

# Excited about Vermont farms, the rural economy, and soil and water health? **Support the Vermont Wool Pellet Project!**



Kimberly Hagen and Suzy Hodgson of the Center for Sustainable Agriculture were seeking a way to support Vermont's sheep farmers by exploring market options of value-added products made from the coarse grade wool that most sheep in the state produce. A grant from USDA Rural Development to Open View Farm, matched with support from the Vermont Agency of Agriculture, Food & Markets, and the partnership and interest of an energetic team of partners, made it possible to explore a range of options.

Originally focused on finding a way to process wool to meet demands for local and sustainable materials for the building trade, the group came to realize that a use that did not require scouring (cleaning) was what was needed.

After learning that unprocessed wool could be formed into pellets, the team began investigating the process and potential impact of manufacturing a wool pellet product for use as a fertilizer. In 2019, they acquired a sample batch of pellets from a Utah producer and recruited three farms for a pilot test of how wool pellets performed on their broccoli crop as compared to an adjacent row that utilized their usual fertilizer – the most common being peanut meal. The findings were significant and promising, prompting a decision to move forward to the next stages of developing a Vermont wool pellet product - but we need financial support.

Even in the midst of the pandemic, we are gearing up for an at-scale test-run of turning wool from local farms into pellets. We are in conversation with the team that coordinates the "Wool Pool" from local shearing, so that we can gather 4,000 lbs. of wool from area farms as soon as it's safe to do so. We will pay the farmers a fair price and then transport it to the pelletizing factory in nearby Quebec. We estimate that this will cost approximately \$13,000, and we are seeking donations to allow us to get to the next exciting stage of research and sustainable product development. Meanwhile, we've received the good news that we have received funding through an NE-SARE partnership grant to begin the next phase of research on benefits the pellets provide for vegetable farms.

## Proposed Budget

Item	Quantity & Unit	Cost
Paying farmers for raw wool	4,000 lbs. at \$1/lb	\$4,000
Wool collection and packaging	2 people, 2 days, 7.5 hrs.@ \$20 hr.	\$300
Truck rental for transport	Randolph VT to Stanstead, QC to Montpelier, VT	\$800
Integrated Pellet Systems	Time & labor	\$5,200
VT Tech College	Crew and space use	\$1,500
Labor to package pellets	2 people, 2 days, 5 hrs. @ \$20/hr.	\$200
Project coordinator	Five 7.5 hr. days @ \$30/hr.	\$1,125
<b>Total projected cost</b>		<b>\$13,125</b>



# Let's give Vermont farmers a new tool to do good and do well - locally and sustainably.

Please visit <http://go.uvm.edu/woolpellets> to make a gift, or else learn more by contacting

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## Why Wool Pellets for Vermont?

- 1. Wool costs sheep farmers money** For decades the market price for raw wool has been very low – below the cost to shear sheep and transport the wool. A small percentage of the “clip” is fine enough for small batch value-added products, but generally, if they do not sell to the local wool pool collection, many producers simply pile it in a corner of their barn or haul it out to the woods to dump it.
- 2. Benefits for vegetable growers** Wool pellets may in some ways be superior to the peanut meal that many farmers currently use. Wool's *hygroscopic* quality means it can support help farms be more resilient, through both extremely dry and extremely wet conditions because it can absorb, hold and release moisture as well as nutrients, over time.
- 3. NPK Profile** Analysis of wool pellets reveals an NPK profile average of 9-0-2 - generous nitrogen, virtually no phosphorous, and small amounts of potassium. The nitrogen slowly releases due to the physical properties of the fibrous wool pellet and slow breakdown. For many vegetable farmers in Vermont this is an ideal combination that could reduce the runoff of phosphorous into Vermont waterways.
- 4. Carbon sequestration** Up to fifty percent of the weight of wool is carbon. When pellets are incorporated into the soil, that carbon stays in the ground.
- 5. A healthy rural economy is the basis of Vermont's working landscape** This project can support livestock farmers, provide a useful product for vegetable growers, and help protect precious natural resources, benefitting our whole region by keeping farms in business and in balance with the land.

