

**Landowners:
Be Aware of Your Farm's Soil Health**

Let's face it; keeping up with everything that takes place on your farm in a given year can be a chore ... especially when you're not involved on a day to day basis. If you own farmland, you have a vested interest in keeping it productive and sustainable for generations to come to maintain the value and vitality of the land. Everything starts with the soil, so that's where one's focus needs to be as a starting point for maintaining and improving this great resource.

The past two to three years have been extremely productive years for corn and soybean farms (unfortunately it has had a draining impact on commodity prices) with record yields for both crops. Although strong yields indicate the productivity of one's farm, it is important to realize that these same high yields have diminished the soils fertility level unless good nutrient management practices are in place. Now, soil fertility isn't a terribly complicated topic ... it can be compared to keeping track of your bank account with the goal of never running so low on money that you get charged a service fee.

Similar to getting your bank statement, soil testing results will give you information on what you have to work with from a fertility standpoint. Soil testing should be done a minimum of every four years to insure soil nutrient levels don't get low. In recent years grid soil sampling has become a standard practice. This method of sampling identifies areas that need additional fertility and those that do not. Grid sizes are generally 2.5 acres, but can range from one to five acres in size. Although grid sampling is more costly than traditional methods, when prorated over four years, it is a fraction of the overall cost to raise a crop and well worth the expense.

Once soil test results come back, the amount of information can be overwhelming. Although all the information is important in understanding the soil's health, key things to consider would be:

- Soil Organic Matter (OM) – a key indicator of soil health and serves as a reserve for many essential nutrients, especially nitrogen
- Soil pH – 6.5 to 6.8 is ideal for corn and soybean production
- Phosphorus – 25-30 ppm (parts per million) is adequate
- Potassium – 150-180 ppm should be the goal

So once you have an inventory of the health of your farm's soil, the next step is to determine what the crop has removed so it can be replaced or improved. Let's use some yield numbers from this year to illustrate the high nutrient removal we have experienced. If your farm averaged 210 bu./acre of corn and 55 bus./acre of soybeans, corn removal would be 74lbs. and 53lbs. of phosphorus and potassium respectively. That 55 bushel bean crop took 40 lbs. of phosphorus and 66 lbs. of potassium! So, just to keep nutrient levels where they are, that amount of fertilizer needs to be applied. If your soils are low, it obviously will take a greater amount to get them to that optimum level.

We've had two to three years of high yields that have pulled a high amount of nutrients from your farm. Is your land's fertility level keeping up or are you "losing ground"? At Farmland Stewardship Solutions we are available and able to help you sort through soil test information, nutrient plans, manure usage, ideas to reduce nitrate levels in tile lines and various other areas that all impact your farm's health and sustainability. Let us help you.