

# VERMONT HIGHER EDUCATION FOOD SYSTEMS CONSORTIUM

PRESENTS

## *FOOD SYSTEM DYNAMICS: THE VERMONT EXPERIENCE*

14-Day Study Tour | Graduate or Undergraduate Credit | June 16-29, 2016

### Food Systems Change

The Vermont Food Systems Study Tour provides participants with an in-depth examination of how **place, players, policy,** and **profitability** can form the foundation for a highly successful statewide food system, while also demonstrating the challenges of such efforts.

### Food Systems Education

The Vermont Food Systems Study Tour highlights different **pedagogical approaches** to food systems education, as well as the varied contributing roles possible among higher education institutions in the formulation and implementation of a statewide strategic plan for food systems development.



## What Vermont Knows... “First,”

“Most,” and “Highest” are the three adjectives most commonly used to compare the Vermont food system with other states in the US. How did Vermont become such a national leader in farm-to-school, farm-to-hospital, organic agriculture, composting, land conservation, local purchasing, and so many other realms?





## Points of Focus

**Vermont Technical College (VTC): Dairy Begins (and ends) with “C”:** Cattle, Carbon, & Capital

**New England Culinary Institute (NECI):** From Farm Gate to Chef’s Plate

**Sterling College:** Restoring the Ecosystem that supports Our Food System: From Underground Biology to Nutritious Food

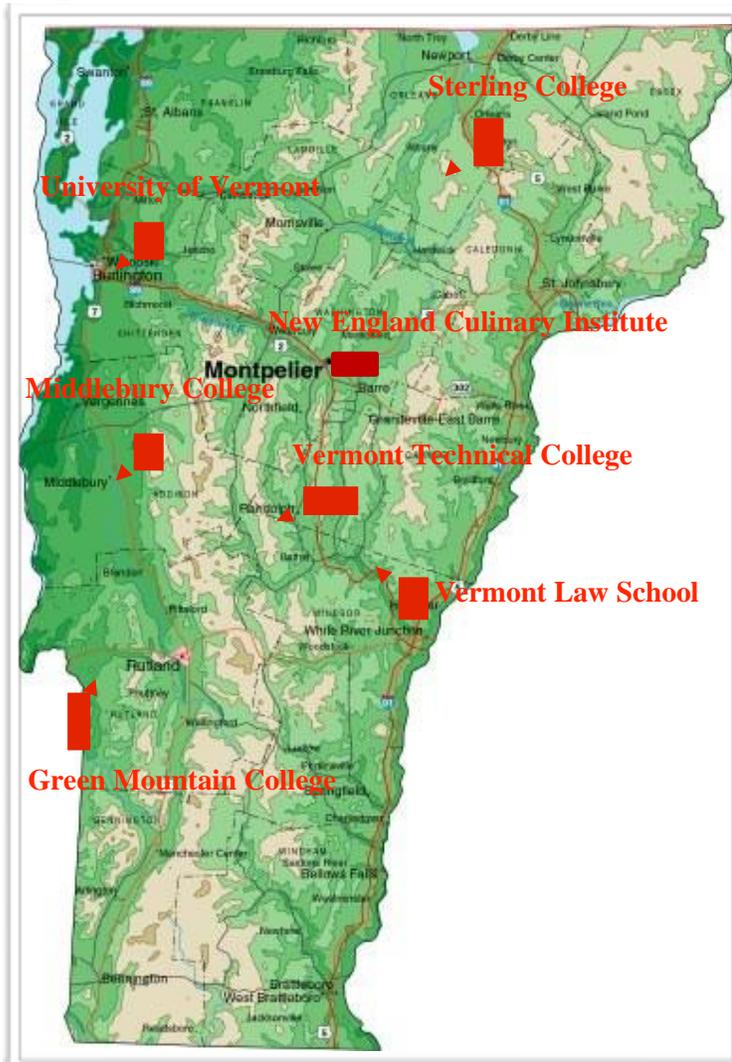
**University of Vermont (UVM):** Building an Urban Food System from the Ground Up

**Middlebury College:** Small State in the Big Picture: Leadership for a Climate of Change in Global Food Systems

**Green Mountain College (GMC):** Conservation at the Core: Biodiversity, Land, Water, & Energy

**Vermont Law School (VLS):** Food System Advocacy: Leading the Nation in GE/GMO Labeling

The list of “firsts” associated with Vermont’s food system continues: yet another national “First” for Vermont is the launch of an innovative 14-day study tour that explores the question of Vermont’s traditions and innovations firsthand, by visiting the land, people, farms, businesses, NGOs, initiatives, policies, and governmental agencies that have made Vermont’s food system so successful—through the lenses and expertise of seven distinctive institutions of higher education. Not only is this for-credit study tour the first of its kind in approach, it is also unique in its origin. **Food Systems Dynamics: The Vermont Experience (SFS 2000/MSFS 5100)** is the inaugural initiative of the newly formed [Vermont Higher Education Food Systems Consortium](#), an innovative alliance of seven Vermont colleges and universities with longstanding and diverse expertise in food systems research and development.



