

BIODEGRADABLE NET WRAP COMPARISON PROJECT



PROJECT OVERVIEW

The Biodegradable Net Wrap Comparison Project is a multi-year on-farm study led by CAFLA to test and showcase an environmentally friendly alternative to traditional synthetic net wrap used for baling hay. This innovative product, called Nature's Net Wrap, is made from plant-based biopolymers instead of petroleum-based plastics. The goal is to evaluate its effectiveness, longevity, and impact on forage quality under real farming conditions.

WHY IT MATTERS

Traditional synthetic net wrap is a major source of plastic waste on farms, often ending up burned, buried, or scattered, causing long-term soil contamination and microplastic pollution. Nature's Net Wrap offers a more sustainable option that breaks down faster and doesn't release harmful microplastics into the soil.

Although slightly more expensive upfront, Nature's Net Wrap may reduce long-term costs by eliminating disposal fees and lowering environmental impact.

HOW THE PROJECT WORKS

Two sites—one in Wetaskiwin County and one in Lacombe County—will be used for testing.

Each site will trial two common bale stacking methods:

- Single Bale Row (commonly used)
- Mushroom Stack (recommended for long-term storage)

Each site will:

- Produce 8 bales per stack wrapped in Nature's Net Wrap.
- Sample and assess bales at 0, 6, 12, and 18 months, and beyond if needed.
- Compare results to bales wrapped in traditional synthetic net wrap.



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WHAT'S BEING MEASURED

- Net wrap durability (visual and strength assessments)
- Forage quality over time
- Decomposition rate (above and below ground)
- Soil health impacts from degrading wrap
- Ease of use and producer feedback



PROJECT GOALS

This project aims to:

- Raise awareness about sustainable bale wrapping options
- Provide real-world data on Nature's Net Wrap performance
- Help producers make informed decisions about adopting eco-friendly practices
- Protect soil health and reduce plastic waste on farms

In short, this project explores whether a greener, cleaner future for forage storage is possible—without sacrificing bale quality or farm efficiency.

