

# Indices on Vermont's Working Landscape

Vermont's identity has always been closely linked with its iconic images of dairy cows grazing, cropland in active production, verdant forests and mountain backdrops. The economic enterprises historically sustained by this working landscape – dairies, sugaring operations, orchards, wood mills and secondary manufacturers – have been essential to forming the state's character, communities and culture. For decades, hundreds of stewards have made decisions, large and small, to sustain and enhance the state's working landscape through active farm and forest management.

Now however, mounting evidence, alarming trends, and a lack of a comprehensive policy are pointing to the demise of the economic viability of the state's working landscape. Left unaddressed, these trends will dramatically change the way Vermonters connect to the land.

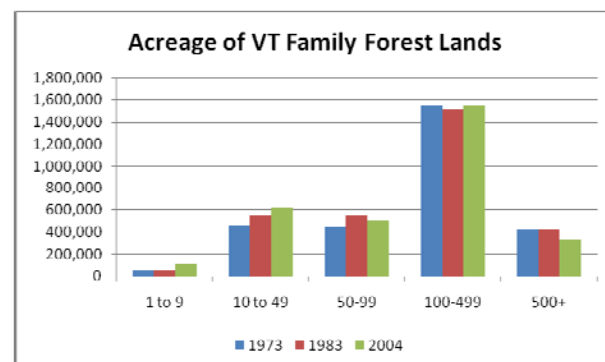
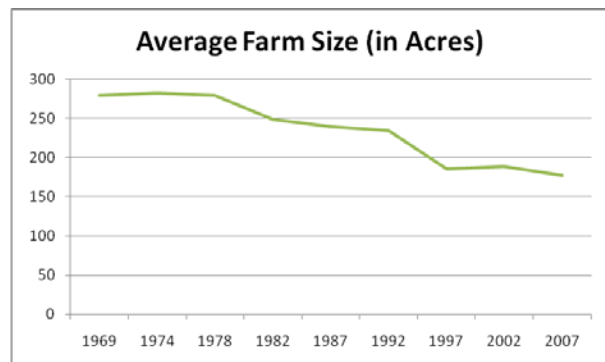
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## WORKING LANDSCAPE TRENDS

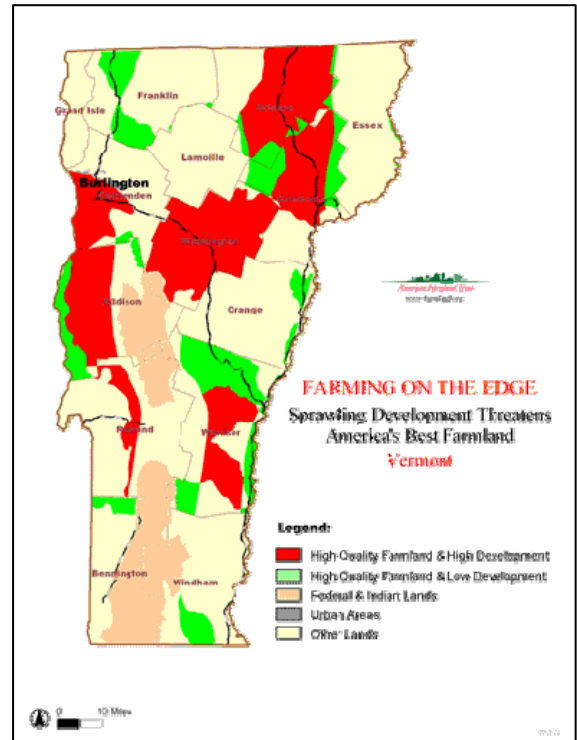
### *Use and Ownership*

***There has been a significant decline in the use of land in Vermont for agricultural and forestry purposes and in the way the land is owned and managed***

- Fifty years ago, half of the state's land was in farms. That number has dropped by almost 60% – today, only 1/5 of the state's lands are being farmed.<sup>1</sup>
- Over the past 25 years, the number of farms in the state grew by 11%, but average farm size decreased by 29%. Overall, the total acreage in farms has decreased by 22%. Even more troubling, the amount of cropland has shrunk by 33%.
- Between 1980 and 2005, about 91% of the acreage in the four-state Northern Forest changed ownership. Nearly half of these land transactions occurred between 2000 and 2005.<sup>2</sup> These ownership changes have increased the acreage in smaller parcels. Owners of smaller parcels are less likely to prepare management plans or harvest their forest lands.<sup>3</sup>



