Soil and Nutrition Conference Winter 2012: Outlines from the Pasture, Forage, Grain, Grass, and Animals Panel

The presenters have prepared these outlines to give background on their operations so that they do not have to present this information at the seminar itself. It is highly recommended to read this before going to the seminar so that you will be familiar with the kinds of farming the that the presenters are doing. This frees up the presenters to focus on specific management practices that use.

Doug Flack, Flack Family Farm, Enosburg Falls, VT

1. Operation

My farm covers 173 fenced acres plus forest for fuel wood, herbs, mushrooms, and general biodiversity including beaver ponds and several marshes. Winter feed, currently as wrapped balage, is made on 81 acres as 1st and 2nd cuts, while the 3rd cut is stockpiled and grazed into December. Growing season grazing covers 92 acres, 25 of which are good quality and 67 are poorer soils, some also brushy or scattered in young tree re-growth. I own 60 acres and lease 113 from 4 owners. The vegetables for fermentation (10 tons) are grown on ½ to ¾ acres, moved every year, in the very best possible soils.

I have been most inspired by Rudolph Steiner's concept of the farm as an organism, Andre` Voisin, Allan Savory, Acres USA, Vilhjalmur Stefansson, and Weston A. Price as well as numerous people and scientists following their steps.

2. Customer base:

On farm pick up of raw American Milking Devon milk to 15 families and purely grass-fed American milking Devon beef to about 30 families. Ten tons of fermented vegetables to 20 Vermont stores and Co-Ops and 5- 10 Delis and restaurants, all within 2 hours drive since we do the deliveries.

3. History

Healing soils, plants, animals and humans began in 1977 with a diverse homestead farm, then a grass-fed, mostly sheep farm (50 -80 ewes), with a neighbor's cattle and a medicinal herb business added in the 90's. American Milking Devon cattle came in 1999, and we began the vegetable fermentation sales in 2000. I have been a Weston A. Price Foundation Chapter leader for 12 years; our main focus remains on producing and selling enzyme, vitamin, and mineral rich foods including raw milk and high fat meats. We also sell breeding stock, A2A2 semen and do

public speaking about the farm as primary healthcare provider. The sheep flock has been shrunk to 5 Icelandic ewes due to overwork.

4. Approaches:

Voisin inspired and Allan Savory tweaked controlled grazing since 1980, shifting to taller grazing 5 years ago. We graze three separate groups of cattle but would prefer a single large group if our geography were compact. Inputs have included limestone, lime-wood ash mixes, rotted manure, compost, B.D. preparations, some rock powders, Ormus minerals (see Roger Taylor on web), sea salt, and foliar sprays including micorrhizal and bacterial spores. Free Choice livestock minerals were added 7 years ago. Palletized organic minerals (made to soil test specs) were spread in 2005 and 2009 to help correct zinc, copper, selenium, manganese, and sulfur deficiencies. We continue to struggle with P and K and available calcium and sulfur deficiencies and also impervious soils with poor drainage in many fields, especially those rented. Sub soiling has been confined, due to rock and boulder, to our small, high yielding, rotating cabbage- vegetable plots. Cover crops include buckwheat, oats, peas, clovers, and winter rye. These small plots are heavily compost spread and receive gypsum, soft rock phosphate, some greensand and azomite and foliar B.D. sprays. Cabbage must be moved yearly to avoid clubroot. Two widely spread years showed leaf surface rot on mature heads. Cabbage whites are easily controlled with Dipel DF, usually once just as heads form.

Ten years ago the cattle showed copper and zinc deficiencies on feet and coat and we had a few foot rot cases and some bad pink eye in the separate steer herd. These problems no longer occur. Our American Milking Devons stay quite fat, invariably breed back and calve without assistance largely in April and May. We've had two serious cases of hardware requiring veterinary services. No vaccines.

5. Economics:

The fermented vegetables are most profitable and have cash flowed the growing Devon herd, being aided by milk, beef and semen sales. We did not sell breeding stock until four years ago. We are at maximum capacity for fermented vegetables (based on limited good soil and space for fermenting the annual fall crop) and for cattle (based on space to feed and winter them). Farm help is always a challenge, and a new socio-economic structure is needed. Some enterprises could be expanded and many more added.

