

SMALL FARM ACTION DAYS

February 21st 2023

My wife, Kerry Gawalt, and I have been farming in the Upper Valley since 1996. Cedar Mountain Farm is a micro dairy and a no-till market garden. We are also partners in Cobb Hill cheese. Our farm is located at an eco-village situated on 275 acres of conserved land.

Payment for Ecosystem Services (CSP +) pilot program

Three years ago, in response to a request from the three farmer watershed alliances, this legislature mandated the formation of a Working Group to come up with a proposal for a Payment for Ecosystem Services program. I participated in the twice monthly meetings as a citizen/farmer. The PES & Soil Health WG submitted its report and proposal to you last month. The WG reached consensus on a plan that would have state agencies amplify their coordination on soil health initiatives with the Technical Service Providers of the NRCS. Rather than doing a Pay for Performance (like the VT phosphorous reduction program) or any kind of carbon off-set trading---the focus is on coordinating at a state level (ANR) with the NRCS and Conservation Districts to amplify enrollment and incentives in the Conservation Stewardship Program (CSP). Currently, CSP is an under-enrolled service in our state. This proposal rewards farmers who sign on to adopt proven (holistic) soil health practices rather than focusing on measuring soil carbon outcomes and paying credits.

One of the main takeaways of the WG on PES is the importance of biodiversity as a primary measure of soil health. Soil is often discussed as a resource and conceived of as a “thing”. But we know that in reality, any soil, whether it be under a lawn, a corn field, or a forest, is an ecosystem unto itself. Biodiversity is the key marker of the health of any ecosystem, whether it be a measure of the soil micro-biome or a survey of macro flora and fauna. The more complex and mature an ecosystem is, the more biodiversity it will contain.

At Cedar Mountain Farm we are practicing no-till organic vegetable production & adaptive rotational grazing of our milking herd and beef animals. We are attempting to mimic the processes of long term stable carbon sequestration endemic to the ancient old growth forests that once covered our region by integrating elements of agroforestry into every aspect of the farm; including silvopasture, riparian buffers, hedgerows, windbreaks, and alley cropping. In order to meet our conservation goals, we have partnered extensively with the Natural Resources Conservation Service (NRCS), first through enrollment in EQUIP and currently under the auspices of CSP. With this assistance, over the last 22 years we are gradually transforming our land from a beat-up-old hard-scrabble dairy to a thriving diversified farm ecosystem.

We are very encouraged by this CSP+ pilot program! We hope that it will serve as an on-ramp for more Vermont farmers to adopt healthy soil practices that benefit everyone and be more financially viable in the bargain!

H126

Beginning in 2010, and for the first time in over one-hundred years, Vermont is again losing forest to the tune of 1150 acres a year. Unchecked development, clear cutting and fragmentation all threaten the health and connectivity of woodlands.

50% of the carbon stored in a forest is held by the top 1% of the biggest trees. New findings show that, young trees are net emitters of carbon until they reach about twenty years and that although it is not as rapid as in young trees, sequestration is greatest from the growth period of 50 years to 150 years of age and is continuous after that. In terms of immediate impact in the midst of the climate crisis & loss of biodiversity, the most consequential action we can take in the northeast is to protect our mature forests.

In the last biennium law makers passed a far-reaching conservation measure---now known as the “Biodiversity Bill”. The original bill was vetoed by the governor but it is being reintroduced as H606 in this biennium. The bill is on a par with President Joe Biden's “30 x30 & 50 x50” executive order, which sets a goal to conserve 30% of all land and waters nationwide by 2030 and 50% by 2050.

A 30x30---50x50 initiative was also adopted this past December 2022 by international delegates at the COP 15 gathering on Biodiversity held in Montreal.

Vermont already has 24% of it’s land protected under three tiers of conservation. We can easily meet the 30 x30 goal by permanently protecting all forests on public land (including state and national forests which comprise about 10% of all VT woodlands).

