

NONPOINT SOURCE POLLUTION SUCCESS STORY

The Power of Conservation District Wraparound Services

A FAMILY FARM WITH A LONG-TERM VISION

Located in Glover within the headwaters of the Black and Barton watersheds, Ledgenear Farm is a family farm rooted in tradition, hard work, stewardship, and a deep commitment to Vermont agriculture and the health of the surrounding landscape.

FARM AT A GLANCE

- **Owners:** James Coe & Nella Cargioli Coe
- **Location:** Glover, Vermont
- **Watersheds:** Black & Barton Headwaters
- **Land Base:** 250 acres plus 13 acres Shadow Lake
- **Operation:** Beef, Sugaring, & Diversified Orchard



100 apple trees and 50 blueberries through OCNRCD's Annual Plant Sale.

- **Livestock:** Approximately 50 beef cows
- **Conservation Focus:** Nutrient management, water quality, flood resilience, and shoreline stewardship

James and Nella understand that the success of their operation depends on the health of the natural resources around them. All are interconnected with the farm's future.

When asked about balancing the honor of family tradition with modern conservation and requirements, James said:

"We're doing what we've always done, but with more science to do it better."

BUILDING A FARM TEAMS TOOLKIT

Ledgenear Farm partnered with the Orleans County Natural Resources Conservation District (OCNRCD) through the Agricultural Clean Water Initiative Program (AgCWIP) with the initial goal of meeting Vermont's Required Agricultural Practices (RAPs). The partnership quickly grew into a broader conservation effort focused on long-term stewardship, farm viability, and natural resource protection. Through site visits, planning meetings, the team identified opportunities to improve water quality and farm resilience.



Nutrient Management Planning

Completed the six-day UVM course, ensuring compliance with Vermont's Required Agricultural Practices "(RAPs) to protect water quality while improving yields



Lakeshore Restoration at Farm Stay Location

Improved stream crossings, forest road gully remediation, strategic buffer plantings to protect the Shadow Lake shoreline and local stream health.



Marketing Conservation

Translating stewardship into a brand story that connects with other farmers, the local community, and customers.

By serving as a single trusted local partner, the Orleans County Natural Resources Conservation District provided the farm with wraparound support—seamlessly connecting James and Nella to resources to meet their varied natural resource needs.



(Left) Completed a Lakeshore Delta Study to inform the 125ft lakeshore restoration project.

(Middle) Planned riparian and stream bank restoration area

(Right) OCNRCD Staff, Will Marlier measures forest gully



Spreadsheet of planned manure applications, made through the Nutrient Management

Ledgegear Farm 2026 Nutrient Management Plan - Planned Manure Applications							Plan
Manure Sources and Spreaders							
Source					Spreader	Spreader Size	
Composted Manure Barneyard Stack					Dan Demaine Manure Spreader Rental	5 tons	
Notes:							
Field Details				Planned Manure Applications in 2026 by Field		Equivalent Number of Loads	
Field Name	Tract & Field #	Acres	Crop(s)	Date	Source	Rate/acre	Dan Demaine Manure Spreader Rental
Air Triangle	344-4	4.54	Hay	Mid May, 2026	Composted Manure Barneyard Stack	2 WT	1.8
FF	344-5	13.98	Hay	Mid May, 2026	Composted Manure Barneyard Stack	2 WT	5.6
Moose	344-7	6.79	Hay	Mid May, 2026	Composted Manure Barneyard Stack	2 WT	2.7

Nutrient Management Plans Results

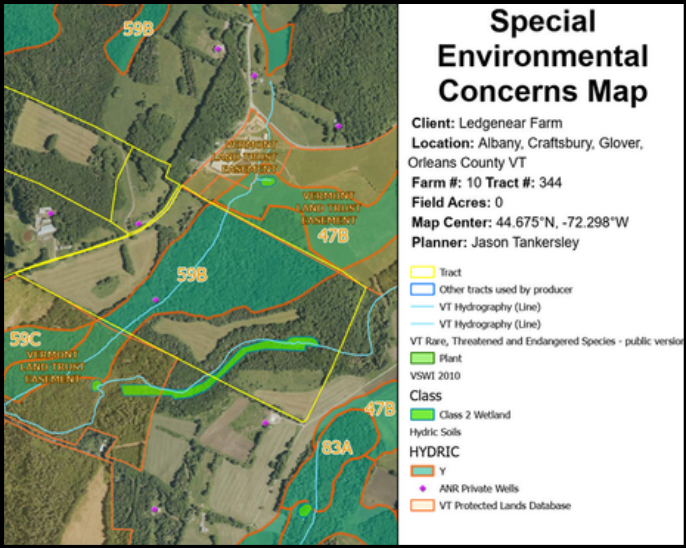
By bringing together field records, soil test results, and manure application schedules, the NMP supports informed decision-making. The UVM GoCrop software provides a practical manure spreading schedule, seen above, for farms to refer to throughout the growing season.

An average soil pH of 5.9 across the farm’s fields indicates moderately acidic soils. While still productive, this pH falls slightly below the optimal range for most forage crops. Having soil samples done every three years, James and Nella better understand the soil conditions and nutrient balance to support crop productivity, and maximize the value of nutrients already being applied.

Nutrient Management Plans provide phosphorus risk ratings across evaluated fields. Ledgegear’s risks are “Low”, these findings provide confidence to continue their management responsibly.

Nutrient Management Plans include a suite of maps that OCNRCD produces for the farm. These include environmental features of the land base and highlight setbacks and sensitive areas to effectively guide operations and nutrient applications.

A map of the environmental concerns on Ledgegear Farm



Community Engagement Results

Through OCNRCD’s Marketing Conservation Program, James and Nella are working to share the story behind their stewardship efforts with customers, peers, and the broader community. The program has produced a video and website & socials content based on:

- Core Conservation Messaging
- Conservation Narrative Frameworks
- Brand Voice and Visual Identity with Conservation Practices.
- Communication Roadmap

Increasing the public’s understanding of the investments farmers make to protect soil, water, and forest resources by connecting conservation practices to purchasing decisions, Ledgegear Farm is demonstrating how stewardship and farm viability work hand in hand.

Vision of Stewardship for Future Generations

“We hope that the efforts we put in now will make the farm stronger, preserving it for the future generation. Though we might not see the benefits ourselves, we hope the future generations will so that farming on the land can continue successfully.

OCNRCD has helped us work toward this vision to implement valuable practices to grow our farm. We were surprised most by how responsive and inclusive OCNRCD is. They listen to our ideas and work with us to plan together.” — Nella

Are you a farmer considering similar conservation work? James and Nella say,

“Reach out to OCNRCD. They have many resources and information on many conservation practices.”

Reach out to start the conversation.



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