I am happy with what has been accomplished and aware of how much more needs to be done, especially with soils and people (social-economic structure). Our customers are thrilled with our food and tell us this often, commenting on flavor, texture, and "energy". Sales grow beyond our capacity. Our website, the Weston A. Price Foundation, local food Co-Ops, and my outreach talks really helped establish and grow our sales.

In 2011 the total farm income was $ 86,000, of which fermented vegetables provided $60,520, beef $16,000, milk $2,500 (had been as high as $8,000), breeding stock $4,600 with the balance from semen, herbs and $1200 from outreach speaking. The family consumes at least $5,000 worth of our food. Other separate income comes from fencing sales and an odd collection of other items. My wife Barbara is a full time teacher, helps with farm planning, our herb, flower and vegetable house garden, facilities development and annual social events like the Raw Milk Theater, garden tours and other events.

6. Animal Selection:

The genetics of the triple purpose American Milking Devon cattle to thrive on hill farm soils and yield great food has proven itself to me. Milk yields are lower than modern breeds and unpredictable from young stock. The very nutrient dense milk is high yielding for cheese and delights consumers. I use bulls for breeding. The dairy animals get the best pastures, which have to be "near" the milking facility. Beef steers are raised on more marginal pastures, but their diversity of "non-pasture" plants like ferns, forbes, brush and tree branches does produce flavorful, well-marbled meats in the 3rd summer (under 29 months). Hanging weight is often 550 or better.

Dan Holmes, Sunnyfield Farm, Peterborough NH

Sunnyfield Farm is in Peterborough N.H. in the upper Contoocook River valley in the eastern half of the Monadnock Region of New Hampshire. The farm is spread out over areas of three towns on mostly rented ground. Terrain is varied from small areas of flat river terrace to hill top pastures and hay fields. In total, we manage something like 180 acres most of which is permanent pasture and hay field. Sunnyfield has dual purpose cattle and hair sheep that are fed a 100% grass diet that is supplemented with minerals only. We also have poultry for meat and eggs and pigs and a small market garden.

Fertility is provided primarily through the compost piles. We bed with wood chips and wood shavings. This with waste hay and cow manure are the base materials. To it we add poultry manure, minerals, stone dusts, clay, slaughter waste, and vegetable waste as it is available or according to where it will be spread. We spray some fish and did spray compost tea before it was disallowed for organic use. We will be doing more with foliars and inoculants in the future but the back bone of our fertility program will remain with balanced soil fertility. We have also started to use a Yeomans plow for subsoiling in pastures and hay fields with noticeable improvement.

All of our sales are retail from the farm store. Milk is raw and put in jars provided by our customers. Beef, lamb, and pork are frozen and sold by the piece. Animals are killed at an inspected slaughter house. Poultry is processed at the farm and sold fresh or frozen. Our most loyal customers are folks with family members with health issues that send them in search of

high quality food, some of which report to us that "your food is the only food they can eat." Food is medicine.

Jack Lazor, Butterworks Farm, Westfield, Vermont

The Operation:

We are a multi-function and multi-generation farm located close to the Québec border in northern Vermont. We milk 45 to 50 Jersey cows and process all of their milk into yogurt, cream and other cultured products like kefir and buttermilk. We grow hay and pasture for our dairy herd on the home farm which is situated high on an exposed windy hilltop. This part of the operation is entirely grass based. We also grow grain crops (corn, soybeans, dry beans, wheat, oats, spelt, barley, sunflowers and rye) in rotation with forage crops on another 350 acres away from the home farm. These crops are raised for human consumption, livestock feed and for seed production. This is a rather extensive operation that takes lots of management and decision making.

