

Balance

Stability for Your Life & Farm

by Joel Salatin

Balancing our ecology, economics, and emotions provides enough challenge to last a lifetime. We never reach a magical destination in this quest for balance, a point in time where we can say “I’ve arrived.”

Every new discovery makes us aware of the need to refine, to constantly tweak our lives and our farm business. The more balanced our enterprises, the more stable they become. Our culture seems more unstable than ever, and we eco-practitioners can easily be sucked into whatever the mass hysteria happens to be.

For example, in post-terror paranoia, food safety is spawning a plethora of government and consumer-oriented security measures, including mandatory food irradiation. In the name of sterilization, mass murder of microbes is the new protocol. But without the 3 trillion microbes in the human intestinal tract, none of us would be able to metabolize food.

Microbes in and on food have always indicated life. When we zap the life out of food, what is left won’t maintain our bodies. Paranoid of ingesting food-borne bacteria that gives us diarrhea, our food police would rather mandate food that won’t maintain a heartbeat. Balance speaks of sense, and much of today’s public policy is imbalanced nonsense.

Balance would suggest having food with the right amount of good microbes but without the bad bugs. It can be done.

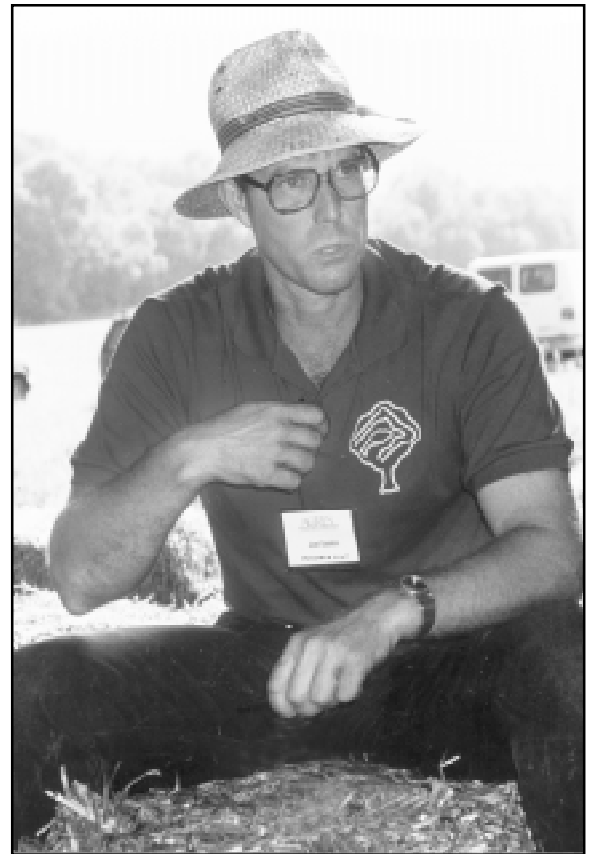
But, on a personal level, each of us deals with this issue, and it is this sphere on which I’d like to focus attention. Back when we were first becoming successful with the pastured poultry model, capitalist visitors would stop by and tell us we should grow 100,000 birds. Well-meaning, they encouraged us to aspire to greatness, to become the Frank Pierdues of the pastured poultry world.

But the problem with those numbers was that they would not fit into our ecological constraints. Pasture in our climate will only uptake about 200 pounds of nitrogen per acre per year. With the field shelters, the birds over any given square foot twice in a year, for that would dump on 400 pounds of nitrogen.

The excess would either vaporize, which is both a loss and odor problem, or leach into the groundwater and become a pollutant. As a result, our pastured broiler carrying capacity must not exceed our agronomic and forage metabolic capacity. Sure, we could buy tons more grain and run these birds across the pasture several times a year. But then pastured poultry would be just as big an environmental disaster as the conventional fecal-factory concentration-camp facilities.

When I run the figures on land area required to produce the grain to feed broilers, it comes out to one acre per 500 birds. At our stocking density, we cover one acre of land per 500 broilers. That is balance.

