

Jose Rodriguez, Extension Assistant, Ilene Iriarte, Justin Santos, Extension Associates, L. Robert Barber, Extension Agriculture Economist

A challenge for new farmers is finding agricultural enterprises that match their temperament and available resources. Chicken tractors are a low cost way to explore the time commitment required by livestock enterprises without large initial capital outlays. Chicken tractors also provide a low labor method of developing garden beds for exploring vegetable and herb production without the need for expensive tillage equipment.

What is a Chicken Tractor?

Chicken tractors are light weight mobile pens, which confine chickens to a small garden spot in order to prepare the soil for planting. Chicken tractors also provide a controlled method of poultry pasturage. The tractor provides the chickens with protection against predators and weather. It also keeps the chickens in one area where they can improve the soil, through scratching and feeding activities



Garden bed prepared with chicken tractor

Benefits of a Chicken Tractor:

Key benefits from chicken tractors are weeding, garden pest control, fertilizer, and food.

Weeding: Weeding occurs as the chickens peck and scratch the soil. This process removes all plant matter, and seeds; thereby, clearing the pen of current and future weeds. The soil stays relatively weed free for about 2-4 months.

Pest Control: The chickens will eat insects and their larvae that find their way into the pen. They also consume diseased plant residue.

Fertilizer: Chicken manure is a great fertilizer for your soil which is able to supply the nitrogen needs of a small garden. Phosphorus, and potassium found in their feed, are also in their manure. The soil is ready for planting in two weeks after moving the chickens to a new location. The waiting period is necessary so the excess nitrogen can bind with carbon in the soil otherwise you will burn your new plants. This initial nitrogen burn also helps clear the plot of weeds.

Food: The hens will supply you with a steady stream of eggs. You can also raise broilers for meat instead of hens for eggs.

Before Building a Chicken Tractor Ask Yourself:

1. How much area do you need to cover?
2. How many chickens do you plan to raise?
3. How large of a tractor do you need?
4. How much are you willing to spend on the chicken tractor?

Different Types of Chicken Tractors:

There are several types of chicken tractors that you can build on your own. The Guam Cooperative Extension has built 3 types. These are a small wooden chicken tractor, a small PVC tractor, and a larger canopy and frame tractor. The wooden chicken tractor is the cheapest to build. It is made of wood (2"x2"s), but it is the heaviest of the three.



4'x8' Wooden Chicken Tractor

The PVC tractor is about the same size as the wooden tractor, it is lighter, and easier to assemble.



4' x 8' PVC Tractor

The wooden chicken tractor and the PVC tractor are both 4' x 8' x 4' and made for backyard use for multiple small garden plots. PVC model has the added advantage of not rotting.

The third chicken tractor is basically a modified canopy and metal tubing frame (common on all our islands) with a base added and fencing around the sides. It covers the largest square footage which allows larger flock and the ability to clear more land.



10' x 12' Canopy and Wire Chicken Tractor – woven coconut fronds provide side shade

Other Components of the Chicken Tractor:

There are a few components that go inside the chicken tractor that are necessary for laying hens; feeders, water containers, nesting boxes, and roosting perches. The chicken tractor may also need side shade to protect the chickens. The box shape of the tractor allows sun light to come in directly from the sides. These components are easy to make.

Feeders: We find that 5 gallon buckets with no lids make excellent feeders. Cut vertical slits on the side about 2-3 inches wide by 6-8 inches high so that the chickens' heads can reach in. You might want to run a rope through the handle to hang the feeder away from the ground so the chickens do not go into it.



Feeder

Water Containers: Water containers can be made of plastic containers which are cut so the chickens get access to the water inside (following the same concept as the feeder, except the slit will be horizontal). Waters should be raised off the ground or hung from the side fencing. Be sure to provide adequate water for several days.

Nesting Boxes: These boxes can be made either out of a bucket with a lid on (or without) and a nice entrance cut on the side, or they can be made out of wood nailed together to resemble a box with an entrance. You can use shredded paper, grass clippings, or wood chips inside the nesting box.



Nesting Boxes

Roosting Perches: These can be any bar of about an inch in diameter strong enough to support the weight of a couple of chickens. You can also use two by two inch length wood or metal water pipe. You can run these roosting perches through the side fencing and tie them to the sides of pen

Side Shade: Since the chickens are confined it is important to ensure that there is always shade available. During early morning and late afternoon you need to provide side shade. This can be provided by a cover of some sort, on the east and west sides of the chicken tractor. A local material that can be used as a cover is woven coconut fronds attached to the sides. This will provide the chickens with shade inside the chicken tractor all day long.