Quantifying Residue Impact

to Protect High-Value Seed Corn Yield

Residue Management

SeedTrax Use Case 2025

KEY HIGHLIGHTS

Identified a ***3 bu/acre yield loss*** *linked to residue-related emergence issues*

Quantified a ***$39/acre financial impact*** *in high-value seed production*

Established a ***clear ROI opportunity of up to 5 bu/acre*** *through improved residue management*

BACKGROUND

A large-scale seed corn grower farms several thousand acres and operates multiple seed production facilities. While most acres are dedicated to seed corn, some soybean seed i s also produced.

As with conventional corn production, seed corn faces common agronomic challenges such as residue management and uniform emergence. However, the **financial impact of yield loss is significantly greater in seed production** because each bushel is worth more.

Because of the weather and limited time in the fall, not every field receives tillage. The grower wanted to better understand whether residue impacts emergence, and ultimately, yield.

CHALLENGE

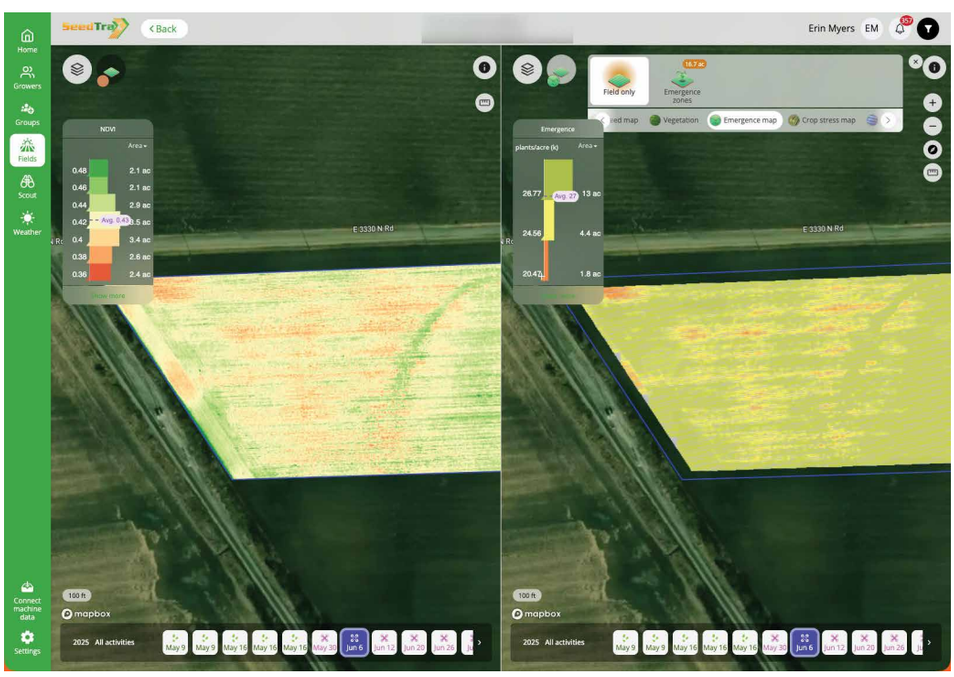
The grower suspected residue may be affecting stand establishment, but could not quantify the impact. Measurable data would help this grower justify changes in management to protect yield.

Key questions included:

- Is residue causing uneven emergence?
- How much yield is being lost in affected areas?
- Would additional tillage or a residue breakdown application provide a return on investment?

Using SeedTrax, the grower compared emergence maps with NDVI maps and identified consistent striping patterns tied to heavier residue areas. **The emergence map clearly showed delayed or reduced emergence in these strips.**

To measure impact, the grower compared affected and unaffected areas within the same field. The analysis indicated a **yield loss of approximately three bushels per acre,** equivalent to roughly **$39 per acre.** Given the value of seed corn, this grower determined that this level of loss warranted action.



Residue strips impact crop emergence

SeedTrax

Innovative seed production management platform

Seed production is complex.
SeedTrax makes it manageable.

