FROM SPRIGGING TO PLAYING IN 30 DAYS

Brad S. Fresenbury
Turfgrass Specialist
University of Missouri
From Sprigging to Playing

Brief Outline:

• *Tell the story*...
Brief Outline:

- **Tell the story** …
- **Historically done** …
From Sprigging to Playing

Brief Outline:

- **Tell the story** …
- **Historically done** …
- **Off the wall sprigging** …
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Brief Outline:

- **Tell the story**…
- **Historically done**…
- **Off the wall sprigging**…
- **Cost** …
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Brief Outline:

• **Tell the story**…
• **Historically done**…
• **Off the wall sprigging**…
• **Cost analysis**…
• **Options**…
Let’s tell a story…

- Construction woes
  - Scheduling
  - Delays (Unexpected change orders)
- Turfgrass establishment timing
- Transition zone
Let’s tell a story…

- Turfgrass establishment timing
  - Wrong time of year
  - Seeding – no
  - Sodding – yes
  - Interface problems – almost always
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Let’s tell a story…

• Interface problems – solutions
  • Washed sod
  • Heavy aerification
Let’s tell a story…

- Best solutions
- Seed directly
- Sprig directly
- Washed sod
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**Historically done…**

- 450 to 500 bushels/acre
- Seeding/sprigging for the transition zone between June 1 & July 15th
- 1 lb of nitrogen/month
- Establishment by end of season
- Stressed importance of 1st year establishment
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Off the wall sprigging…

Started here…
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Hammons Field scenario...

- Start date – June 10, 2003

Saw cut bedrock for drains

Scheduled for sod

Photo courtesy of “Perfect Play - Belleville, IL”
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Hammons Field solution…
- Fear of interface problems with sod
- Raised the question, “Can we sprig?”
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Hammons Field solution…

Mike Munie, Perfect Play out of Belleville, Illinois presented this idea –

Sprig 2000 bushels per acre!

Reactions to this!
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Hammons Field solution…

Game Plan:

• Biostimulants (Prior to & post sprigging)
• Fertilizers
• 2,000 bushels/acre
• With possibly eight weeks left in season (if we were lucky)
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Hammons Field solution…

• Start date – June 10, 2003

July 15, 2003

Photo courtesy of “Perfect Play - Belleville, IL”
Hammons Field solution…

- Start date – June 10, 2003

July 30, 2003
3” rain – 45 min.

Photo courtesy of “Perfect Play - Belleville, IL”
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Hammons Field solution…

- Start date – June 10, 2003

August 1, 2003

3” rain

Photo courtesy of “Perfect Play - Belleville, IL”
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Hammons Field solution...

- Start date – June 10, 2003

August 1, 2003

After rain

Photo courtesy of “Perfect Play - Belleville, IL”
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Hammons Field solution…

• Start date – June 10, 2003

August 1, 2003
(Mid afternoon)
Six weeks after start

Photo courtesy of “Perfect Play - Belleville, IL”
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Grow-in schedule…

• Applied bio-stimulant to bermuda sod prior to harvest
• Applied bio-stimulant the day of sprigging
• Applied bio-stimulant every week for four weeks following sprigging
Grow-in schedule…

• Applied starter fertilizer (12-12-12) at a rate of 1 lb of nitrogen/1,000 sqft on day of sprigging

• Applied urea (46-0-0) every 7 days at a rate of 0.75 lbs of nitrogen/1,000 sqft
Grow-in cost…

- Bio-stimulant applied at rate of 1 quart/1,000 sqft = $132/acre/application
- Starter fertilizer = $94.50/acre
- Urea fertilizer = $15/acre/application
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Hammons Field solution…

• Start date – June 10, 2003

August 21, 2003

Photo courtesy of “Perfect Play - Belleville, IL”
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Hammons Field solution...

- Start date – June 10, 2003

August 29, 2003

28 days post sprigging
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Hammons Field solution…

Photo courtesy of “Perfect Play - Belleville, IL”
Cost...

