



## T-Mo - Chicken manure composting

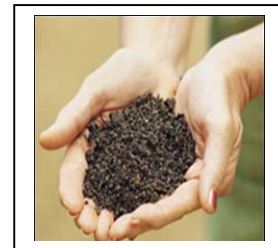
### Chickens Produce Eggs *and* Manure

Your chicken produces an egg every 24 hours and it is wonderful to have your own home-produced fresh eggs. Your average size hen also produces 1 cubic foot of manure every six months. What are you doing with this? Manure simply can't continue to accumulate in your coop. It stinks, attracts rodents and flies, and the ammonia is not healthy for your chickens to breathe.

### Benefits of Chicken Manure

Don't despair; manure can be one of the greatest assets for a home gardener! Although chicken manure is too strong to be used raw on your flowers or vegetables, it can be composted and converted to "black gold". If used without composting it could damage roots and possibly kill your plants, however, once it is composted chicken manure is:

- A good soil amendment, chicken manure adds organic matter and increases the water holding capacity and beneficial biota in soil.
- \* A good fertilizer; chicken manure provides Nitrogen, Phosphorus and Potassium to your plants (more than horse, cow or steer manure).



### Composting Chicken Manure

If you are not familiar with composting and need to learn how, contact **TERRASYSTEM®** ([www.terra-3000.com](http://www.terra-3000.com)). We can supply the right microbes for optimal composting process and will provide you with information about the components of composting: Carbon (*browns* - your coop bedding), Nitrogen (*greens* - your chicken manure), air, moisture, volume, and temperature. Here are some recommendations to get you started using chicken manure in your compost pile:

- **Collect manure and bedding.** Chicken owners normally use bedding such as shavings, sawdust, dry leaves, or straw to provide a dry cushion for chickens and to control odor and pests. The coop bedding can be collected with the manure and dumped into a composting bin. Some owners prefer to pick manure and soiled bedding out of the coop on a daily basis; others will add new bedding over droppings and collect on a less frequent basis.
- **Carbon to Nitrogen balance.** A combination of 30 parts Carbon to 1 part Nitrogen creates the ideal environment for microbes to break down organic material to produce compost. When combining coop bedding and chicken manure how do you achieve the ideal C: N ratio? Since the different beddings have their own C: N ratio, the proportion of bedding to manure will vary depending on the type of bedding used.

- To keep things simple most composters follow the general rule of 1 part brown to 2 parts green. However, because chicken manure is so high in Nitrogen you may be more successful using a 1:1 or even a 2:1 mixture.
- **Use a “hot compost” recipe.** By combining the correct ratio of bedding and manure at one time to form a pile, approximately one cubic yard, then adding moisture (material should be about as wet as a well wrung sponge), will produce
- a hot pile. It is recommend that the compost pile heat to 55-65 degrees C. and maintain that temperature for 3 days. Heating is necessary to destroy pathogens
- but temperatures above 72 degrees C can kill beneficial microorganisms and slow the process. To help you achieve appropriate temperature you can purchase a compost temperature gauge from a local nursery.
- **Repeat the heating process.** Once the center of your compost pile has reached the required temperature for three days it will start to cool. After it cools, pull the center apart and move the core material to the edges and bring the edge material into the center to heat. For 1 cubic yard of material repeat the process of bringing edges into the core at least 3 times.
- **Let it cure.** Monitor the pile and once you are satisfied that the entire contents of your bin has been heated, loosely cover and let cure for 45-60 days before using. It's ready when most material is dark, crumbly and sweet-smelling like soil.
- **Add to garden.** You can add the resulting compost to your vegetable garden or flower bed by spreading it on the surface or by gently working it into existing soil.
- **Composting challenges.** Does your compost pile stink, never decompose, or attract pests? Get advice from [www.terra-3000.com](http://www.terra-3000.com).



### Manure Safety Tips

Fresh chicken manure may contain disease organisms that could contaminate root crops (carrots, radishes, beets) and leaves (lettuce, spinach), so DO NOT spread uncomposted manure on the soil in your vegetable garden. The following “Safety Tips” are summarized from **TERRASYSTEM®**:

- Apply only aged or composted manure to your soil.
- Always wear gloves when handling livestock manure.
- Thoroughly wash raw vegetables before eating.
- Do not use cat, dog or pig manure in compost piles.
- People who are susceptible to food borne illnesses should avoid eating uncooked vegetables from manured gardens. Those who face risks from food borne illness include pregnant women, very young children, and persons with cancer, kidney failure, liver disease, diabetes or AIDS.