Emerging Ag Information Services
Precision Business Planning

Certification
Compliance
Agronomic
Risk Management
Operational
Marketing
Conservation
Real Estate
Financial
Profit Zone Concept

Precision Business Plan

Certification
Compliance
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Conservation

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Understanding Subfield Profit and ROI

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Primary Message

Environmental Performance and Economic Performance are driven by the same goal:

Maximize the output per unit of input
Subfield Financial Product Design: Current Practices

Summary

- 50 Year Yld Ave: 170 bu/acre
- 50 Year Yld STD: 38 bu/acre
- Profit Average: $47/acre
- Profit STD: $235/acre
- Years Profitable Ave: 31
- Years Profitable STD: 14
- Percentage of Field Profitable: 74%
Subfield Financial Product Design: Risk Management Through Agronomy

Summary

New production at loss > $200/acre with adjusted ins prem’s and int rates

Profit Average: $105$/acre
Profit STD: $149$/acre
Percentage of Field Profitable: 79%
ROI Focused Agronomic Management

Expense Limited Zone

No Cost Zone

Revenue Zone

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Precision Business Planning Workflow – Business Performance Review

Intelligence Gathering

Business Performance Review

Return Ratio Analysis

Negative Return Assessment

Return Ratio Business Planning

In-season Plan Adjustments

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Precision Business Planning Workflow – Return Ratio Analysis

- Intelligence Gathering
- Business Performance Review
- Return Ratio Analysis
- Negative Return Assessment
- Return Ratio Business Planning
- In-season Plan Adjustments

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Acreage</td>
<td>143.26 ac</td>
</tr>
<tr>
<td>Average Yield</td>
<td>179.94 bush/acre</td>
</tr>
<tr>
<td>Profit</td>
<td>$63.25/acre</td>
</tr>
<tr>
<td>ROI</td>
<td>6.89%</td>
</tr>
<tr>
<td>Production Efficiency</td>
<td>213.37 bu/$1000</td>
</tr>
<tr>
<td>Loss Ratio - Land</td>
<td>0.23</td>
</tr>
<tr>
<td>Loss Ratio - Capital</td>
<td>$25,093.95</td>
</tr>
<tr>
<td>Total Field Expenses</td>
<td>$114,768.44</td>
</tr>
<tr>
<td>Total Field Revenue</td>
<td>$122,438.50</td>
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<tr>
<td>Total Field Profit</td>
<td>$7,673.06</td>
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Precision Business Planning Workflow – Return Ratio Business Planning

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Webster: Actual Production - Corn: 2010
Actual Production - Corn Break-even Yield Increase
This map shows the yield increase needed to break even on expenses at the commodity price in the associated crop budget.
Conservation Planning: Financial and Environmental Benefits

Profitability and environmental performance are linked

Nutrient Reduction Strategy Implications

- First set of improvements through improved business performance
- Fast actions to slow down regulation
- Buffered production systems
Active Management of Asset Value

Profitability and environmental performance are linked

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<th>Advanced Management</th>
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<td>204</td>
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Adding Context to Environmental Performance Impacts

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**Soil Erosion**

**Soil Carbon**

**CO₂ Gas Flux**

Conventional - Advanced =
Identifying the Opportunities

- Between 2-3 million acres annually at an expected loss
- Over $1B annually in misallocated working capital

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Value Across the Supply Chain

- Land Managers
- Ag Retail/CCA’s
- Conservation Professionals
- Policy Administrators
- Financial Services/Investment/Farm Management

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Questions?