

2006 National Carcass Disposal Symposium:  
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## **Composting Catastrophic Poultry Mortalities A Growers' Perspective**

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I am a Poultry Grower and also work full time as a county Extension educator, (ag agent).

We have 4 houses, each measuring 43' x 548' and containing 31,000 birds. Normal mortality is always less than 2 per 1000 chicks placed per house per day but that is still 62 birds per house or 248 birds per day. At placement, these mortalities are easy to compost in the 4' x 4' compost bin attached to the 40' x 152' manure building. During the first 2 weeks it is quite easy to compost these birds in the 4x4 bin. When birds reach 5 and 6 weeks of age, the bins fill up quickly, and disposal of dead birds, really becomes time consuming. During the last week, 7 weeks of age, it is nearly impossible to compost dead birds in the small 4x4 bin, as normal mortality usually rises. These birds weigh at least 6 pounds and 250 birds at 6 pounds each is 1500 pounds per day. The 4x4 compost bin fills so rapidly that we have to find an easier way to compost our daily mortality.

The compost “menu” calls for 1 part chicken, 1 part manure, 1 part straw, and enough water to saturate the feathers but not soak the birds. This material is difficult to handle in a spinner type manure spreader, as the straw tends to bridge so it will not fall and hit the floor chain. The lower eastern shore of Maryland uses spinner spreaders to move manure. Our farmers are serious about spreaders, even mounting them on trucks and tractor trailers. The straw composted material just will not work in spinner spreaders. The older beater spreaders can handle the material better.

We crust out every 7 weeks when the flock goes out. Our turnaround time varies with each flock from hours to weeks between flocks. We use either a skid steer loader (Bobcat<sup>™</sup>) or a crusher to clean out between flocks. The crusher must be unloaded in the middle drive-thru section of the manure building, and when we use a Bobcat to crust out, we haul either with dump trucks (maximum 14' body) or the spinner spreaders with the chain removed on the spinners. Regardless of what equipment we use, the material is in the drive through section of the building. We then use the Bobcat to move this material to our North wall and pile it. It begins composting a bit as we pile it.

The South side of the manure building is where we place our mortality. We place manure on the floor, then birds, then more manure. We are careful to use lots of manure on top to adequately cover the birds to discourage predators like foxes and even domestic dogs. Your neighbor certainly does not want his dog bringing home partly

composted poultry. We place each day's mortality beside the previous day's mortality and move material from the North wall to the South wall with the Bobcat. We then turn the material at least once after it composts for about 2 weeks. When we clean the manure storage structure out, the composted material will go through a spinner spreader.

We do not place the compost material very high on the walls as the manure sheds have wooden sides and poles and spontaneous combustion can occur. We never pack the material but leave it loose and fluffy to have a sufficient amount of air. As the material composts, it will reduce the volume to approximately half. This system works best for us. It is easy, convenient, all done mechanically, and produces a product that will go through a spinner spreader during land application as fertilizer.