Approach to Fertility:

Since we have almost 100 head of cows, we are able to make a fair amount of compost with our dairy manure and straw from our grain crops. The herd is housed on a bedding pack in the winter which provides the raw material for enough compost to moderately coat 150 acres of land each year. We also use small amounts of minerals like sul-po-mag, gypsum, wood ash, boron, Epsom salts and sulfates of zinc, copper and manganese. I like to apply these “salts” in the presence of a carbon source like compost or well-rotted manure to ease their effect on the soil’s biology. I have also been experimenting with Mycorrizhal fungal inoculants and sprayed on molasses and micronized calcium applications. I am a firm believer in the Albrecht approach to soil fertility and do my very best to balance fertility for a proper ratio of base saturation. Thirty-five years of this type of agriculture has brought incredible well-being and bounty to the earth that we steward.

Putting it all together:

Our investment of giving back more than we have taken has paid off in so many ways. Our herd health is excellent and our milk tastes sweet. This has allowed us to produce superior dairy products that stand head and shoulders above many of the more industrial brands on the shelf. We believe in the food we produce and our customers. We have cultivated many meaningful personal relationships with the folks who buy our dairy and grain products as well our seed

customers. We have built our reputation on close attention to detail and high quality good tasting food. When you take care of the earth, it takes care of you.

Julie Rawson, Many Hands Organic Farm, Barre, MA

Operation:

We have 55 acres, 14 open, 4 in vegetables and fruit; 5+ available for pasture; $140,000 gross; 160 CSA members with some outside sales; approx. $50,000 in 450 meat birds – two batches, 1000 dozen eggs, 90 turkeys, 12 feeder pigs, 2 steers.

Our customer base is mostly CSA and direct meat and egg sales.

We've been focused on increasing nutritional quality on the farm in a focused way since 2007.

Approach to Fertility:

Our farm has been certified organic since 1987. We're focus on minimal tillage, more cover cropping and undersowing. Some of the approaches we have used include: (In order) Granite meal; volcanic dust, large volumes of calcium lime and rock phosphate, microbials, micronized drenches and foliars, attention to micro-nutrients in dry form, annual mineral balancing, animals in rotation in veg fields (always done this), undersowing of clovers in veg beds, mulching with farm hay, minimal composting and inefficient cover-cropping due to intensive cropping schedule in vegetables

Management choices specific to livestock and poultry:

- certified organic commercial feeds from Nature's Best for all animals except steers
- free choice kelp
- free choice Agri-Dynamics mineral preps for layers and steers
- oyster shell (layers);
- sprouting whole grains free choice for past year, now soaking seeds in sea mineral and kelp solution prior to sprouting – mostly layers and steers in winter
- Movable pens for turkeys and chickens moved daily
- Layers free range winter 6 months
- Pigs on edges of fields into the woods – whey daily
- Veg waste to whomever is around
- birds graze after steers

Results of Increased Attention to Soil Nutrition:

Since we started adopting biological farming practices, we've seen an increase in financial viability. The gross in 2006 was $55,000. Our planned gross for 2012 is $140,000. Disease and pests have been seriously reduced.

The quality and nutrition of our produce is of significantly higher quality – weight, taste, shelf life, color, volume on fruiting crops, less unmarketable food.

The water holding capacity of soil is much improved on our wet farm, even with increased rainfall in 3 of the past 4 years.

Animal weight gain is also up. Birds are eating less grain and more pasture, gaining better faster, higher quality carcass (hogs, meat chickens, turkeys) and more juicy and flavorful, egg production and quality remains high all year long, layers very thrifty even after 2-3 seasons. The turkeys cooked significantly faster this year.

We are still working on drainage improvement, channeling, swailing, planting of more perennial flowering plants.

Getting from the ground to the customers plate:

- Animal selection – Kosher king meat birds are better foragers than Cornish rock – take 12 – 13 weeks; high production older varieties of layers who range well – white leghorn favorite; golden red comet, barred rock, Rhode Island red; Tamworth x Gloucester Old Spot for grazing and lard production
- The pasture is also the hayfield for mulch in veg fields, animals rotate into veg fields after crop is taken off.
- We feel more enthusiastic about possibilities than ever before; looking toward developing even more intensive "stacking" of enterprises as we go forward.
- Our marketing tag line is "Certified Organic and Nutrient Dense"