VERMONT FOOD SYSTEM PLAN PRODUCT BRIEF



PRODUCT: Food-Grade Grains

What's At Stake?

Consumers are concerned about where their food comes from, yet may not realize that the majority of local grain-based products (e.g., flour, bread, baked goods, beer, and spirits) are not made with locally grown grains. Local grains market opportunities are beyond direct-to-consumer, as brewers, maltsters, bakers, restaurant owners, food distributors, and others have all demonstrated interest in greater local product availability. For Vermont dairy farmers looking to diversify, growing grains is a feasible option because grains can be grown at scale, would benefit the forage rotation, are suitable for our soils and climate, and offer a diversified income stream. For farms to continue to, or transition to, growing edible grain, there needs to be additional equipment and infrastructure in Vermont for growing and processing, strong regional markets, access to capital, and research-based technical assistance.

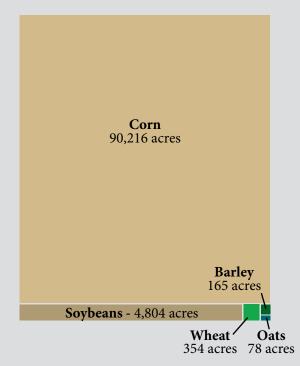
Current Conditions

Vermont was a national hub for grain production in the 1800s, but today, much of the grain and foods containing grains are imported into our state. This represents a missed opportunity for Vermont farmers and the numerous related businesses that could benefit from a local grains economy. Consumers are demanding goods that are grown or produced locally. Beer, bread, and spirits are all rapidly expanding Vermont products and markets requiring grain for production (see Bread brief, Beer brief, Spirits brief). Vermont brewers and distillers use an estimated 31 million pounds of grains each year with less than 5% of that grain coming from local or regional growers. Peterson's Quality Malt in Charlotte is providing brewers with a new malt made from local and regionally sourced grains, and estimates the demand will increase to 8,000 acres by 2023.

Similarly, the number of bakeries in Vermont and surrounding states presents a significant opportunity for local flour production. However, Vermont lacks processing infrastructure to turn raw product into a flour, severely limiting opportunities for farmers and end users.

In order for the Vermont grain economy to grow, infrastructure is required for growers to harvest, dry, store, aggregate, mill, and process their harvested grains. At this time, such infrastructure does not exist in our state on a scale that is necessary to meet in-state demand, let alone sell into out-of-state markets. In 2017, Vermont had an estimated 147 bakeries, 35 breweries, and 12 distilleries. These numbers only include establishments captured by either the Bureau of Labor Statistics or the US Census Bureau Nonemployer Statistics and may be an undercount.

Conservative estimates show additional wheat demand requiring approximately 8,000 acres, and additional barley demand requiring 2,855 additional acres. The amount of existing corn and soy acreage shows Vermont has the land capacity to grow enough grain to meet estimated current food-grade demand.



Bottlenecks & Gaps

- There is limited information on local and regional market demand and opportunities for grain.
- There are limited Vermont processing facilities and those that exist have infrastructure needs (e.g., threshers, seed cleaners, mills, industrial dryers, grain bins, storage, etc.).
- The system for distributing and marketing Vermontgrown grains, both in state and out-of-state, needs improvement.
- Farmers new to growing grain need individual technical assistance, both agronomic and financial.
- More research and testing services are needed to evaluate seed quality and assist growers with producing an exceptional product for value-added sales.

Opportunities

- Grain centers, established in other regions, are facilities which allow grain growers to properly and efficiently grow, harvest, clean, dry, test, sort, market, and handle grains going to the local markets. Grain centers can create and support new jobs such as farmers, millers, process facility labor, skilled labor, engineers, scientists, economists, market analysts, researchers, etc.
- Vermont-branded grains could leverage the state's brand and reputation for quality and farm-to-table foods and beverages.
- Investing in a local grain economy would help diversify farms and sustain or create new jobs in the agricultural sector (i.e., custom combine operations, grain equipment sales, grain processing jobs).

Recommendations

- Create a Vermont grains processing center with a multitude of benefits, including job creation and market security. This center would encourage more working lands to transition to grains, boosting the local markets. It would increase the reliability of grain quality for buyers, mitigating the risk of quality inconsistencies and boosting the potential monetary value for farmers. A grains center could control the quality of grain through consistent cleaning, drying, milling, processing, and storing.
- Provide funding for capital expenses to eliminate some of the small-scale infrastructure gaps. This funding could be available to farmers, or to organizations and/or businesses that work directly with farmers.
- Develop regional market connections and a marketing mechanism for Vermont grain products, particularly specialty grains. For example, fund the Northern Grain Growers Association to develop quality production standards for Vermont grain farmers to use if they so choose and fall under the qualifications of the program.
- Increase funding for research to identify marketable grains that grow well in Vermont, such as barley, spelt, and heirloom wheat varieties. With climate change and ever more unpredictable weather and seasonal patterns, creating new varieties and production strategies that can be resilient in Vermont will become of even greater importance than it is now. Cost: \$75,000 per year.
- Increase funding for technical assistance. Farmers and grain related businesses have technical assistance requirements that are not always readily available in Vermont. Building connections through UVM Extension and Northern Grain Growers Association to increase technical assistance availability would improve grain quantity and quality. Cost: one FTE at UVM Extension, \$125,000 per year.

Farm to Plate is Vermont's food system plan being implemented statewide to increase economic development and jobs in the farm and food sector and improve access to healthy local food for all Vermonters.

The Vermont Agency of Agriculture, Food & Markets (VAAFM) facilitates, supports, and encourages the growth and viability of agriculture in Vermont while protecting the working landscape, human health, animal health, plant health, consumers, and the environment. This brief was prepared by: Lead Author: Heather Darby, UVM Extension Contributing Authors: Brent Beidler, Beidler Family Farm | Catherine Davison, UVM Extension | Seth Johnson, Morning Star Farm | Randy George, Red Hen Bakery | Andrew Peterson, Peterson Quality Malt Todd Hardie, grain grower, formerly of Caledonia Spirits | Steve Hardy, L.D. Oliver Seed | Scott Magnan, dairy farmer.

For end notes and data sources, and to read other food system briefs, visit <u>vtfarmtoplate.com/plan</u>