UVA REFORM

Also in the last legislative session, UVA (Use Value Appraisal AKA Current Use tax abatement) opened the door a crack to allow for “passive management” on “ecologically sensitive” land (if this designation comprises 30% of the total enrolled woodlot the landowner can place all of their land in this category). We need further reform of UVA to allow for "passive management" for any participating landowner who wants to manage for old forests---and to have Ecological Forest Management (managing for old growth characteristics) be the mandated practice for all enrollees in UVA. 80% of our forest is in private ownership. We need to understand the forest as a system and grant incentives to woodland owners to manage for the long term health of the entire region. This doesn’t have to entail the “not-in-my-backyard” syndrome. We can sustain a planned local harvest while managing for mature forest complexity. In fact, promotion of timber harvested under a *Vermont certified ecological forest management* program could help jump start a “localvore” movement in the wood products industries. After all, do we really prefer to buy old growth lumber imported from British Columbia?

STATE-WIDE LAND USE PLAN

In 1970 Vermont Governor Deane C. Davis (R) signed Act 250 into law. The aim was to encourage progress and prosperity without sacrificing our rural heritage. Protection of natural resources and historic values of place were the essential criteria to be met. The law also called for a *state-wide Land Use Plan* but this proposal did not make it into the final legislation.

Act 250 was progressive for its time and has certainly helped retain the rural character of Vermont. But the limit of 10 acres or more has meant that we have a lot of housing developments of 9 acres with 9 houses scattered around the state. Forest fragmentation and loss of prime Ag soils have continued at an alarming rate (30% of prime Ag soils lost since 1987). Since 1970 Vermont has seen a steady increase in its share of polluting industries, big box stores, trophy homes on the hillsides, and urban sprawl.

In 1989 Governor Madelaine Kunin (D) signed Act 200---the Growth Management Act--- which proposed to put more teeth into the environmental protections of Act 250, particularly of agricultural and forest resources. The goal was to prompt all towns in the state to draw up municipal land use plans in order to qualify for housing funds. However, the law has remained largely unimplemented, with almost half of Vermont towns still without municipal land use planning.

Fifty-two years down the road the world is a very different place. We must conclude, that for all its progressive thinking around environmental protection, in practice Act 250, especially without its counterpart Act 200, has been unable to fully safeguard the health and wealth of all of the state's inhabitants---human and non-human. We now face the urgent challenges of irreversible abrupt climate change and loss of biodiversity. There is increasing agreement among climate scientists and policy-makers that "Nature-Based Solutions" are the most immediate and cost-effective means to draw down green house gas emissions and mitigate the worst effects of the changing climate. This approach has many co-benefits, not least of which is safeguarding and building out our local food and forest economy at a time when increasing shocks and disruptions to national and international supply chains seems inevitable.

The implementation of Nature-Based-Solutions embedded within the Vermont Climate Action Plan---as mandated by the 2019 Global Warming Solutions Act---could be greatly facilitated by the re-activation of statewide land use planning. We need this kind of broad inventory and wise stewardship of our remaining natural resources to respond effectively and intelligently to the climate emergency.

BIOMASS & BIO-FUELS

Biomass burning for power generation is being considered as a "climate solution" as part of the *Clean Heat* Standard and touted as a "green energy", yet it has been shown to be more damaging than even coal as an emitter of Green House Gases (GHG) and particulate pollution. Whether it be biofuel for heat or biomass for electricity---is burning carbon of any sort really a climate solution? We should place a moratorium on new biomass projects for generating energy. Weatherization of homes & subsidies for thermal heat pumps could bring us better gains without further environmental destruction.

DAIRY REFORM

The trend of consolidation of the dairy sector continues unabated in our state: 2500 dairies in 1975 to less than 500 in 2023---all the while producing approximately the same volume of milk.

Recently you've been asked for a short-term bail-out of \$9.2 million for the organic dairy sector. I join with many others in asking you to approve this funding. But I recognize it as a band-aid to an industry in need of systemic reform. Senator Starr's *State Milk Pricing* proposal is a good step in the right direction. Another idea that is often floated which I believe has great merit is a Vermont Brand milk bottling facility.

I would also like to refer you to the *MILK FROM FAMILY DAIRIES ACT* being proposed at a national level (in anticipation of the 2023 Farm Bill) by the National Coalition of Family Farmers (NFFC)---(Rural-VT & Nofa-VT are member organizations). The bill would implement base pricing and a regional parity pricing system. It would function in many ways like Canada's current system except that quotas cannot be monetized and aggregated.

Stephen Leslie is a co-owner of Cedar Mountain Farm & Cobb Hill Cheese, both located at Cobb Hill Co-housing in Hartland, VT---doing business in the Upper Valley since 1996.

*Stephen is a member of the board at Rural-VT
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