- **Seed** - $5 to 6/lb or $10 to 12/lb
- **Sprigs** - $2 to 3/bushel
  - $1,750/acre – single pass
- **Sod** - $1.68 to $1.98/yard (not installed)
  - $1 per yard to install
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Cost of sprigs...

<table>
<thead>
<tr>
<th>Sprigs*</th>
<th>1000 sqft</th>
<th>Acre</th>
<th>Field**</th>
</tr>
</thead>
<tbody>
<tr>
<td>500 bu/acre</td>
<td>$29</td>
<td>$1,250</td>
<td>$2,895</td>
</tr>
<tr>
<td>2000 bu/acre</td>
<td>$115</td>
<td>$5,000</td>
<td>$11,550</td>
</tr>
</tbody>
</table>

* Average cost - $2.50/bushel

** Field within 400 m track – 100,880 sqft

Turfgrass Science
University of Missouri
Cost analysis…

Cost Considerations of Big Roll Sod:

A football field with 400 m running track = 100,880 sq ft which = 11,089 sq yd

Cultivars cost around $1.98/sq yd

11,089 sq yd x $1.98/sq yd = $21,956

Add $1.00/ sq yd for installation = $33,045
Cost analysis…

Cost Considerations of Seeding:

Seed rate of 2 lbs/1,000 sq ft

A football field with 400 m running track = 100,880 sq ft

Cultivars that cost around $6.00/lb

2 lbs of seed x $6.00/lb x 100.88 (1000 sqft units) = $1,210
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### Cost comparisons...

<table>
<thead>
<tr>
<th></th>
<th>1000 sqft</th>
<th>Acre</th>
<th>Field***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seed*</td>
<td>$12</td>
<td>$523</td>
<td>$1210</td>
</tr>
<tr>
<td>500 bu**/acre</td>
<td>$29</td>
<td>$1,250</td>
<td>$2,895</td>
</tr>
<tr>
<td>2000 bu/acre</td>
<td>$115</td>
<td>$5,000</td>
<td>$11,550</td>
</tr>
<tr>
<td>Sod</td>
<td>$220</td>
<td>$9,583</td>
<td>$21,956</td>
</tr>
</tbody>
</table>

* $6.00/pound

** Average cost - $2.50/bushel

*** Field within 400 m track – 100,880 sqft
**Cost options…**

- Fewer sprigs

<table>
<thead>
<tr>
<th>Use less (per acre):</th>
</tr>
</thead>
<tbody>
<tr>
<td>500 bushels - $2,895*</td>
</tr>
<tr>
<td>750 bushels - $4,331</td>
</tr>
<tr>
<td>1,000 bushels - $5,775</td>
</tr>
<tr>
<td>1,500 bushels - $8,662</td>
</tr>
<tr>
<td>2,000 bushels - $11,550</td>
</tr>
</tbody>
</table>

* Cost per 100,880 sq ft
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Cost options…

- Fewer sprigs
- Sprig heavily on playing field only

100,880 sq ft vs 57,600 sq ft

$11,550 vs $6,595*

$5,775 vs $3,298**

* 2,000 bushels/acre
** 1,000 bushels/acre
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Cost options…

- Fewer sprigs
- Sprig playing field only
- Field within a field

100,880 sqft vs 57,600 sqft vs 15,000 sqft

$11,550 vs $6,595 vs $1,717*

$5,775 vs $3,298 vs $859**

* 2,000 bushels/acre
** 1,000 bushels/acre
Cost options… The Field within a Field*

… and fewer sprigs!

* Dr. Dave Minner, Iowa State Univ.
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Cost options...

- Fewer sprigs
- Sprig playing field only
- Field within a field
- Seeding vs sprigging
  - Why not?

Seed: $1,210
Sprigs: $3,298
(1,000 bu)
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Seeding vs Sprigging… only less cost

Seeded vs Vegetative

**Sprigging:**
- More cold tolerance
- Deeper rooting
- More stolons, rhizomes
- Added strength

Lamar High School - Lamar, Mo
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Questions???
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Web site:

Sports Turf AdvanTage

http://agebb.missouri.edu/stat/
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