



Grow Your Own Poultry Feed

By Harvey Ussery

In a time of economic constriction, a home poultry flock can contribute to food security — *if* you're not totally dependent on purchasing poultry feed to keep it producing. The home flock that makes you more food-independent is the one that is fed, at least partly, from your homestead's own resources. Fortunately, the natural feeds you can produce in your backyard are what chickens would eat in the wild: green plants, wild seeds and animal foods, such as earthworms and insects — all fresher and more nutritious than anything you can buy in a bag.

Imagine feeding as a spectrum: On one end is a completely confined flock, eating exclusively what we offer them. Rigidly "scientifically balanced" feed is necessary, because the birds have no way to make up any deficiencies on their own. At the other end of the spectrum is a flock eating solely what it finds on its own in a completely natural setting — feeds that naturally balance its dietary needs. Of course, few of us have the land and time resources to provide our flocks with natural foods sufficient to sustain them completely. So, your feeding program will likely be somewhere in the middle of the spectrum.

Pasturing the Flock

It's possible for free-range flocks of poultry to feed themselves — if they have access to enough biologically diverse ground and protection from predators. My grandmother's flock fed itself, ranging freely over a 100-acre farm. Geese can subsist exclusively on good grass after they're a couple months old. Turkeys collect their own feed if allowed to glean ticks, wild persimmons and acorns from wooded areas.

Pasturing our flocks during the growing season is the closest to complete free-ranging most of us can come. A pastured flock helps with pasture management: Grazing the turf means less mowing for us; eating wild seeds limits the "seed bank" for weeds; and potentially destructive leaf eaters, such as grasshoppers, don't have a chance to multiply. Plus, the birds' droppings boost soil fertility. Before concluding that pasturing your flock is not an option for you, remember that many small flock owners pasture their flocks on their lawns.

Conventional Grain and Legume Feeds for Chickens

Most grains in commercial feed for poultry (corn, legumes, and small grains such as wheat, rye, oats and barley) are easy for the homesteader to grow. I grow 'Hickory King,' a vigorous, large-ear feed corn. After the ears dry on the stalks, I husk and store them in large trash bins, and hand-shell daily for the birds during winter.

Chickens with access to grit (sand or pebbles necessary for grinding feed in their gizzards, as chickens don't have teeth) will have no problem processing whole kernel corn. I am skeptical that any actual difference in feed efficiency is worth the additional expense and effort to grind homegrown corn. If you grind corn, feed it within a few days, because the more perishable nutrients begin to break down as soon as the seed coat has been ruptured. Whole kernel corn is not appropriate for chicks.

Other easy-to-grow seed crops include millet, sorghum and sunflowers. Simply throw the whole seed heads to your chickens.

Garden Cover Crops, Insects and Weeds

Many common garden cover crops — alfalfa, clover, annual rye, kale (and its close relative, rape), turnips, mustard, buckwheat and grain grasses — provide abundant feed for poultry. All can be cut and carried to the chickens, or the chickens can graze these crops.

The biggest challenge with conventional feed grains is not growing them, but harvesting and threshing (which are labor-intensive), plus finding the space to store them. You can eliminate these issues by growing grains as cover crops and allowing them to mature before sending in the chickens. Cowpeas and buckwheat are similar double-duty cover crops with nutritious seeds for chickens.

While eating these high-quality feeds, chickens till in the cover crops, improving the soil with both plant residues and their droppings.

Electrified net fences (available through [Premier 1](#) and [Kencove](#)) and natural feeding strategies intersect in the garden, as well as the pasture. A net can surround the winter squash patch and enclose a few guineas to provide 100 percent control of squash bugs. Fencing chickens (and/or ducks) in the garden before the planting season largely eliminates the slug population for months. "Weeder" geese rid certain crops (corn, grapes, onions, potatoes, strawberries, raspberries, blueberries and asparagus) of weeds.

If you want to selectively target smaller garden areas, park a [chicken tractor](#) on individual beds. Adjacent beds are protected from the chickens.

Regulations governing certified-organic production specify a waiting period of 120 days between the application of raw manure and the harvest of crops in contact with the soil — 90 days in the case of tall crops, such as corn and trellised pole beans, where there is no direct soil contact with the harvested part. I personally think the droppings of a well-managed home flock are unlikely to be a vector for pathogens. It is my standard practice to replant a bed immediately after it has been worked by the chickens, and to harvest the resulting crop without regard to any waiting period.

Comfrey and Other Feed Crops

Comfrey, rich in protein and minerals, is a sturdy perennial that can be cut and fed to the birds, or a moveable pen can be rotated over a comfrey patch so the birds can harvest the plants themselves. Geese and ducks especially love comfrey. Questions have been raised about the potential for long-term liver toxicity due to the alkaloids in comfrey. If you want to explore the subject further, search for "pyrrolizidine" online. My research has convinced me that whole comfrey leaves do not present health risks to livestock.

Certain "people-food" crops also can be used as poultry feed: potatoes, pumpkins, winter squashes, sweet potatoes, plus mangel or fodder beets. All these crops store well in the proper conditions.