## *Fields of Expertise: Study Tour Basics*

Available for undergraduate and graduate credit (SFS 2000/MSFS 5100), this three-credit interdisciplinary study tour will wind its way not only through the beautiful and diverse topography of the Green Mountain State, but also through the myriad components of Vermont’s complex food system—exploring the realities of the state’s unique “soil-to-soil” vision and with the optional participation in the nationally-renowned [UVM Food Systems Summit June 14-15](#) before the start of the Study Tour.

Each institution will host students, and the Study Tour’s two accompanying facilitators, for 1-2 days of inquiry and exploration, with part of each day dedicated to presentations and guided discussions and the other portion of the day providing time to explore farms, businesses, and key players associated with the development of Vermont’s food and agriculture sector. Students will trade dirty hands for clean aprons on a regular basis, as some hands-on farm work and culinary experimentation is to be expected!

### **Study Tour Objectives**

**Students who are fully engaged in all aspects of the study tour and who successfully complete the course work will be able to:**

- Describe the components of food systems of differing scales and design
- Analyze the strengths and weaknesses of the independent components of specific food systems and the interactions between those components
- Portray and analyze the history, successes, and current challenges of the Vermont food system, including the internal and external forces that have shaped Vermont’s food system leadership status in the US
- Discuss the strategic origins of the current successes in the Vermont food system, including policy initiatives, entrepreneurial efforts, NGO support, socio-economic agendas, and environmental efforts
- Explain different approaches to food system education based on the contrasting approaches and expertise of VHEFSC member institutions

### *Readings & Resources*

Assigned readings and other multimedia material will be made available prior to and throughout the study tour. Many of the assigned readings are authored by food systems experts who teach at consortium member institutions or reside in Vermont. Two texts will serve as primary touchstones for the course, complemented by an array of related readings available in PDF format:

- *Hands on the Land: A History of the Vermont Landscape* by Jan Albers
- Vermont’s *Farm to Plate Strategic Plan* and subsequent Annual Reports

Due to the intensive nature of the study tour schedule, students are expected to prepare for the course prior to first meeting day (Thursday, June 16) by reading selected materials in advance. These materials will be available to students, facilitators, and site visit hosts via a shared Google Drive resource portfolio, in addition to the assigned textbooks. Access to this portfolio will be available to all deposited students beginning May 1, 2016.

### Curated Reflection

In addition to a culminating research paper (described below) that will be due one week after the completion of the study tour, students will capture their daily experiences with a variety of media-- anything from notes on lined paper to ink drawings! Or it may just be digital information: phones, cameras, video and audio recording devices.

*“Sight is a faculty; seeing, an art.”*  
George Perkins Marsh, *Man and Nature* (1864)

As students travel, interact, observe, and reflect, they will use van rides, and meal times, for questions and discussions that reflect on the readings and theme of the day. Each evening, a couple hours will be set aside for more structured “evening sessions.” After a brief training in group consensus process, these sessions will be co-facilitated by students to: a) Establish the main points of understanding for the day and b) To “tell that story” by curating the student-generated content, considering all perspectives and experiences, to create a daily post in a multimedia publication of the student’s design.

Giving students a cooperative and discursive context for reflection and synthesis generates deep levels of meaning from their daily experiences in the field, and offers opportunities for students to engage with group process and to experience affinity networks, facilitation tools, and new organization and communication strategies that support inclusion, cooperation, equality, and democratic process. This dynamic and multi-layered learning strategy will culminate each day with the publishing of these storied experiences online, using a platform that will be highly visual, but with strong, supporting written content as well. This interactive version of each year’s study tour experience will be archived annually.



The potential for interplay between the ideas and images conveyed by the group of students and those of a broader national and international audience will have several important outcomes:

1. Heightened and broadened learning opportunities for the students
2. An engaging multimedia presentation of the Vermont food system
3. Global sharing of the valuable lessons offered through Vermont’s food system successes and the value of this innovative consortium
4. Student-generated material that will help promote consortium initiatives in coming years

### *General Guidelines for the Final Paper*

SFS 2000: *Undergraduate level* (10-15 pages, 12 pt. font, 1.5 spacing, CMS format)

- Reflect on what you have learned about food systems and its relationship to your home community and, when applicable, to your own professional and academic interests. Throughout the paper, demonstrate your familiarity with and understanding of the assigned readings.

