

Version:1.0 StartHTML:0000000181 EndHTML:0000002741 StartFragment:0000002362  
EndFragment:0000002705  
SourceURL:file:///localhost/Users/computer/Desktop/obits/barefootfarmer.doc

Plowing and harrowing leaves the soil fully pulverized, soft and fluffy. Even after a rainstorm the tilth will remain loose and mellow. If it gets hard, the organic matter is too low and there is nothing to fluff up. If the percentage of organic matter is high (4 to %%), a lack of biological activity is indicated.

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EndFragment:0000005286  
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The last two conditions are remedied by good quality compost. We ferment manure with bedding, soil, and garden refuse for a year, and apply it liberally on the crop land. 50 tons to the acre figures out to be about a third of an inch thick, spread over the whole field. A few years of this, along with cover crops, builds up a live soil humus with plenty of organic matter and beneficial micro organisms.

I need to walk in a field and sink down a few inches into the soft soil. Silky, velvety, satiny to the feel, the garden is like a down pillow, impressionable and responsive. Now I can start to picture a crop growing here.

The farmall tractor has shoes behind the back tires that lay off rows about 45 inches apart. After the first pass, I turn the tractor around and put one tire in the outside row, reploting it and making the next row with the other tire and shoe.

The soil must be dry enough to fall apart when a handful is squeezed and dropped, otherwise it will form clods. If soil is coming up on the tractor tire, it is probably too damp to be out there. One of the hardest jobs for a vegetable grower is simply that waiting for the ground to dry. The calendar says it's time to plant, and the seeds are still in the house.

Instead of working moist soil and planting, we find other jobs to do. I'd much rather plant in dry soil with a few dry days ahead, so I can rake or harrow over the tops of the rows. A prolonged wet spell in the spring means lots more weeds. If the garden is unplanted, I can take care of them with a tractor. Late gardens do great here in Tennessee anyway, so I try not to rush it.

## Plowing and Harrowing

Tuesday, May 25, 2010

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Once the rows are laid out, we drop the seed by hand and step on it. This firms it into the soft soil, insuring good seed to soil contact. The seeds absorb moisture from the soil even if it doesn't rain, if they are compressed with the earth. I straddle the rows with the cultivators down to cover up the rows with loose soil.

In a few days I harrow over the whole field, being careful not to put the tires on top of the rows. I can follow the tracks left by the shoes behind the tires on the previous pass which covered up the rows. Sometimes it rains and I don't get to do this, and we'll have to get in there with the hoes sooner than if I so get to harrow.

When the crop emerges, I like to leave it alone until the second set of leaves appear. The first leaves are called seed leaves, or cotyledons. These leaves nourish the elementary, emerging plant, as the roots are not yet well formed. In a few days the true leaves appear, indicating lateral roots and a good connection to the earth. Now it's time to aerate and check evaporation by cultivation, to again leave the soil soft and fluffy.