HOW COMFORTABLE ARE THE COWS?

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WHY SHOULD WE CARE?

2696 (136 # of milk/day)
- 2 hours in parlor
- 30 minutes drinking
- 1 hour socializing
- Eating
- Lying down

2672 (37 # of milk/day)
- 2 hours in parlor
- 30 minutes drinking
- 1 hour socializing
- Eating
- Lying down
WHY SHOULD WE CARE?

2696 (136 # of milk/day)
- 2 hours in parlor
- 30 minutes drinking
- < 1 hour socializing
- Eating 7.5 hours
- Lying down 14 hours
- This cow will sacrifice eating time (not amount) and socializing for lying time

2672 (37 # of milk/day)
- 2 hours in parlor
- 30 minutes drinking
- > 1 hour socializing
- Eating 8 hours
- Lying down 12 hours
VIDEO
WHAT HAVE WE LEARNED FROM WATCHING THE VIDEOS?

- Sand is still the gold standard
- Not all sand is equal
- Other types of stalls can be made to be more comfortable/used
- Cows don’t always have “warm fuzzy” feelings for each other
- Cows returning from the parlor like to eat
- Cows like stalls nearest the feed
- Cows love a “scratcher/brushes”
CATTLE BRUSH
“Lazy Cows” That Like to Eat!

- Release from lock-ups
- Clean, dry well bedded stalls
- 4 row vs 6 row
- Cows like to eat on return from the parlor
BAMBI IS A CARTOON, NOT REALITY!

- Cows, like chickens, have a pecking order
- First calf heifers are intimidated by older cows
- Overcrowding can be decrease cow performance
DO OTHER STALL TYPES COMPARE TO SAND?

<table>
<thead>
<tr>
<th>Type of bedding</th>
<th>Avg Time to lying (seconds)</th>
<th>Standard Deviation</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compost</td>
<td>332</td>
<td>359</td>
<td>1735</td>
</tr>
<tr>
<td>Mattress</td>
<td>293</td>
<td>438</td>
<td>1700</td>
</tr>
</tbody>
</table>
## Are All Sand Stalls Equivalent

<table>
<thead>
<tr>
<th>Type of sand bedding</th>
<th>% left</th>
<th>Avg Time to lying (seconds)</th>
<th>Standard Deviation</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renovated 6 row</td>
<td>24.5%</td>
<td>176</td>
<td>247</td>
<td>1295</td>
</tr>
<tr>
<td>6 row</td>
<td>22.2%</td>
<td>134</td>
<td>164.3</td>
<td>655</td>
</tr>
<tr>
<td>Sand on cement</td>
<td>47.1%</td>
<td>384</td>
<td>504.2</td>
<td>1785</td>
</tr>
<tr>
<td>Sand 4 row</td>
<td>21.2</td>
<td>85</td>
<td>116.1</td>
<td>613</td>
</tr>
</tbody>
</table>
# Does Size of the Stall Matter?

<table>
<thead>
<tr>
<th>Stall Type</th>
<th>Sand</th>
<th>Sand</th>
<th>Sand</th>
<th>Mattress</th>
<th>Mattress</th>
<th>Sand</th>
<th>Sand</th>
<th>Renovated</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 row</td>
<td>72</td>
<td>NA</td>
<td>NA</td>
<td>73</td>
<td>70</td>
<td>NA</td>
<td>NA</td>
<td>70</td>
</tr>
<tr>
<td>4 row</td>
<td>64</td>
<td>66</td>
<td>64</td>
<td>64</td>
<td>70</td>
<td>65</td>
<td>60</td>
<td>71</td>
</tr>
<tr>
<td>6 row</td>
<td>48</td>
<td>48</td>
<td>48</td>
<td>49.5</td>
<td>48</td>
<td>48</td>
<td>47-52</td>
<td>45</td>
</tr>
<tr>
<td>6 row</td>
<td>96</td>
<td>100</td>
<td>88</td>
<td>89</td>
<td>94</td>
<td>101</td>
<td>97</td>
<td>94</td>
</tr>
<tr>
<td>Stall curb to brisket board</td>
<td>45</td>
<td>45</td>
<td>46</td>
<td>46.5</td>
<td>51</td>
<td>45</td>
<td>44</td>
<td>46</td>
</tr>
<tr>
<td>curb to neck rail</td>
<td>72</td>
<td>NA</td>
<td>NA</td>
<td>73</td>
<td>70</td>
<td>NA</td>
<td>NA</td>
<td>70</td>
</tr>
<tr>
<td>stall width</td>
<td>64</td>
<td>66</td>
<td>64</td>
<td>64</td>
<td>70</td>
<td>65</td>
<td>60</td>
<td>71</td>
</tr>
<tr>
<td>total stall length</td>
<td>48</td>
<td>48</td>
<td>48</td>
<td>49.5</td>
<td>48</td>
<td>48</td>
<td>47-52</td>
<td>45</td>
</tr>
<tr>
<td>neck rail above surface</td>
<td>96</td>
<td>100</td>
<td>88</td>
<td>89</td>
<td>94</td>
<td>101</td>
<td>97</td>
<td>94</td>
</tr>
<tr>
<td>surface</td>
<td>45</td>
<td>45</td>
<td>46</td>
<td>46.5</td>
<td>51</td>
<td>45</td>
<td>44</td>
<td>46</td>
</tr>
</tbody>
</table>
SEEING A PEN OF COWS, WITH ALMOST ALL THE COWS LYING DOWN, IS A BEAUTIFUL SIGHT!!!
WHAT NEXT?

- Film more barns
- Analysis of various types of bedding and barn layouts
- Suggests improvements to existing barns
- How does this relate to economics
STOCKMANSHIP PRINCIPLES

- Pressure area surrounds the flight zone
- Apply pressure to animals properly
5 SENSES

- Taste
- Smell
- Hearing
- Sight
- Touch

Dr. Paul Rapnicki
CATTLE AND NOISE

- Cattle are sensitive to the human voice
- Cattle have a similar aversion to hitting as to shouting
KEY POINTS

 Always let cattle see where we are
 Cattle will look (listen) to what is pressuring them
 Be aware of which senses are being stimulated, to avoid startling them
PEOPLE VS COWS

- People walk at 3-4 mph
- Cows walk at 2 mph
WHAT IS THE PURPOSE OF GETTING COWS FROM THE PEN?

- Clean the stalls
- Secondarily, the cows will leave the pen!
GOAL

- Move cows:
  - Out of pen, corral, pasture
  - into the holding area
  - into parlor
  - back to pen, corral, pasture
- Remember, milking starts when you start moving the cows!!!!
DRIVE COWS IN A ZIGZAG FASHION
BRINGING COWS INTO THE PARLOR.
PREFERABLY YOU HAVE TAUGHT THE COWS TO COME IN ON THEIR OWN!
USE OF CROWD GATE:
IT SHOULD NEVER PUSH A COW FORWARD!!!
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- Dr. Pedro Melendez
- Dr. Pam Adkins
- Dr. Patrick Pithua
- Dr. Dusty Nagy
- Dr. Brian Vander Ley
- Dr. Scott Poock

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- Individual cow and quarter milk samples and body site samples for studying subclinical and clinical mastitis
- Transition cow research including monitoring metabolism and peripartum disease
- Records analysis – prospective or retrospective
- Calf health including FPT
- Clinical trials
- Antimicrobial use
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