

# GUIDE FOR CONSTRUCTION OF A SUSTAINABLE CHICKEN COOP

This information is provided by Papa John Kiefer as a guide for incorporating sustainable practices into construction of a backyard chicken coop.

## VALUE OF A SUSTAINABLE COOP

### WHAT'S IN IT FOR THE HENS?

- o Provides a long-term healthy living environment.
- o Dry ground, with 'Soft Soil' for scratching and bathing.
- o Space to exercise.
- o 360o fresh air circulation.
- o Adequate natural light
- o Protection from wind and rain.
- o Safety from predators and rodents.

### WHAT'S IN IT FOR THE FAMILY?

- o Fresh eggs.
- o No odor, and no removing fresh manure from coop.
- o No crowing (Roosters not needed, and prohibited in Lafayette).
- o Children's education and pleasure. (Feeding, gathering eggs, holding pets).
- o Chickens can remain in the coop for an extended period without access to run, and remain completely healthy.
- o May reduce the possibility of a municipal code violation and/or a complaint to City.

## SUSTAINABLE COOP REQUIREMENTS

- o Provide a minimum of 5 square feet per chicken inside the coop. This provides sufficient space for movement, scratching, bathing, eating, drinking, and sleeping.
- o The floor of the coop is the ground, specifically, 'soft soil', defined below.
- o A portion of wall space is welded wire, 20-30%. This includes perimeter air space at ground level. Welded wire is placed around full inside perimeter of coop extending below ground and above ground.
- o The remainder of wall space is solid 3/8" plywood.

## CREATING A 'SOFT SOIL' ENVIRONMENT

The key to a sustainable coop with 'no odor and no cleaning' is Soft Soil.

- o Remove all dirt from the inside of coop to a depth of 8".
- o Place welded wire, ½" x 1", 16 gauge, around the complete inside perimeter of the coop, extending from 8" below ground level to 10" above ground level. Wire across the bottom of the coop is not required. Below ground protects from rodents, and above ground protects against four footed predators.
- o SOFT SOIL – Refill the hole in the ground inside the coop with the following: Equal parts of planting/potting soil, straw, the original earth removed, and wood shavings (not wood chips). Mix together in coop. Soft soil in coop should be 5 – 6 " deep. The texture of original earth returned to coop should be loose, and fine to small pieces of earth, avoiding larger clods of earth. Soft soil should be turned over monthly.
- o The combination of soft soil, air circulation and constant scratching dries and breaks down poop quickly resulting in no odor and no need for removing fresh manure. Over time, the hens will convert the original soft soil into useable compost.
- o Roof water should be drained away from coop.

**For More information** about a Kiefer sustainable coop and construction plans contact:  
Papa John Kiefer, <jhkiefer@comcast.net>. 4/01/15