



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

Thursday, June 15, 2017

Chris Hardenbrook of [13-Mile Farm](#) facilitating

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! Last week we talked about starting a chicken flock, today we'll talk about responsibly sustaining a small flock of chickens for eggs and meat.

How Important Are Chickens In America's Diet?

- Eggs produced daily: 50 billion
- Chickens consumed daily: 22 million
- *Per capita* consumption: 90 lbs in 2015 (28 lbs in 1960)
- Third highest source of calories in average American diet

What Is Meant By Sustainability?

Sustainability means the ability to be maintained at a certain rate or level.

In practice, it acts against the depletion of natural resources in order to maintain an ecological balance. Many smart farmers save seed from their produce rather than buy new seed every planting cycle. By saving the seed that was nourished and matured *in-situ*, there is a greater possibility of the plant to adapt favorably to the local conditions of soil and weather in future generations of that plant. The same holds for livestock, including chickens.

The benefits of deliberate breeding can yield chickens that are:

- Healthier
- More robust (vigor and stamina)
- More productive (more/better eggs/meat)
- Temperament (less aggressive)

To reach true sustainability for your chicken flock, you must use standard (heritage) breed chickens. Standard breeds are all dual-purpose, though some are better for eggs and others for meat, you will get both from any of these breeds. The point is to replace your birds from within the flock rather than be forced to buy new chickens periodically.

What Is A Breeding (Mating) System?

In Nature, pairing for breeding is not a totally haphazard, random affair. Social and sexual factors promote pairings that accomplish two things above all:

- Increase diversity of gene pool
- Decrease likelihood of in-breeding depression

A Breeding System will follow the same guidelines and, perhaps, be specifically selective to also consider enhancement of “desirable” traits while attempting to eliminate or diminish “undesirable” traits. These traits may be both physical and behavioral.

The “best” birds to mate are not just the biggest ones or other arbitrary traits, you must insure minimized in-breeding to maintain genetic diversity, and choose for a good all-around bird before selecting for egg-laying or egg color or meatier carcasses.

AGAIN, MANAGEMENT IS THE KEY

There are several breeding systems, or schemes. Some require more record-keeping than others, and what you are trying to accomplish may dictate the best system to use. My choice is the Clan (Spiral) System:

- Overall simplicity
- Minimum record-keeping
- Controls in-breeding
- Guarantees genetic diversity
- Allows for selection of best traits (improvement breeding)

The Clan System

Separate into three “Clans” minimum (your finest three roosters with your finest three hens).

First pairings might be arbitrary if you have only a few birds and don't know their lineage. Subsequent pairings will be more rigorously determined.

Give each Clan an identifier, such as colored bands, so you have a Green Clan, a Red Clan, and a Blue Clan, for instance.

First Breeding is within own Clan. So: Green rooster to Green hen, Red rooster to Red hen, and Blue rooster to Blue hen. All subsequent matings will rotate in a prescribed manner.

All chicks are assigned to the Clan of the mother, regardless of gender.

Use toe-punching as a permanent ID.

Second Breeding season, mate cocks to hens in “next Clan over.” So: Green roosters to Red hens, Red roosters to Blue hens, and Blue roosters to Green hens.

Again, all chicks are assigned to Clan of their mother, regardless of gender.

Third Breeding season, again mate to “next clan over.”

Continue with this scheme; never use a rooster for more than one breeding season to avoid possibility of mating to a daughter.

Clan Breeding System – Two Basic Rules:

1. ALL chicks from each breeding, cockerels and pullets, are assigned forever to the Clan of their mother.
2. AFTER first breeding season, cocks mate to hens from “the next Clan over.”
 - Cocks and hens of the same Clan never mate together.
 - Cocks never mate hens except from “the next Clan over.”

The birds that do not qualify for breeding are culled. Culled can mean harvested for the table, or put out to pasture as a good egg-producing layer. In short, best breeders will conform to the American Poultry Assoc.'s Standard of Perfection handbook. This means you are choosing for the traits that make a great dual-purpose fowl.

You may, however, decide to breed with the intent of creating your own distinctive breed. This may be done if you know what you are doing! The methods used for determining which birds are “best” for breeding will be covered fully in a seminar at 13-Mile Farm on 26-August. **Jim Adkins, of the Sustainable Poultry Network** is visiting from N.Carolina to examine my Black Australorp flock for certification. See contact info below.

References

Sustainable Poultry Network <http://spnusa.com/>

The Modern Homestead <http://www.themodernhomestead.us/article/Home.html>

Livestock Conservancy Poultry page <https://livestockconservancy.org/index.php/heritage/internal/poultry-breeds>

The Grow Network <http://thegrownetwork.pages.ontraport.net/free-membership-sp>

Henderson's Handy Dandy Chicken Chart <http://www.sagehenfarmlodi.com/chooks/chooks.html>

Chris Hardenbrook

13-Mile Farm

Kurtistown, HI 96760-0558

808.430.4355

chris@13milefarm.com

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)