

**Plant Aloha** <http://hawaiiansanctuary.com/plantaloha>

Thursday, June 8, 2017

**Chris Hardenbrook of 13-Mile Farm** facilitating



## Starting A Poultry Flock

(Two part series. Next week: Sustaining A Poultry Flock)

**Acknowledgments:** A special thanks to Hawaiian Sanctuary, the County of Hawaii Research and Development, and all others involved to make these classes a reality! We are still looking for support to complete and enhance this amazing FREE program. <http://hawaiiansanctuary.com/donate>

**Introduction:** Aloha! Hawai'i used to produce much more of its own food. Now, in the modern era, let's say since 1950 or so, we have seen increasing dependence on food supplied from out-of-state sources. The reasons are many and, to some degree, we will always have this situation while tourism dominates over agriculture in terms of resource allocation and the conversion of ag-lands to housing and production of non-food crops persists. Conscientious consumers have turned to local growers and small farmers to find a supply of healthy locally-grown food. Homeowners can provide themselves with small vegetable gardens and a flock of chickens as a way to have fresh wholesome food and appreciate where food comes from! Today, we'll talk about responsibly starting a small flock of chickens for eggs and meat.

### Why Have Chickens In The First Place?

A lot of people's experience with chickens is less than favorable. The general impression is they are noisy, filthy, and stupid. They'll tear up your yard and that little veggie garden of yours, and the roosters are dangerous, to boot. There are also legal issues resulting from Zoning land-use rules applicable to your property. On the other hand, the reasons for keeping chickens is compelling:

- Eggs and meat
- Garden help
- Manure production
- Pest control
- Companionship
- Conservation

### MANAGEMENT IS THE KEY

Know what you want from your chickens. Chickens can be pretty versatile around the homestead, but each additional job you task them with requires more effort on your part, too.

- Have a goal
- Know what to expect
- Provide necessary elements for control
- Commit to their welfare
- Plan ahead

**How Many Chickens Do You Need?** General guidelines say four hens-per-person in your household will keep you in eggs. Meat chickens grow from baby chicks to slaughter weight in just 8 weeks; so, if you raise a dozen meat birds, you can have two months of whole chickens (at one or two per week from your freezer) for the table. Start new meat birds every 8 weeks to continuously keep your household in meat.

**Pick A Breed To Match Your Need:** Types of Chickens

- Meat – usually hybrids; yield in 6-10 weeks, and must be replaced after slaughter
- Eggs – usually hybrids; yield in 5 months and will lay productively for 2 or 3 years
- Dual Purpose – standard heritage breeds; useful for both eggs and meat and can be self-sustaining
- Show/Fancy/Conservation/Pet – all over the map!

### Sources Of Chickens

Locally, you can trap feral chickens or check out Craigslist under the Farm/Garden heading. Buying birds locally may mean less cost and hassle, but you need to consider the source before you buy. Look for chicks raised in a relatively clean environment if buying very young birds. Buying pullets for eggs gives you a better idea of the bird's vigor and saves the feed/housing cost of raising day-olds. Look for birds approximately four months old.

- Asagi Hatchery – only Hawaiian hatchery, located on 'Oahu (<http://www.asagihatchery.com/>)
- Mainland hatcheries – many to choose from, large variety available
- Sustainable Poultry Network – Highest quality dual-purpose heritage breeds

I suggest raising chicks from hatching eggs or by buying day-old chicks. YOU control their diet and environment and get to know the little critters as they imprint on you. You'll learn to appreciate chickens as the remarkable little dinosaurs they are, and not just food-machines!

### **Raising Day-Old Chicks**

Baby chicks are delicate and super-hardy at the same time. They are tough enough to be shipped all over the world in little boxes, but get one wet and it's a goner. There are a few special needs you will provide in the first few weeks to raise vigorous productive birds.

Brooder box – can be a cardboard box, a plastic swimming pool, or other enclosure to confine chicks, keep them warm, fed, and protected from predators such as mongooses and your cat or dog.

Allow 1 to 1.5 sqft per bird.

They need to be kept at about 95 degrees the first week. Use a light bulb or heat lamp (250 watt) and place it above the chicks ~18” so the brooder floor is 95F. If the chicks huddle under lamp, move it down an inch. If they stay away from the light and huddle in corners, raise it up some. Watching the chicks will tell you when you have the temperature right.

**DO NOT** use flat newspaper as litter because it gets slick and chicks can get hurt. Also, it will stink. Better use a few inches of white pine shavings and/or straw. **DO NOT** use cedar shavings or treated wood chips.

The very best treatment is to inoculate the bedding with indigenous micro-organisms (IMO) and lactic acid bacteria (LAB). This is the Korean Natural Farming (KNF) way. Provide water in a bowl they cannot drown in (marbles in bowl keep it shallow).

**Feed** – I use the KNF method for starting my day-old chicks: The first three days (one day if meat birds) offer nothing except raw hard brown rice. After the third day (1<sup>st</sup> if meat birds) add cut-up bamboo or banana or another fibrous grass and commercial STARTER feed, free-choice. Look for a minimum of 20% protein. Supplement with fruit, leafy greens, and left over rice and pasta (in moderation). The mainstay of their diet is commercial feed as it has formulations you cannot duplicate and are important to the long-term health and vigor of your birds.

