Backyard Chicken Gardening 101

Submitted by Mary O Trosien CMG Intern 2021

Introduction

The popularity of raising backyard chickens has grown in the last decade for urban and suburban chicken ownership. According to a recent survey done by the American Pet Products Association National Pet Owners, roughly 10 million US households own backyard chickens! Do you know what this means? Yes, a large population enjoy delicious fresh eggs is an answer. Yes, families enjoy hours of entertainment watching their feathered pets. However, what I am thinking of is that is a lot of chicken poop people must deal with! Do you know that a chicken lays about 1 cubic feet of manure every 6 months? So, what can a responsible owner do with all of manure? The answer is composting of course! I will be discussing a specific method of composting in this article.

Benefits for the Gardener

Chicken manure and the associated litter are higher in nitrogen, potassium, phosphorus, and calcium as compared to other farm animals. Other nutrients include magnesium, sulfur, manganese, copper, zinc, chlorine, boron, iron, and molybdenum. Composted poultry litter is a natural slow-release source of macro and micronutrients. One application tilled into the top 6-10 inches of soil will provide a nutrient for plants' roots and feed them throughout the growing season. Soil tends to be darker in color and less compacted. Such a benefit in my clay dominated garden!

Managing Safety

It is important to exercise precaution when handling chicken waste to minimize potential health risks associated with harmful bacteria, specifically E. Coli and Salmonella. This includes wearing gloves and thoroughly washing your hands and clothes afterwards. A minimum of 120 days waiting period between application of the chicken compost, harvesting the produce and consumption is recommended to allow adequate time for the natural death of harmful bacteria. This period can be included when the litter is in the compost pile or can occur after its application in the garden. Immunocompromised populations including cancer, AIDs, liver disease, kidney failure as well as pregnant women and very young children, who are susceptible to food borne illnesses, should avoid eating uncooked vegetables from manured gardens.

Active Pile Composting

This method of composting uses a large pile litter that can be easily created in an area of your yard. The internet provides numerous suggestions on how to start the pile, but the easiest I found is to start the base layer with straw, twigs, or a pallet to provide a few inches off the ground for drainage purposes before piling your compost material. The manure is the "green" component full of rich nutrients as described and the litter, which consists of the coop bedding (pine shavings, straw, grass etc.), feathers, and undigested food is the "brown" component or carbon source. The pile temperature (ideal at 130-150 F x 3 days), the frequency of turning, moisture level and initial make up of litter determine length of time for when it is ready for the garden. It is recommended to turn the pile every couple of weeks to allow the center of the pile to "heat up". Aeration provides oxygen to the microorganisms involved in the composting process and mixes the pile. It is recommended to keep the pile moist, feeling like a damp sponge, but unable to squeeze water out if you grab a handful. The ideal ratio is a combination of 25% mature to 75% bedding. The average time for your compost to cure is approximately

45-60 days. The compost is ready when your pile material is dark, crumbly, and sweet-smelling humus.

Fresh eggs, feathered entertainment and continual source for rich compost are a few of the many benefits of raising backyard chickens.

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