Investing in Pastures: Weed Control

Jay Ferrell
IFAS - Gainesville
We have been taught to think of pastures as a natural resource.

Actually, they are an *asset* that contains equity.
We have been taught to think of pastures as a natural resource.

Actually, they are an asset that contains equity:

- Over past few years, we’ve depreciated the asset.
You can depreciate to $0
How Do We Add Equity to Pastures?

• Soil Test
  – Adjust pH
  – Potassium levels (tissue samples)
  – What about micronutrients?

• Weed Control
  – Fertility and pH
  – Herbicides
“Pasture Robbers”

- Dogfennel
- Horsenettle
- Thistle
- Smutgrass
- Blackberry
Dogfennel Control

- Cheap and easy to control early
- Becomes very difficult to control with age
Dogfennel Control

Recommendation

• 0-24” – GrazonNext or Weedmaster 2pt

• Above 24” – GrazonNext + PastureGard
## Control of 18” dogfennel

<table>
<thead>
<tr>
<th>Herbicide</th>
<th>% control 5 Weeks</th>
<th>$/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>GrazonNext HL – 1.5 pt/A</td>
<td>85</td>
<td>8</td>
</tr>
<tr>
<td>GrazonNext HL – 2 pt/A</td>
<td>90</td>
<td>12</td>
</tr>
<tr>
<td>Weedmaster - 2 pt</td>
<td>95</td>
<td>8</td>
</tr>
</tbody>
</table>
## Control of 3’ dogfennel

<table>
<thead>
<tr>
<th>Herbicide</th>
<th>% control 5 Weeks</th>
<th>$/A</th>
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<tbody>
<tr>
<td>GrazonNext HL – 2 pt/A</td>
<td>65</td>
<td>12</td>
</tr>
<tr>
<td>GrazonNext HL – 1.5 pt/A + PastureGard HL – 8 oz/A</td>
<td>100</td>
<td>15</td>
</tr>
<tr>
<td>Weedmaster - 2 pt</td>
<td>80</td>
<td>8</td>
</tr>
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</table>
Weedmaster can be slow

![Graph showing % control over weeks for PG + GN and WeedM]
Trumpcard

• Sold by Helena and similar to Cleanwave + 2,4-D

• Highly effective on dogfennel.

• Consider price and dogfennel size before spraying.
Thistle
Rosette or Bolted?

• Rosette
  – 2,4-D ester
  – GrazonNext HL
  – Weedmaster?

• Bolted
  – GrazonNext HL
    • Rate – you choose
Horsenettle

- GrazonNext HL
  - 1.5-2pt/A
  - 6 weeks for control

- Remedy (no residual)
  - 2 pt/A at bloom
  - Expect 60-80% control
Smutgrass
Control

Velpar

• Primarily absorbed by the roots; limited leaf absorption
  – Surfactant not necessary
  – Must have rainfall to activate

• 3 to 4 pints per acre ($10 per pint)
  – Can I shave the rate?
Giant smutgrass rate titration

1 Year after treatment

percent control

hexazinone rate (kg ai/ha)
Control shortcomings

- High cost: $30-40/A
- Enormous seed bank
- Large open spots
- Short-term efficacy
<table>
<thead>
<tr>
<th>Treatments</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
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<tbody>
<tr>
<td>2008</td>
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</tr>
<tr>
<td>Velpar</td>
<td></td>
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<tr>
<td>4 pt/A</td>
<td>0</td>
<td>0 kg/ha</td>
<td>2</td>
<td>0.2</td>
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<tr>
<td>4 pt/A</td>
<td>2 pt/A</td>
<td>0 kg/ha</td>
<td>2</td>
<td>0.1</td>
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<tr>
<td>Nitrogen</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>4 pt/A</td>
<td></td>
<td></td>
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</table>

Field Experiment 2
<table>
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<tr>
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<th>2009</th>
<th>2010</th>
<th>2011</th>
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<tbody>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Velpar</td>
<td>Velpar</td>
<td>Nitrogen</td>
<td>No./m²</td>
<td></td>
</tr>
<tr>
<td>4 pt/A</td>
<td>0</td>
<td>0 kg/ha</td>
<td>2</td>
<td>0.2</td>
</tr>
<tr>
<td>4 pt/A</td>
<td>2 pt/A</td>
<td>0 kg/ha</td>
<td>2</td>
<td>0.1</td>
</tr>
<tr>
<td>4 pt/A</td>
<td>0</td>
<td>56 kg/ha</td>
<td>2</td>
<td>0.1</td>
</tr>
<tr>
<td>4 pt/A</td>
<td>2 pt/A</td>
<td>56 kg/ha</td>
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Blackberry
Triclopyr (Remedy) on Blackberry

- Can be inconsistent

- One application is NEVER 100%

- Expect to spray twice (or more)
How do we improve consistency?

• Spray in the fall or at bloom
  – Fall is best

• Spray when there is adequate soil moisture

• Drop the triclopyr rate (1-1.5 pt/A) and consider adding GrazonNext HL (1.5 pt/A)
How do we prepare for falling cattle prices?

• Soil Test
  – Adjust pH
  – Potassium levels (tissue samples)
  – What about micronutrients?

• Weed Control
  – Fertility and pH
  – Herbicides