MSFS 5100 *Graduate level* (15-25 pages, 12 pt. font, 1.5 spacing, CMS format):

- Utilizing course readings and additional outside resources, analyze the successes and challenges of the VT food system from one angle, lens, or discipline and provide a well-substantiated critique of its strengths and/or weaknesses,
- or
- Utilizing course readings and additional outside resources, examine the successes and challenges of the VT food system and contrast them to similar initiatives in the student’s home community/region/state, including suggested strategies for one or both of these food systems.

**Note:** *Students at both the undergraduate and graduate level may opt to create a professional-level article or multimedia project for publication or other means of public dissemination. Such projects should be negotiated with the course facilitators during the study tour. Students should be aware that these projects are no less rigorous than an academic paper; in fact, the level of polish required may involve more work than a more conventional paper. Both require evidence of engagement with assigned readings and an appropriate bibliography. Given its use in the mainstream media, citations and bibliography should be in CMS format.*

**Grading Criteria:** Curated Reflection-50% ; Final Paper-25% ; Engaged Participation-25%



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## Food System Lenses:

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### Place, players, policy, profitability, & pedagogy

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The role of the individual state in the development of more just, sustainable, and resilient food systems is virtually unexplored in the nascent but fast-growing academic discipline we call “food systems.” To date, there are few examples of intensive, interdisciplinary inquiry into the successes and challenges of a statewide food system. In fact, there are altogether too few states creating or utilizing a strategic plan for envisioning and building a thoughtful statewide food system. Vermont was not only the first state in recent history to embark on such an effort but also the first state to do so by means of a collaborative and nonpartisan grassroots effort, beginning in 2009 and culminating in the [Vermont’s Farm to Plate Ten-Year strategic plan](#).

As Vermont Farm to Plate enters its fifth year of implementation, collaborators from around the state are working together as an innovative network that cuts across traditional boundaries, generating new initiatives and gathering quantitative and qualitative data. Such efforts suggest that Vermont’s status as the national leader in direct farm-to-consumer sales and food systems reform is no accident; rather, these successes are the result of strategic and collaborative statewide efforts, bringing together a culmination of community-based initiatives and organizations.

### Why study state-level food systems?

**As the intermediary between local and federal level food systems initiatives, states play a critical role in innovation and reform:**

- Strategic state-level food system development is attentive to the particularities of place and regional identity while also possessing the capacity to support and magnify the impacts of local-level initiatives
- States have a pivotal function to play in the evolution of food systems that rectify food insecurity, foster environmental stewardship, promote worker and animal welfare, enhance nutrition education, and build local economies.
- Each state serves as a co-regulator and a funding conduit for a number of federal agencies and initiatives.
- When states work together collaboratively to advocate for specific agendas and policies at the federal level, they have the capacity to shape national and international shifts in food systems.



The evolution of Vermont’s renowned food system has been supported by a unique assortment of academic institutions scattered across the state, each of which has tackled food systems education from a different pedagogical approach, educational mission and with the context of their different communities. The education and research done by each institution has informed the Vermont Farm to Plate strategic plan and subsequent initiatives, and each institution is contributing critical workforce development tools and institutional purchasing power to the process.

Additionally, Vermont’s Farm to Plate strategic plan provides a powerful teaching tool for each of these institutions. The [Vermont Higher Education Food Systems Consortium](#) represents both the pedagogical diversity and the collaborative possibilities among higher education institutions within a state. Significant successes in rebuilding food systems at the state level are partly dependent upon such strategic alliances.

One key to Vermont’s successes in re-envisioning and building a more secure, just, and resilient statewide food system has been the leadership put forward through its land grant institution, the University of Vermont. At the outset of the study tour, students in this course will have the option to participate in the [UVM Food Systems Summit](#) on June 14-15. This is a two day symposium that highlights Vermont’s achievements while also raising issues and challenges facing Vermont and the broader global community. This additional opportunity can provide students with the opportunity to interact with a broad range of experts and practitioners and tease out concepts and questions encountered before the study tour and to broaden their perspectives.



# ***Food System Dynamics: The Vermont Experience*** **(3 credits: Undergraduate or Graduate Level)** ***A Project of the VT Higher Education Food Systems Consortium***

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## *Vermont Technical College (VTC)*

One cannot know agriculture without first understanding the role of carbon in the food system. At Vermont Tech we will quickly walk through photosynthesis, soil degradation, digestion, combustion and metabolism at the molecular level while simultaneously observing and interacting with these processes on our active farmstead.

## *New England Culinary Institute (NECI)*

For New England Culinary Institute’s portion of the Summer Study tour students will sample elements of our programs in Culinary Arts, Food and Beverage Business Management and Baking and Pastry. They will gain an understanding of the importance of hands-on skills training in sustainable food system and the critical nature of the "middle" of the food system between farm gate and dinner plate. Students will start the day with a 3-hour, hands-on demo discussion on carcass break down ( a half pig), total utilization and value added products, and the need for skilled meat cutters in local and regional food systems. Chef David Miles, our Meat Fab Instructor will include a sausage demo and will have some additional charcuterie items to show as well. He will talk about the regulatory process and the rules regarding in house production and sale versus items to be shipped elsewhere.