I am deeply distressed to see so many organic producers exceeding ecological balance just because the wonders of modern transportation and commerce allow it to be done. Plenty of organic poultry operations exist on acreages far too small to metabolize all the manure generated or to grow the grain on that land. Most organic eggs and broilers are grown in confinement facilities, often with a dirt yard attached, which receives incredible loads of nitrogen — sometimes more than 5,000 pounds per acre per year. The same could be said of organic beef feedlots



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or organic confinement dairies. By the way, loafing paddocks don’t change the figures.

If you want to exceed the natural carrying capacity of the land, then implement systems that will increase the nutrient metabolism. An example would be irrigation. P.A. Yeomans, the Australian water guru, thought the goal of every farmer should be to eliminate water runoff. If that water can be impounded during excess periods and metered out strategically in shortfalls, it reduces flooding downstream, on the one hand, and, on the other, maintains soil biological activity.

Water applied during droughts allows the plants to capture solar energy and turn it into biomass, which stimulates the decay cycle as a byproduct of the growth cycle. In this way, a given acre of land can metabolize more nutrients per year due to ratcheting up plant growth. Such hypermetabolism would open the system to receive more nutrients, allowing balance to be maintained with, say, more chickens.

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On a grand scale, this is the fallacy of concentrating crops in certain areas that seem to have a natural ability to make those crops grow better. Idaho potatoes come to mind. When farmers there first saw bountiful crops when they planted potatoes, their natural tendency was to plant more the next year. And then more the next year. Neighbors saw the success and planted even more.

Now, the region is rife with all sorts of potato diseases. Nature never appreciates too much concentration. Here in Virginia's Shenandoah Valley, mange attacks foxes when their numbers get too high. When the population is low, nearly all the pelts are excellent. When people stop trapping and the fox population builds, as many as eight of 10 pelts will be unusable. Population buildups and crashes are common phenomena in nature.

When I hear an eco-farmer proudly boast of his cherry orchard, I cringe, because normally the trees are planted just as intensively as those of the chemical-using neighbor's. And the organic farmer is using just as many concoctions — natural, to be sure — as the pesticide-spraying neighbor. Both farmers are concentrating too many trees per acre for nature's balance to work. Because of this imbalance, both are trusting off-farm, out-of-their-ecosystem stuff to keep the trees afloat.

Faced with this problem several years ago when we wanted to put in a vineyard, we combined turkeys with the grapevines. Dividing the quarter acre into four quadrants, each with a different variety of grapes, we planted 12 vines in each quadrant. We graze turkeys under the vines, rotating them from quadrant to quadrant about once a week. The turkeys mow the grass, debug, and fertilize. In turn, the vines offer shade and weather protection for the turkeys.

When the turkeys get to 12 weeks and tall enough to begin reaching lower grapes, we move them to a nearby orchard for their last four weeks. There they do the same thing, but the fruit is beyond their reach. Turkeys do not scratch in the ground like chickens, so the sod ground cover can be maintained beautifully under the fruit. Because the acreage yields two crops — turkey and fruit — neither single enterprise needs to be concentrated enough to justify the land use from one enterprise.

While it may be hard to imagine a world without the space shuttle, it is even harder to imagine a world without the earthworm. I'm betting on the earthworms.

The grapevines are planted at about 60 percent of their normal intensity, and the turkeys are at around 60 percent of a normal free-range density. The result is 120 percent production per acre, but without any of the pathogen problems that either would be likely to suffer at 100 percent normal intensity.

This principle carries over on a macro-landscape level. The three environments of open land, water and forest need to be balanced. The more these areas intersect, the greater the diversity of plant and animal life, because most living things require two of these environments, not just one. This is why here at Polyface we are building ponds out the wazoo. Imagine being able to capture all the water that runs off the farm every year. And imagine all the toads, waterfowl and aquatic plants that would add their synergism to the farm's ecology in such a magnitude of water.

In our 40 years on this farm, we have reforested roughly 60 acres for conservation reasons and to extend forestal wildlife zones into the pastures. This provides cover for birds, nature's insecticide. Now we are beginning to create small pastures in the forest, partly to create more of this life-abundant edge effect. Wildfires used to maintain forest age diversity; today, this effect can be achieved through harvesting and judicious conversion. It's as imbalanced to view forests as static wilderness areas as it is to clear-cut 100-acre tracts.