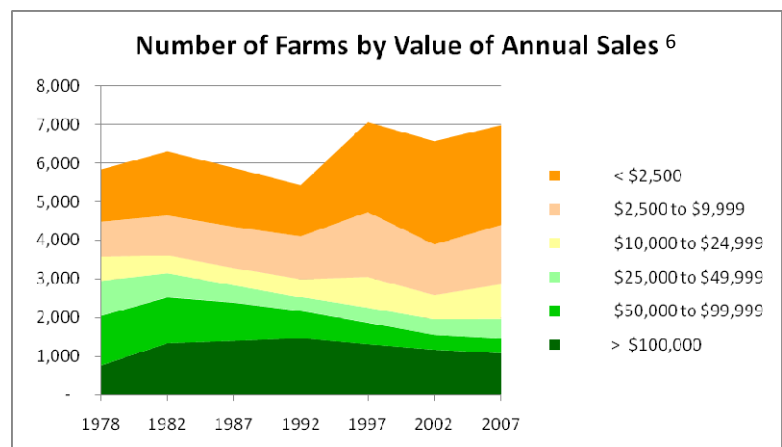
- Like many states, Vermont is facing huge pressure from land development. The American Farmland Trust 2002 report, "Farming on the Edge" prepared the adjacent map which shows the degree to which increased sprawl threatens high-quality farmland.<sup>4</sup>
- From 1980 until 2008, the number of VT housing units grew by 39%. Developed land grew 42% over a slightly shorter period (1982-2003). This increase in development was twice as fast as the state's population growth which only increased by 21%.<sup>5</sup> Estimates indicate that Vermont is losing about 4,881 acres of land to development each year.



### **Economics and Affordability**

***Land has become less affordable at the same time that farm and forest incomes have steadily declined. This has occurred despite an increase in the proportion of income from direct farm sales. Farm households have become increasingly dependent on off-farm income to meet their needs and local businesses have felt the effect of reductions in farm purchases across rural Vermont.***

- From 1990 to 2007 the average value of land acreage in Vermont rose 351% – higher than the national average of 299%.
- Farms are defined by the USDA as agricultural enterprises that produce \$1,000 or more in production annually. Although under that definition the number of farms has been on the increase, the value of farm sales has steadily declined since 1982. Of even greater concern is the precipitous decline in the number of farms with annual sales of \$25,000 or more (as shown in green on the adjacent chart.)<sup>6</sup>



In 1982, there were over 3,100 farms with sales at this level. By 2007, before the current dairy crisis, the number of farms with sales of \$25,000 or more had dropped to less than 2,000 and only 15% of the state's

farms had sales over \$100,000. Even more distressing is the knowledge that sales are reported in current dollars for each period and *not* adjusted for inflation.

- Most of the farms operating in Vermont today are unable to support a single person with a living wage, much less a family. Almost 2 out of every 5 farms have *sales* of less than \$2,500 – in effect, they are hobby farms, not viable economic operations. Another fifth have sales of \$2,500-\$10,000 – enough to provide some supplementary income to offset farm costs but not enough to sustain a family.
- Farms have a significant impact on local economies – it has been estimated that 96% of supplies for the farm are purchased locally. In 2007, the Agency of Agriculture estimated that dairy farms directly produced 7,500 jobs and supported an additional 7,800 jobs off farm for a total of more than 15,000 Vermont jobs. That same year, milk production generated \$517 million in cash receipts to farms and produced an overall economic impact to Vermont of over \$1 billion. By 2009, with milk prices down significantly below the cost of production, cash receipts have dropped to \$338 million and the economic impact has been reduced to \$650 million.

### ***Dairy Industry is in Crisis***

***Dairy continues to dominate Vermont's agricultural land use and production, but multiple indicators show many dairy farms are in significant danger of failure.***

- In 1947, Vermont had 11,206 dairy farms. Since then, there has been a net loss of dairy farms, with only 5 of the past 53 years showing any gains. We have lost farms every one of the last 19 years and by October 2010, the total stood at only 1,007 survivors.
- Despite the increasing diversity of farm products, milk and dairy products continue to dominate Vermont agricultural cash receipts, accounting for 76% of total 2006 farm income.<sup>7</sup> If hay, beef and additional farm products produced on dairy farms are included, the percentage is much higher.
- Vermont has always faced volatility in dairy prices. In 2007, average milk prices paid to farmers were about \$19.85 per hundredweight. By 2009, the amount had plummeted to \$13.50 including the MILC federal price subsidies – that's a 32% decline over a three-year period.
- In 2008, milk sold in stores at an average of \$3.12 per gallon, but the price paid to Vermont dairy farmers was only \$.99 cents – \$.66 per gallon *less than* the cost of production. Declining milk prices in the first six months of 2009 meant \$64,741 less cash for the average dairy farm in Vermont. Many Vermont dairy farmers were *forced to borrow* between \$850 and \$1,000 per cow that year, *just to survive*.