The class will then move to our restaurant NECI on Main, for a lunch highlighting local foods and a comparative tasting of Vermont craft beers. We’ll discuss the evolution of NECI’s role in the local food system and the importance of the Vermont Fresh Network in promoting the farmer chef connection. Students will then prepare their own seasonal desserts in our La Brioche Bakeshop in a hands-on workshop on sweet and savory galettes.

## *Sterling College*

At Sterling College students will delve into soil. From the management of soil in gardens, pasture and forest – to the production of nutritious food. Then take a deeper look into the role that soil plays in the larger food system with a focus on the health of the food that is produced, and using that food to help create healthy diets. This would include some human nutrition and some cooking.

## *University of Vermont (UVM)*

University of Vermont (UVM) is located in Burlington, VT, on the shores of Lake Champlain. At UVM, you’ll learn about Vermont’s local food system through the lens of getting food from the farm to your plate. During field trips to the Intervale (which hosts 11 organic farms and a food hub) and City Market (Burlington’s thriving food cooperative), you’ll learn about innovations in local production, distribution, and retail. Burlington is also home to leading Farm to Institution programs in K-12 schools, university dining, and healthcare. You’ll meet the people who research and implement these innovative programs.

## *Middlebury College*

At Middlebury College students will be engaged in a local to global perspective. The College has many longstanding strong relationship with local producers, as well as a Real Food Challenge goal of 30% for 2016. We also have a goal of carbon neutrality in 2016, as well as other local and global sustainability initiatives domestically and at our schools abroad. We will spend time discussing these topics as well as speaking with alumni in the apple and hard cider businesses. Pollinators are one of the great factors of our food system, and we will be talking with several experts regarding climate change’s effect on pollinators. A part of our mission states it best: “[t]he College’s Vermont location offers an inspirational setting for learning and reflection, reinforcing our commitment to integrating environmental stewardship into both our curriculum and our practices on campus. Yet the College also reaches far beyond the Green Mountains, offering a rich array of undergraduate and graduate programs that connect our community to other places, countries, and cultures...Through the pursuit of knowledge unconstrained by national or disciplinary boundaries, students who come to Middlebury learn to engage the world.”

## *Green Mountain College (GMC)*

Through explorations of Green Mountain College’s Cerridwen Farm and a tour of the Mettowee Valley, students will tackle the complexities of innovative conservation approaches related to grass-based agriculture, rare breeds, water quality, renewable energy, use-value appraisal, and land trust strategies, complemented by several on-farm meals.

## *Vermont Law School*

This course is intended to teach students about how food is regulated in the United States. Students will learn how the executive, judicial, and legislative branches of government work in concert with other federal regulatory agencies (namely, the Food and Drug Administration [FDA], the United States Department of Agriculture [USDA], and the Environmental Protection Agency [EPA] to regulate our food. Specifically, students will learn how food additives, ingredients, labels, and GMOs are regulated and will gain an overview of the relevant law and policies to understand how our current food system was shaped.

## Schedule for 2016 Study Tour

Date	Study Location	Theme/Activity
TU* 6/14/2016	UVM*	UVM Food Systems Summit*
WE* 6/15/2016	UVM*	UVM Food Systems Summit*
TH 6/16/2016	Vermont Tech	Arrive and Settle at Vermont Tech - Farm BBQ
FR 6/17/2016	Vermont Tech	Dairy Begins (and ends) with “C”: Cattle, Carbon, & Capital
SA 6/18/2016	NECI Sterling	From Farm Gate to Chef’s Plate
SU 6/19/2016	Sterling	Restoring the Ecosystem that Supports Our Food System: From Underground Biology to Nutritious Food
MO 6/20/2016	Sterling to UVM	Intervale & City Market Tours & Presentation
TU 6/21/2016	UVM	Farm to Healthcare, School, & College
WE 6/22/2016	UVM to Middlebury	Farm to Institution
TH 6/23/2016	Middlebury	Food Systems - Local to Global
FR 6/24/2016	Middlebury to GMC	Leading Climate Change
SA 6/25/2016	GMC	Conservation at the Core: Biodiversity, Land, Water, & Energy
SU 6/26/2016	GMC	Conservation at the Core: Biodiversity, Land, Water, & Energy
MO 6/27/2016	Vermont Tech	Carbon Mapping in the Food System
TU 6/28/2016	VLS	Practice to Policy
WE 6/29/2016	VLS to VTC	Practice to Policy Closing Banquet

\*optional event