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Winnebago County UW-Extension
625 E. County Y, Suite 600
Oshkosh, WI 54901
920-232-1971

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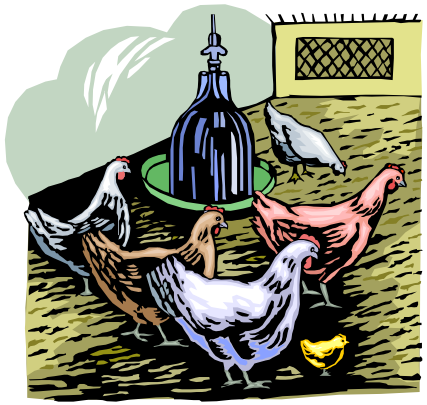
Handling Urban Poultry Litter



Prepared by: Nick Schneider
Winnebago County Agriculture Agent
University of Wisconsin-Extension

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Handling Urban Poultry Litter

How much waste will poultry create?

A typical laying hen weighing four pounds will produce between three to four ounces of waste per day (A3601). This is approximately 75 pounds per year. At the time of excretion, poultry waste is rather wet so it is important to have plenty of bedding (aka. litter once soiled) to absorb the moisture. The total amount of bedding, such as wood shavings or straw, can vary based on the size of the chicken coop and number of birds. Plan for two to three inches deep of bedding. Bedding not only is important for keeping the poultry warm and dry, it also provides scratch which is important for poultry well being (Fanatico). The bedding should be replaced when it stays too damp and/or cakes together. Good ventilation is an important way to help the bedding dry.

How should poultry litter be disposed of?

The two most likely disposal techniques will be in a composting system or applied to the soil such as in a garden.

Are there precautions with handling poultry litter?

Like other types of animal wastes, soiled poultry litter can be a source of bacteria, in particular, *Salmonella*. Wearing rubber gloves and washing hands well with soap when cleaning out a coop is a simple way to address this issue.

How should poultry litter be composted?

Composting the poultry litter is an excellent option. Composting can be done by many methods ranging from piles, to pits, to open bins, to sealed bins which can be stationary or rotate.

The correct carbon to nitrogen ratio is important for good composting. Initial C:N ratios from 20:1 to 40:1 give good composting results. This is often referred to as having the correct amounts of brown and green material. Other plant material and some food wastes can be added to balance the compost pile. Moisture content should range from 40 to 60% for microbial activity. Aerating or stirring the material is important for introducing oxygen and encouraging good aerobic bacteria to eat and break down the particles. Improperly aerated piles can encourage anaerobic bacteria which can be a source of bad odors. Aggressively managed compost that heats well may be finished in a couple of months while a passively managed pile may take more than a year to break down (Governo). Since poultry litter can contain undesirable bacteria and be a source of odors, sealed yet aerated compost bins may be prefered for disposing of poultry waste in urban enviorments.

Can poultry litter be used in the garden?

With caution. The risk of bacterial contamination from manure is serious enough that USDA National Organic Program (NOP) rules specifically address when non-composted manure can be applied to soil used for vegetable production. The NOP rules state that if vegetables have edible parts that might contact the soil (either directly or via rain/irrigation splash), then manure must be applied at least 120 days before harvest. For a crop like sweet corn, where the edible portion is not exposed to soil, the limit is 90 days before harvest. In Wisconsin, 120 days can cover most of the vegetable growing season, so growers may be tempted to apply fresh manure in the spring, even though harvest will be less than 120 days away. Avoid doing this. Incorporating the litter into the soil in fall is a better option for providing the recommended 120 days (Ingham).

What is the nutrient content of poultry litter?

While poultry manure is relatively nutrient rich compared to other types of animal manure, the total amount of nutrients produced from a small backyard flock will be low. In a single year, a chicken will produce less than a pound of nitrogen, phosphate and potassium in a plant available form (A3601). It is important the poultry litter be contained in and around the coop so it does not became a pollutant by washing into storm water systems.