## ***A Challenged Forest Products Industry***

***The Vermont forest products industry is facing an unheralded crisis due in part to weather, in part to the national recession and in part to international competition, all of which have resulted in dramatic reductions in wood processing and manufacturing as well as logs and biomass.***

- Most of Vermont's forests, about 81%, are privately owned. Nearly 75% of Vermont's 6 million acres of land are forested, and the forest and its biomass resources are continuing to grow with about a 2% gain since 1982. But these gains have not been paralleled by an increase in the working forest economy.
- In 2000, Vermont forest products businesses processed 927,811 cords of wood, by 2008 that had dropped to 584,150, a 37% drop in 8 years.
- The number of mills in Vermont have declined a dramatic 43% from a peak of 185 in 2002 down to 105 in 2008.
- Mill production also dropped in half over the past decade, going from a high of 260,855 thousand board feet (Mbf) in 1999 to just 133,814 Mbf in 2008.

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## **THE IMPLICATIONS**

The results of many of these trends are devastating. Just imagine a Vermont...

- Where the economy of the forest and farm disappears in our most rural communities and they dry up or become commuter enclaves, empty during the day;
- Where no one makes their living from work in the woods or fields, where the characteristic Vermont look of mixed open fields and forest is lost forever, and Vermont looks more like southern New Hampshire, Massachusetts and Connecticut.
- Where the only places to connect to nature are overcrowded parks or private preserves without public access or meaningful economic contributions to rural communities.
- Where the continuous loss of youth hollows out our rural places.
- Where Vermont's public health suffers as it became harder to hike, hunt, ski, walk on unposted land close to home. Where 'no child is left in the woods' or in the fields and where complacency about childhood obesity becomes the norm of modern life.
- Where we have forfeited food and energy security.
- Where the culture and heritage associated with hard physical labor, community interdependence and neighborliness, shared governance and lending a hand gets replaced by self-centered individualism;
- Where Vermont looks like Anywhere, USA.

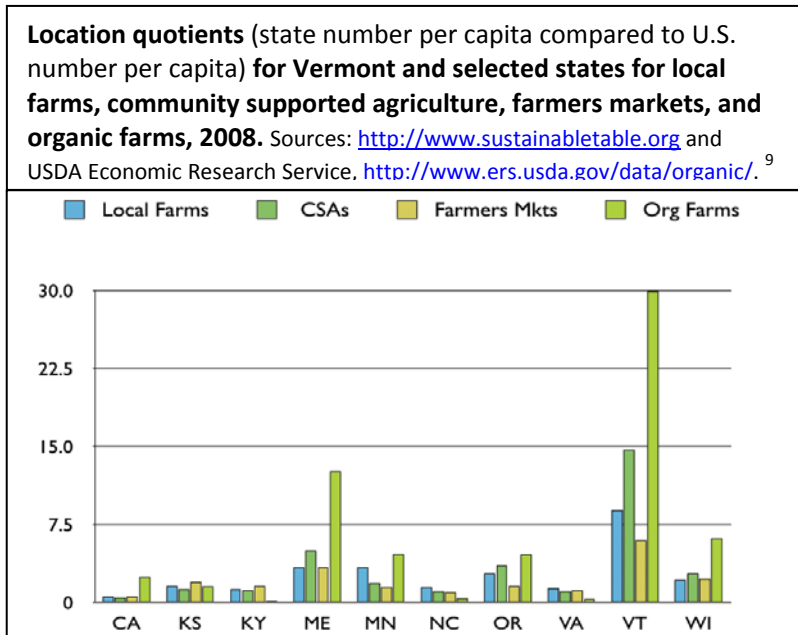
These outcomes may seem impossible here; but have come to be realities in many other places in the Northeast and rural America. In less than a generation, we could see an end to the working landscape —unless we find the will to act together as Vermonters.

## A WORKING LANDSCAPE FUTURE FOR VERMONT

In the midst of these dispiriting trends, there are a tremendous assets and opportunities for Vermont’s working landscape and our agricultural and forest economies.

- Direct sales by Vermont farmers to consumers through farmers’ markets, CSAs and local restaurants and institutions have grown from \$3.8 million in 1982 to \$9.6 million in 2002 to \$ 22.9 million in 2007. While this represents only about 4% of total farm sales, direct sales have become a marketing opportunity pursued by 1 out of every 5 Vermont farms. The average value of these sales is \$15, 541 per farm.<sup>8</sup>

- Per capita, Vermont has a far more vibrant number of local and organic farms as well as direct CSAs and farmers markets than any other state in the country. The chart to the right, which was prepared by Stuart Rosenfeld, Principal of Regional Technology Strategies, Inc., compares the number of each of these entities per capita for each named states versus the national amount per capita.<sup>9</sup> Vermont’s number of CSA’s per capita is almost 15 times the national average. These outlets as well as Vermont’s “Buy Local” ethos may be part of the reason Vermonters are able to spend five times the national average on local food. Creativity and innovation in the natural resource economy make Vermont a model for local foods expansion and value-added development.



