

POULTRY COMPOSTING

Loading the Primary Composter

Materials should be loaded into the primary bins as follows:

1. Place 1 foot of dry manure on the floor of the bin.
2. Add a 6-inch layer of straw, peanut hulls, or chopped hay. This adds additional carbon and aids aeration under the birds.
3. Add a layer of carcasses. Spread the birds in a single layer keeping them at least 6 inches away from the walls.
4. Cover the carcasses with manure. Several layers of straw, birds, and manure may be needed during a single day when the birds reach maturity.
5. Add water by wetting the surface. Less water may be needed as the birds reach maturity.
6. When the last layer of chickens is added to a bin, cap the pile with an extra layer of manure.
7. Monitor the temperature with a 36 inch probe-type thermometer. Temperatures should reach about 140 degrees in 7 to 10 days after capping. If temperature does not reach 140 degrees try using less water or more of the carbon source. 140 degrees is needed to kill fly larvae, bacteria, and viruses.

Practical Dead Bird Disposal

Disposal of dead birds has always been a problem for commercial poultry farmers. Incineration is too slow and expensive, burial in pits does not comply with state law unless the pit is lined, and rendering facilities are not available. The age-old method of composting is today's most cost-effective and cleanest way for poultry farmers to utilize and dispose of mortality.

Research and practical experience have shown that mixing a prescribed recipe of dead poultry and chicken manure as a nitrogen source, and rice hulls, cottonseed hulls or peanut hulls as a carbon source with the right moisture content will cause microorganisms to break the materials down. It is a two stage process in which the material is moved from the primary bins to the secondary bin for additional composting.

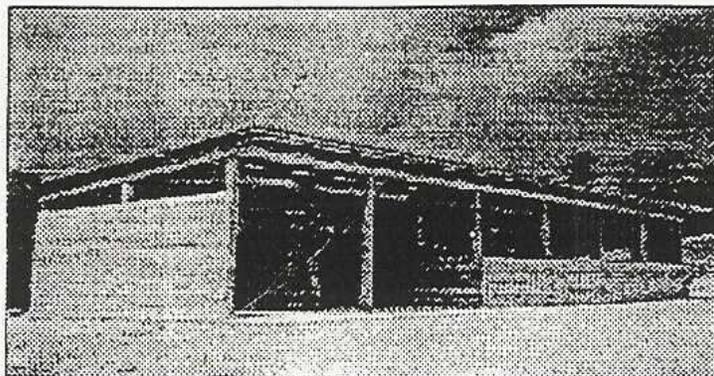
Proportions of materials needed in composting.

Materials	By Volume	By Weight
Dead Poultry	1.0	1.0
Manure	2.0	1.5
Straw or Hulls	1.0	0.1
Water	0.2	0.3

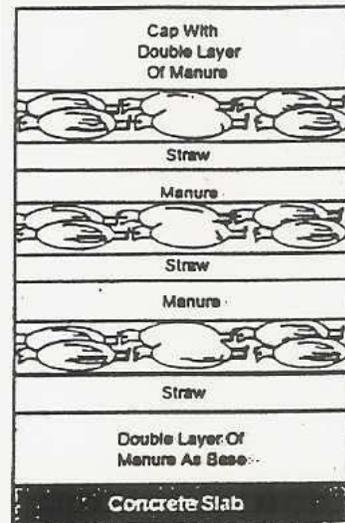
Stage 1 (Primary bin) As dead birds are collected add the correct recipe of carcasses, manure, hulls, and water to the primary bin. In a few days temperatures should increase to 140 to 150 degrees F. Once the temperature drops below 130 degrees F move the material to the secondary bin.

Stage 2 (Secondary bin) Moving the material increases aeration and activates microorganism activity. When temperatures peak in a few days and drop, apply the material to the field.

A free-standing dead poultry composter.



Dead poultry composter bin, showing layers.



Cautions

Three cautions to remember:

1. Composting dead poultry is not for everyone. Although only 20 minutes per day should be needed in loading and caring for the composter, good management is needed or the system may develop bad odors and attract flies and vermin.
2. The composter is designed for normal mortality. It is not designed for large die-offs from diseases or excessive heat.
3. Avoid getting the mix too wet. 20% moisture content seems to be ideal. Too dry and it will not heat up properly, too wet and the system becomes odorous. A little trial and error will soon tell you how best to manage your composter.