Maintaining balance emotionally and socially is equally challenging. I don't know how many well-meaning folks have told us we should just hire a bunch of immigrants to grow more eggs or move chicken shelters. That is not a balanced approach. If I can't hire my neighbors, then something is wrong with my business. That also goes for organic vegetable and fruit producers.

It's frustrating to have spent a lifetime listening to the eco-ag community lambast the socially imbalanced mind-set of the industrial food complex only to see today's organic empires embracing the same Wall Street mentality. The commoditization of organic food has pushed conventional Main Street thinking into this once-sanctified worldview.

My notion of a successful organic farm does not include a bunch of minimum-wage hirelings doing grunt work while I tool around the country pontificating about socially responsible food. In fact, on a very personal note, I've had people who enjoyed my presentation at a conference tell me I should travel and speak all the time. But then my life would be imbalanced. The energy and passion that drive my lectures grow out of the meditation and sweat over a well-placed fence post or a well-delivered baby calf.

All of us are pulled — by greed, by sincerity, by ignorance — to run beyond the balance point. But the truth is that simply "more of the same" is often not the best approach. "We sold 100 quarts last year, so let's double next year" is the Wall Street refrain. But the law of diminishing returns bumps up against cheaper-by-the-million efficiency. Culturally, we've seen it in the breakup of large corporations that led the information economy, where downsizing, outsourcing, and restructuring were the buzzwords of the paradigm shift. Agriculture was the last to join the industrial

economy, and it will be the last to exit. As agriculture runs pell-mell toward the latest industrial concoctions, whether they be genetic adulteration or corporate consolidation, the balancers known as E. coli and salmonella will bring balance back as surely as day follows night. Cycles have a way of restoring balance.

As companies rushed to replace secretaries with four-ounce voice-mail routers, their love affair with techno-glitz yielded frustrated patrons who took business elsewhere. Now the same companies are abandoning these devices and returning to real people to answer phone calls. This is the balance described by Thomas L. Friedman in his futuristic book *The Lexus and the Olive Tree*. The human soul craves heritage

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Polyface Farm strives for a balance of open land, water and forest - creating a greater diversity of plant and animal life.

and personal touch just as much as it desires creativity and the techno-glitz.

Hence, for every new pseudo-food product invented by Archer Daniels Midland, an eco-farmer joins the increasing ranks of stewards who love their land and their community too much to live without morals or ethics. While it may be hard to imagine a world without the space shuttle, it is even harder

to imagine a world without the earthworm. I'm betting on the earthworms.

We eco-farmers set the standard for balance. We decry the no-impact worldview of Wall Street. We must make consistency and balance normative in both words and action. Our world needs us to provide examples of balance, to show that production need not compromise the local ecology, to show that a profitable business need not adulterate the demographics of the community. We need to pioneer new ways of growing that regenerate communities and our families rather than destroy the bedrock institutions of a culture. If we don't, who will?

How do I sense imbalance? Here are some things that come to mind:

- Common pathogenic problems in my plants or animals
- Stress in my family — somebody ain't happy
- Unwillingness to freely share information lest it cut into my market share
- Unpleasant farm odors or unpleasant farm sights (apologizing to visitors)
- Losing my temper
- Wanting to "get away"
- Wishing I had the neighbor's farm in order to expand (coveting)
- Forgetting a wedding anniversary

Certainly this list could go on and on, but I think you get the picture. Balance

enters into every decision we make. It's what keeps us grounded — and helps us fly. It's why young farmers care what Dad thinks, and it's why Dad needs to let the youngster think and do. Yes, maintaining balance is one of the biggest challenges we face, individually and as an eco-food movement. Let's bend to the task.

Joel Salatin raises grass-fed beef, pastured poultry, rabbits and more on a model diversified farmstead, Polyface Farm, in Virginia's Shenandoah Valley. He is the author of Salad Bar Beef, Pastured Poultry Profits, You Can Farm, and Family Friendly Farming, each available from Acres U.S.A. for \$30, plus \$3 shipping and handling (see page 27 for international rates). Call 1-800-355-5313 or visit our website at <www.acresusa.com> to order.

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