Managing Your Pastures Better:
Management Intensive Grazing 101

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This webinar is being offered in cooperation with the American Sheep Industry Association Rebuild the Sheep Inventory Committee.
Intensive Grazing Management Intensive Grazing
How Do We Manage Forages?

Standard Recommendation:

Animals in: 8”
Animals out: 3”

Example:
Ewe raising twins in early lactation

How many inches of grass does she need to meet her nutritional requirements?
Managing Forages

Can We Answer These Basic Questions:

- How long can 50 ewes graze a 15-acre paddock?
- How many acres are needed to support 50 ewes for 4 days?

Is there a better way?
Yes

How Do We Balance an Animal’s Diet?

By Weight

Pounds of feed

Therefore —

Manage Forages by **Weight**
<table>
<thead>
<tr>
<th>By Weight (Mass of DM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Mass (DM)</td>
</tr>
</tbody>
</table>

How do we measure forage mass?
12” x 11.5” = 138 square inches

12” x 11.5” → 26 grams dry forage

> 26 g DM / 138 square inches

x 100 → 2,600 lb DM / acre
<table>
<thead>
<tr>
<th>Description</th>
<th>Mass</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Mass</td>
<td>3,000 lb</td>
</tr>
<tr>
<td>Residual Mass</td>
<td>1,000 lb</td>
</tr>
<tr>
<td>Available Mass</td>
<td>2,000 lb</td>
</tr>
</tbody>
</table>

This is the forage available for grazing.
Example  

flock size = 125 ewes

1 acre = 2,000 lb Available Forage

1 ewe @ 160 lb @ 5% body weight = 8 lb/day

125 ewes will graze 1,000 lb forage DM/day

1 acre = 2 days of grazing for 125 ewes

3-acre field = ewes are OK for 6 days
How do forages grow?

Do Forages Grow Like This?

Phase I

Phase II

Phase III

Total Forage Mass (lb/acre)

Time
5” Grass — Mass vs Height

Density is Critical

<table>
<thead>
<tr>
<th>3,000</th>
<th>2,000</th>
<th>1,300</th>
</tr>
</thead>
<tbody>
<tr>
<td>611</td>
<td>411</td>
<td>311</td>
</tr>
<tr>
<td>611</td>
<td>411</td>
<td>311</td>
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<tr>
<td>611</td>
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<td>611</td>
</tr>
</tbody>
</table>
## Intensive Grazing — What to Do

<table>
<thead>
<tr>
<th>Phase I</th>
<th>Phase II</th>
<th>Phase III</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,000</td>
<td>3,000</td>
<td></td>
</tr>
</tbody>
</table>

**Diagram:**
- **Y-axis:** Total Forage Mass (lb/acre)
- **X-axis:** Time

- **Phase I:** 1,000 lb/acre
- **Phase II:** 3,000 lb/acre
- **Phase III:**
  - **Put Animals In** at 3,000 lb/acre
  - **Take Animals Out** between 1,000 and 3,000 lb/acre

**Graphical Indicators:**
- Red box for Phase I
- Green line for growth
- Blue arrows for animal management

**Legend:**
- Red arrow for time direction
- Black dashed lines for thresholds
Fencing: May ➔ early June

Each cell = 2 days
Fencing: late July ➔ August

Each cell = 2 days
2 Cycles Through the Field

Allocating Feed!
Specifics of MIG

- Introduce sheep at the top of Phase II
- Remove sheep at the bottom of Phase II
- Residual — Don’t graze into Phase I
  - Adds 7–14 days to reach bottom of Phase II
  - Stresses some plants
  - Open areas for weeds
- Avoid Phase III
- Grazing in Phase II
  - Efficiency — most efficient
  - Nutrition — excellent
  - Forages — healthy, sustainable, growing fast
## 4 Rules of MIG

<table>
<thead>
<tr>
<th>Rule</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stay in Phase II growth</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Leave enough Residual</strong></td>
<td>• 800—1,000 lb DM/acre</td>
</tr>
<tr>
<td><strong>Protect Regrowth</strong></td>
<td>• 5-Day Rule</td>
</tr>
<tr>
<td><strong>Water &amp; minerals move with sheep</strong></td>
<td>• each cell contains H$_2$O &amp; TM mixture</td>
</tr>
</tbody>
</table>
Grass Farmer

Capture Sunlight
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