- Vermont has a strong and established infrastructure for conserving farmland and encouraging young entrepreneurs who want to start and operate farms or start value-added agricultural enterprises. In addition to state-supported entities and policies including the Vermont Housing and Conservation Board, Vermont Economic Development Authority, UVM Extension, current use taxation and the Vermont Farm to Plate Initiative, there are new and more seasoned nonprofit institutions committed to helping farm entrepreneurs

succeed – these include the Vermont Land Trust, the Intervale Center, Rutland Area Farm and Food Link and the Center for an Agricultural Economy.

- Recent reports indicate that Vermont could produce about 20% of its energy needs from farm and forest resources.<sup>10</sup> Vermont is already a national leader in siting on-farm methane digesters and using wood heat for schools.<sup>11</sup>
- A new generation of farm and forest entrepreneurs are networking among themselves and growing Vermont-based companies that provide biofuels, artisan and cave-aged cheese, specialty wood paneling, and organic seeds, produce, grains and value-added products.

These trends offer some inspiration. But they, in and of themselves, are not sufficient to sustain our working landscape. To do that, we as Vermonters will need to come together and commit to an economically vibrant working landscape providing food, fiber, energy and sustenance for the 21<sup>st</sup> century. We will need to develop and then implement comprehensive and potentially novel public policies as well as private innovation and investment that ensures Vermont's working landscape will not just survive but truly thrive for future generations.

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<sup>1</sup> USDA National Agricultural Statistics Service (NASS) Census of Agriculture - Data from 1959 and 1987 – Table 1; <http://www.agcensus.usda.gov/index.asp>.

<sup>2</sup> Vermont Forest Roundtable - <http://svr3.acornhost.com/~vnrcorg/frt/tools.htm>

<sup>3</sup> Butler, Brett, USFS, *Forest Parcelization and Forest Fragmentation in the U.S., Northeast, and Vermont*, presentation at Vermont Technical College, September 18, 2006, <http://svr3.acornhost.com/~vnrcorg/frt/VTParcelization-ButlerII.ppt>

<sup>4</sup> From [http://www.farmland.org/resources/fote/states/map\\_vermont.asp](http://www.farmland.org/resources/fote/states/map_vermont.asp)

<sup>5</sup> Housing and population data - US Census for 1980 and 2006-2008 American Community Survey 3-Year Estimate Land development data from *Disappearing Vermont: A report of fifty indicators that show what is happening to Vermont's environment and way of life*. Published by Vermonters for a Sustainable Population — March 2008, available at <http://www.vspop.org/DisappearingVermontFINAL08.pdf>

<sup>6</sup> USDA National Agricultural Statistics Service (NASS) Census of Agriculture – 2007 Census of Agriculture Report. <http://www.agcensus.usda.gov/index.asp>. Chart created by Nancy Wasserman of Sleeping Lion Associates, Inc.

<sup>7</sup> USDA, Economic Research Service, "Vermont: leading commodities for cash, 2006."

<sup>8</sup> USDA data – as compiled in Trends in New England Agriculture -

[http://www.nass.usda.gov/Statistics\\_by\\_State/New\\_England/Publications/Presentations\\_and\\_Displays/TrendsInNewEnglandandAgriculture.ppt](http://www.nass.usda.gov/Statistics_by_State/New_England/Publications/Presentations_and_Displays/TrendsInNewEnglandandAgriculture.ppt) and from Stuart Rosenfeld's paper *Sustainable Food Systems Cluster, Vermont-Style*, Refereed for European Planning Studies - to be published in November, 2010.

<sup>9</sup> Rosenfeld, Stuart, *Sustainable Food Systems Cluster, Vermont-Style*, November 2010. Chart used by permission.

<sup>10</sup> Delhagen, Edward, *Farm Energy Innovation in Vermont: A Report to the Sustainable Agriculture Council*, December 2008. P. 10 available at

[http://www.uvm.edu/sustainableagriculture/Documents/energy\\_innovation.pdf](http://www.uvm.edu/sustainableagriculture/Documents/energy_innovation.pdf)

<sup>11</sup> Zezima, Katie, "Electricity from What Cows Leave Behind," *New York Times*, September 24, 2008.