Dandelions and yellow dock stay green into winter. As long as I can push a spading fork into the ground, I dig these highly nutritious plants and throw them to my winter flock by the bucketful. Geese are especially fond of wild chicory. And how do you suppose chickweed got its name?

Orchards, Forests and Tree Crops

Poultry fenced in the orchard consume a lot of protein as they help control damaging insects. They also help control diseases by cleaning up dropped fruit. Geese are particularly diligent at gleaning dropped apples and pears.

Historically, farmers allowed flocks of turkeys to range in wooded areas to fatten on windfalls of acorns, beechnuts and persimmons. I feed my flocks wild hickory nuts and black walnuts after smashing the nuts on a rock with a hammer.

Mulberry trees in the pastures provide shade and dropped fruit in abundance. [Chestnut trees](#) provide shade for chickens, and the chickens garner protein by eating chestnut weevils at various stages of development, breaking the life cycle of the weevils and protecting the trees.

Composter Chickens

The typical static chicken run — bare of green cover and dotted with poop — should be anathema to everyone concerned about flock health and avoiding runoff pollution. I recommend using a thick cover of organic duff on the run to absorb droppings, prevent runoff and retain fertility for garden applications. Fall leaves, grass clippings, wood chips, old hay or straw make great bedding for the run. As this organic debris field becomes more biologically active, it proliferates with feed for your chickens: insects, earthworms, fungal strands and health-promoting metabolites of microbes.

This strategy works in winter and summer. In winter, pasturing is usually not a possibility because dormant pasture sod will be destroyed by the chickens. Releasing the flock onto a heavily mulched winter yard is vastly better than confinement. If the mulch is heavy enough, the ground won't freeze and the chickens will have access to live animal foods (worms, slugs and pill bugs). In the summer, those who cannot pasture their flocks will find that a run covered with deep, mixed organic matter is the best possible alternative to the bare chicken run.

Making Alliances with 'Recomposers'

Organic wastes can be turned into resources through use of decomposer organisms, which I like to call "recomposers." Bins of cultivated red worms convert kitchen castoffs, garden residues and manure to a valuable soil amendment (worm castings), and you can harvest the worms as feed for the flock.

The black soldier fly, native in the United States in Zone 6 and warmer, is an especially fascinating ally. I began managing a colony of soldier grubs (the larval stage of this insect) last year, feeding them dense, succulent wastes such as food scraps, manure and culled fruits and vegetables. The grubs are high in feed value (42 percent protein and 35 percent fat, dry weight). The chickens and ducks love them.

Surplus Foods, Dairy Products and Eggs

Most culled fruits and vegetables make good feed for the flock. People who have extra space in a greenhouse can grow cut-and-come-again grain grasses, rape, turnips and other fodder crops for the winter flock. If I have an abundance of Japanese beetles, I shake off clusters of them (in the cool of the morning and evening, when they are less apt to fly) into a 5-gallon bucket with a gallon of water. Imagine the feeding frenzy when I give them to the chickens!

Sprouting the seeds you feed (purchased or homegrown) boosts nutritional value (enzymes, vitamins and protein). Sprouting is an especially useful strategy in winter, when fresh foods are scarce.

Excess milk and dairy byproducts, such as skimmed milk and whey, make excellent feed for the flock. Fermenting the milk using live cultures such as kefir makes it even more beneficial.

If you have them, cracked or dirty eggs make excellent feed, especially for growing birds with higher protein needs. Just boil the eggs, crush by hand, and feed — shells and all. Feeding eggs in this way will not encourage your chickens to eat raw eggs.

Finally, one of the best strategies for achieving greater independence from commercial feeds may be to reduce flock size. The fewer birds you support, the greater the share per bird of feed resources you're able to offer. As I get more serious about feeding from home resources, I'm trying to find the ideal compromise between reducing the flock to a more supportable size and producing the amounts of eggs, dressed poultry, broth and rendered cooking fats we need.

Most chickens *want* to forage natural feeds if given the opportunity. But how can you know whether your hens are getting enough to eat, and how much you should supplement with commercial feeds or those you formulate yourself? If your flock is ranging an area with plenty of natural feeding opportunities, don't be afraid to "push" your birds to maximize their foraging by being a bit stingy with the prepared feeds you offer.

What Do You Feed Your Flock?

Have you experimented with ways to produce more of your flock's feeds from your own resources? Do you have ideas to share? If so, please post a comment below. If you advocate growing particular crops for home feeds, please specify the types (e.g. single-head sunflowers with large seeds, or multi-headed types with smaller seeds) and/or varieties you have worked with.

Certain strategies are so obvious and commonly used (feed kitchen scraps to the flock), they don't need to be mentioned. But your unique twist on such ideas could be useful, for example: "I've arranged with a nearby sandwich shop to save their food scraps for me."

Remember to include your location and (if you know) your climate (plant hardiness) zone.

For more information on raising poultry, see these other articles by [Harvey Ussery: Anyone Can Raise Chickens](#) and [Incredible Homestead Chickens](#).