Layers can graduate from the brooder to your coop or coop/pasture after 4 to 6 weeks. Meat birds will move to larger quarters by 3 to 4 weeks as they are growing so fast.

### **Housing Your Flock...so many ways...**

- Fixed enclosed coop (KNF and deep-litter systems)
- Mobile enclosed coop (Salatin, chickshaw, various tractors)
- Coops with runs (“free range”)
- Pasturing (“pastured”)

If chickens have access to pasture they will work it for bugs and graze the grass. When the grass is depleted and the bugs gone, you can move the pasture they have available with mobile electric fencing and a mobile coop.

Birds need protection from mongooses, hawks, and dogs.

### **Feeding Your Flock**

Layer hybrids and dual purpose can use STARTER feed for the first four weeks at least. They can then be switched to GROWER feed (~18% protein) until they start to lay at about 5 months. Then, when 80% of the flock are laying, switch to LAYER feed (usually 14% to 17% protein plus added calcium). Meat birds can finish on GROWER or just eat STARTER all their short lives.

ALWAYS plenty of clean water! A 5-gallon bucket with chicken nipples in the bottom, hung ~18” high, works great.

Keeping feed cost down is a problem for all livestock producers. Supplement that expensive mainland-shipped feed with table scraps (no meat, rotten or moldy food, PLEASE!), sprouted grains such as barley and peas, also, fermented feed for probiotic input is part of the KNF protocol, and easy to make.

*Probiotics are “good” bacteria that help keep our digestive systems healthy by controlling growth of harmful bacteria. Fermentation produces **probiotics**.*

**Pasture** is good for chickens and managed properly can be good for your pasture. Chickens are OMNIVORES. If you have other livestock and rotate pastures, the rule is: “omnivores follow herbivores.” The chickens will eat coquis, centipedes, cockroaches, mo'o, and more!

**Worms and Black Soldier Flies (BSF)** go well with a poultry operation. The BSF, especially, are super-food for baby chicks and a great supplement for adults.

Permaculture Integration: The Working Chicken

- Tiller chickens
- Shredder/composters
- Pest controllers
- Fertilizer producers
- Weed eaters

In the permaculture plan, your property is divided into zones. The lowest numbered zones are closest to your living area. The idea is to place the things you visit the most to harvest and maintain, closest to your house. So a veggie garden for salad greens and herbs is close to the house, making it easy to visit. An orchard of 'ulu might be at the edges of your property since you visit for pruning and harvesting only seasonally. Chickens could go in zone "1½" so to speak. You will probably visit them daily, but might not want them right up against your house! Mine are kept in zones 3 and 4.

Use chickens in easy to make tractors to till, weed, de-bug, and fertilize your veggie rows before planting. Bring them back after harvest to clean up the mess. Put them in pasture to follow cows, sheep, goats, or pigs; they'll spread the herbivore poop around, scratch it in, and eat the fly larvae while adding their own fertilizer! The pasture recovers more quickly and robustly, while you save on feed cost.

**Resources:** The Internet is full of chicken stuff! There are blogs, vlogs, newsletters, advice of all kinds (some of it not altogether so good...). If you are only going to buy ONE book: **The Small-Scale Poultry Flock**, by Harvey Ussery; Chelsea Green Publishing

Info on KNF: <http://naturalfarminghawaii.net/>

CTAHR, UH at Mānoa, has a bunch of free publications and papers on the Web.

Go to: <https://www.ctahr.hawaii.edu/site/Info.aspx> and type poultry in the search box. You will have a list of downloadable publications ranging from "Poultry Keeping for Beginners in Hawaii" (1929), to "An Introduction to Natural Farming Poultry Production in Hawai'i, the Wave of the Future" (2016).

I also like watching the antics of Justin Rhodes at <http://abundantpermaculture.com/> Also, look for his YouTube channel and check out: <http://abundantpermaculture.com/free-chicken-videos> (you will have to sign up to his email list, but of course, you can unsubscribe anytime.)

### **Next Class: Thursday, June 15: Sustaining A Poultry Flock**

We'll review the material covered in Starting A Poultry Flock and describe a plan for keeping your chickens producing for you forever. The nice thing about hybrid chickens is their excellence at doing what they were bred to do. The problem with hybrid chickens is they "wear out" too quickly and must be replaced. We'll examine standard heritage breeds more closely and learn how to breed and sustain your flock correctly, to protect their genetics, and sustain your flock. You can even develop your own distinctive breed! **MAHALO!**

**Chris Hardenbrook**

**13-Mile Farm**

Kurtistown, HI 96760-0558

808.430.4355

[chris@13milefarm.com](mailto:chris@13milefarm.com)

### **Event Announcement**

Meet Jim Adkins, Founder and President of SPN-USA

(The Sustainable Poultry Network)

Slow Poultry for Hawai'i Seminar at 13-Mile Farm

Saturday, August 26, 2017 from 9am – 5pm

\$60. includes lunch (call Chris for details @ 808.430.4355)