Powered by Intelinair

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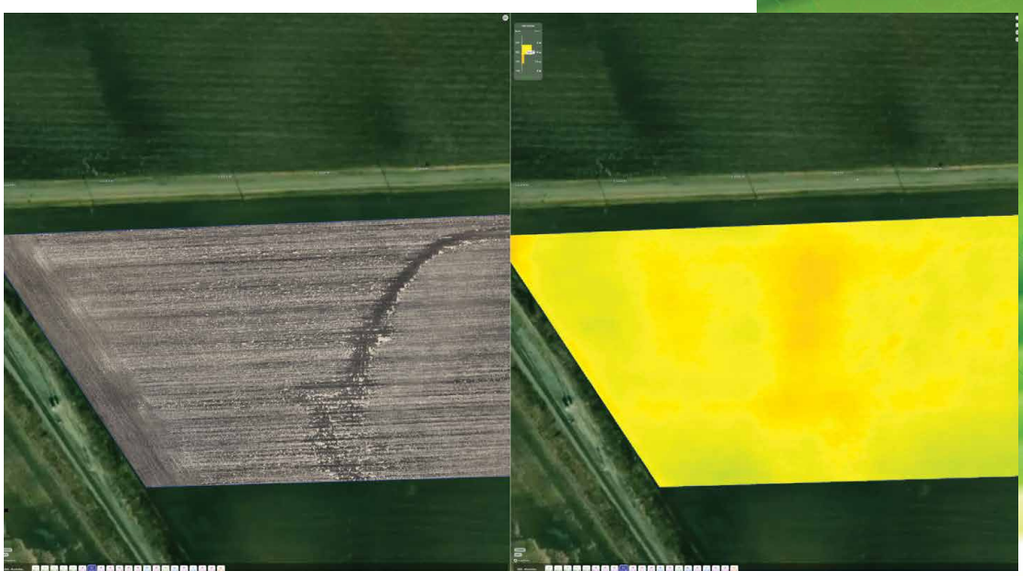
SOLUTION

SeedTrax allowed the grower to **move from assumption to measurable impact.** By layering emergence data with NDVI, the grower was able to:

- Confirm residue-related emergence issues
- Compare performance across field zones
- Quantify financial impact

With validated data, the grower decided to prioritize tillage to ensure residue is incorporated and able to break down effectively. If fall tillage is not completed, spring tillage will be scheduled to minimize residue-related emergence issues.

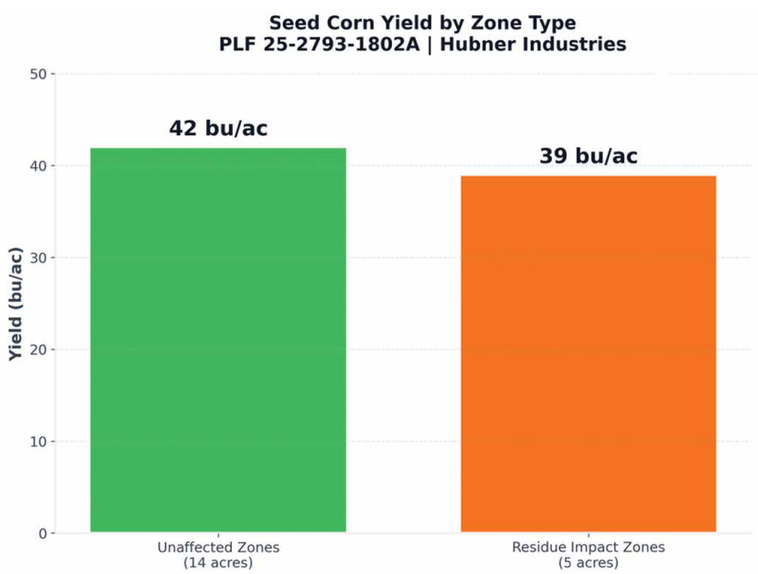


Heavy residue impacts overall yield

RESULTS

Full-season results are still being finalized, but analysis shows a **potential ROI opportunity of up to 5 bushels per acre** through improved residue management.

Identifying a $ 39-per-acre yield drag provided the justification to adjust management practices and protect high-value seed corn production. SeedTrax helped prioritize action during a busy season and supported a data-driven decision.



3 bushel yield drag in residue impacted zones

SeedTrax

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Into Confident Decisions

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Contact Us to Learn More

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