly from old crop residue from past crops. This old, turned under residue is full of nutrients that can be very beneficial in helping the next crop. Think about this...A tree grows in the forest and produces fruit for 50 years without any applied fertilizer other than the foliage and twigs that compost and release nutrients. Because it takes time for old residue turned under to completely compost and release nutrients for crop use, we can plan ahead and take advantage of this natural process that occurs in all soils. We must manage our soils in a timely manner by cutting and disking at least six weeks before planting the next crop. If we turn it under at planting, it becomes a detriment instead of an asset. "Planning is the first step to success".

## Planting a Hunting Plot for Forage Only

Many hunters grow food plots strictly to attract deer or lure them into clear view for observation or harvest. If our goal is to create a "Hunting Plot" rather than a "Nutrition Plot" we need to consider how long we want the plot to be attractive to wildlife. When planting a crop like wheat, rye or oats or some combination strictly to "bring them out" the truth is that our primary focus should be Nitrogen fertilizer. When you purchase a blend like 13-13-13, you are purchasing a material with the same amount of Phosphate and Potash as Nitrogen.

## Clover Plus Planted in Trophy Oats, Basket Removed Early Summer

### Nitrogen Only

For a Hunting plot, in most cases, we only need Nitrogen. We should be looking for a high Nitrogen fertilizer. Examples are 46-0-0 (urea), 34-0-0 (ammonium nitrate), or 33-0-0 which is a blend of granular ammonium sulfate and urea. This 33-0-0 is becoming more and more readily available due to restrictions on ammonium nitrate. Either way, we need to buy Nitrogen, not a blend of N-P-K that will cause us to have to apply a much higher rate in pounds per acre. Example: 13-13-13; to apply 33 pounds of Nitrogen, would require 300 pounds per acre (each 100 #s has 13 #s of actual nitrogen). However, to receive the same amount of Nitrogen from the 33-0-0 only requires 100 pounds per acre of material. Remember, the number is the per cent (pounds per 100 pounds) and is always listed in the same order; Nitrogen-Phosphate-Potash.

Can we reduce the amount of Nitrogen purchased? Yes! But we need to know there is ample Nitrogen to get the wheat, rye or oats to start growing. These crops need very little Nitrogen in the initial three weeks after they emerge out of the ground. In most fields, there should be enough Nitrogen left in the soil to take care of the crop needs for the first few weeks. Don't apply your Nitrogen until the crop is out of the ground! This will reduce the risk of wasting or losing Nitrogen. After that, to produce forage only, we will normally need only about 30 to 40 pounds of Nitrogen. The longer the growing season (South) the more Nitrogen will be needed and as we go further north, less is needed due to a shorter growing season before Winter.

Crop residue vs. good soil tith.

#### Plant Legumes

With the high cost of fertilizer, especially Nitrogen, we should also take advantage of legume crops that produce Nitrogen. If we PLAN ahead, we can grow a legume in advance of growing a cereal grain for foraging. I wish we could plant a legume like clover along with the Fall planted grain crop and get enough Nitrogen for the same Fall's Nitrogen needs. Unfortunately, the clover will not produce Nitrogen soon enough to feed the cereal crop when planted at the same time. However, by Mid-Spring the clover will generate enough extra Nitrogen to feed the cereal grain. On our Fall plots, we plant Clover Plus in with Trophy Oats, but we are after the carry-over Nitrogen for the next crop. In other words, we are planting our oats/clover in a field that had oats/clover in the previous Spring so we do not need to apply any Nitrogen. Our oats have plenty of Nitrogen in the Fall and we have Saved Money! In some fields we also rotate soybeans in our Summer plots where we have planned to come back the next year with the oats/clover combo. The problem here is foraging pressure. Remember, these Summer legume crops must grow for at least two months to produce extra Nitrogen. With good growth of legumes like clover, lablab, alfalfa, peanuts, vetch or soybeans we can produce Nitrogen for the next planting rather than having to purchase high priced Nitrogen.

**Fertilizer Needs When Planting Legumes:** With legumes producing their own Nitrogen and/or furnishing Nitrogen for other crops like wheat, rye or oats, we only need be concerned with Phosphate and Potash. Here, based on soil tests, if P and K are needed, we can purchase a fertilizer like a 0-20-20 or 0-24-24. These will furnish the P and K without causing you to purchase Nitrogen and this will Save Money!

**Old Crop Residue Contains Phosphate and Potash:** We can turn under old crop residue six or eight weeks before planting and give the soil time to convert this residue to mulch and organic matter that is loaded with Phosphate and Potash as well as Nitrogen. At DeltAg, we pulled soil tests when we first purchased our property in 2005 and with low P and K levels as well as a very acid soil pH, we limed and applied N, P and K. With our focus on old crop residue, soil health, and the use of legumes in rotation between Summer and Fall plots, we have not purchased additional fertilizer since 2005 and this practice is based on yearly Soil Tests.

Even with the high costs of fertilizer, food plots are still the most inexpensive way to generate supplemental nutrition for our wildlife. And yes, we CAN reduce our fertilizer costs with Good Planning and Smart Planting!

Take advantage of Nature &hellip;.. plan ahead &hellip;.. make 2008 your best season yet!

Johnny McRight, Owner/Manager DeltAg Wildlife, LLC and DeltAg Formulations. DeltAg formulates and produces three primary products for Food Plots and Gardens:

- &bull; Soil Solution: to aid composting of old residue and improve soil health.
- &bull; Seed Coat: to aid seedling emergence, vigor and early root development.
- &bull; Plant Power: to spray growing plants to increase root and shoot development.