



Plowing Forward

End of Year Special Edition

December 2025

A Thriving Stream in the Heart of a Dairy Farm—Is It Possible?



A One Health Perspective

At the Lands at Hillside Farms (Hillside Farms), we embrace a One Health*

way of thinking—recognizing that the well-being of people, animals, and the land are inseparable. The stream that winds through our farm tells this story beautifully.

Once simply a waterway, it is now vibrant and alive, bordered by lush vegetation and supporting diverse aquatic life, including native brown trout. This thriving stream is no accident; it reflects our commitment to responsible, sustainable farming practices that protect natural resources, nurture wildlife, and ensure a healthy landscape for generations to come—not only here at the farm, but for those who live downstream.

The Landscape That Shapes the Stream

Hillside Farms is composed of a small valley, with the Huntsville Stream bisecting cattle pastures at the lowest points of the farm. The topography of the land directs water across the dairy pastures and into the stream.

Historically, this created a rustic scene, with hilly pastures groomed to the stream's edges, fencing along the water, and a functional dam or impoundment that formed a midstream pond with a short waterfall exit. This feature abutted stone buildings that once served as the dairy's powerplant and milkhouse.

Asking the Hard Question

Today, amid ongoing conversations about the environmental impacts of dairy farming, Hillside Farms serves as a living experiment—using thoughtful operational changes to answer a central question:

Can a healthy stream exist within a rotationally grazed dairy farm?

Changes That Matter

Over the past 20 years, we have made many changes to the farm landscape—some popular, others more challenging. We established riparian buffer zones, including the planting of hundreds of native trees, yielding pasture to conservation and moving fencing well away from the stream's edges.

We removed the dam, which no longer served a functional purpose and prevented fish migration. Cornfields gave way to permanent pastures, providing nutrition for our cattle while stabilizing soil and supporting a greater diversity of life.

The goal of this work is straightforward: to use vegetation to feed cattle, slow water flow to reduce erosion, and allow plants to uptake excess nutrients—protecting the stream from nutrient overload and degradation.

Vegetation: The Quiet Protector

It quickly becomes clear that vegetation is a cornerstone of Hillside Farms' system—supporting cattle health, soil stability, and water quality. Often, simply allowing vegetation to grow and function naturally is one of the most effective ways to protect stream health.

Measuring Success in the Water

While there is still work to be done to achieve a perfect symbiotic balance, significant progress is already behind us. Recently, the [Luzerne Conservation District](#) hosted students from the [Dallas School District](#) to conduct stream testing. Results showed:

- Nitrogen/Nitrates: 0–1 ppm
- pH: 7
- Dissolved Oxygen: 10 ppm

—all strong indicators of healthy water.

Perhaps most telling is the presence of pollution-sensitive macroinvertebrates such as crayfish, snails, and dragonflies, along with frogs, turtles, and snakes. Most exciting of all is the discovery of wild brown trout. **Taken together, these indicators show a thriving stream coexisting with the dairy herd.**

Looking Ahead

Looking toward 2026 and beyond, visitors can expect to see even more native vegetation along the stream corridor. We are pursuing a sustainable solution to invasive knotweed removal to further strengthen stream banks, reduce erosion, and protect the stream's long-term health.

A Living Classroom for the Future

As we move forward, this stream will remain a living classroom—where students of all ages can explore science, technology, engineering, and math through real-world observation and discovery. Its health stands as clear evidence that a thriving stream and a working dairy farm can coexist.

By continuing to monitor, study, and document this ecosystem, we are committed to learning from it, sharing its story, and demonstrating what responsible, sustainable farming can achieve.

* **One Health** is a collaborative, interdisciplinary approach that recognizes the health of people, animals, and the environment as deeply interconnected and interdependent. The concept has roots in the 19th century, when physicians and veterinarians identified links between human and animal health. Learn more by [clicking here](#).

Below are photos of the stream flowing behind Hillside Farms power plant and milk house buildings, taken approximately 50 years apart. The top photo is current and shows a robust riparian buffer zone that protects the health of the water and inhabitants.





**The Lands At Hillside Farms
is proud to earn
The Gold Standard in Animal
Welfare for Dairy Cattle**



agreenerworld.org

The Lands at Hillside Farms is a historic, 434-acre, 501(c)(3) non-profit educational dairy farm EIN 20-2975553. Our mission is to teach life choices that are healthy, logical, and sustainable so those born 200 years from now will have access to the same or better resources and opportunities.

You can contribute to our non-profit mission by visiting
[our online donation page.](#)

**We are grateful for your support.
TheLandsatHillsideFarms.org**



The Lands at Hillside Farms | 65 Hillside Road | Shavertown, PA 18708 US

[Unsubscribe](#) | [Update Profile](#) | [Constant Contact Data Notice](#)