Leave No Dairy Calf Behind
Educational Series

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Why calves?

• Having healthy dairy replacements is critical to a farm’s overall profitability and sustainability

• 2012 Iowa Dairy Survey indicated that 40% of Iowa dairy farms will be making changes to calf facilities in the next 5 years
RME Grant Goals

– Assist producers in evaluating their current practices and potentially new calf housing and feeding systems
– Enhance management skills to operate these systems successfully
• Questions? Type into chat box

• Type Name/Email address into chat box

• Webinar/Resource Materials:
  – [http://www.extension.iastate.edu/dairyteam/calves-heifers](http://www.extension.iastate.edu/dairyteam/calves-heifers)
Calf Raising Facilities

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Key Components of Calf Housing

- Adequate space
- Good air quality
- Dry and clean bedding area
- Easy access to feed and water
- Caretaker convenience and comfort
The Gold Standard
The Gold Standard’s Drawbacks
The Gold Standard’s Drawbacks
Calf hutch Costs

Commercial Calf Hutches: $269 and up
Home Built Hutches: $100 and up
Indoor Alternative

Advantages:
- Protection from adverse weather
- Feed and supplies close
- More efficient use of space

Disadvantages:
- Harder to correctly ventilate
- Harder to idle facilities
The Ideal Calf Buildings

- **Individual Pens**
  - Solid panels between calves with open fronts and mesh 2 feet and above in back
  - 34 Square feet or more bedded area per calf
  - Deeply bedded pen in cooler temperatures
  - Drainage below the bedding
  - Natural ventilation with positive pressure tube
  - Sized to handle 25% more calves than calving rate
Indoor Housing

- Group Housing
  - 34 Square feet or more bedded area per calf
  - Deeply bedded pen in cooler temperatures
  - Drainage below the bedding
  - Positive pressure tube for minimum ventilation
  - Good Drainage around water tanks and calf feeders
Automatic Calf Feeder Barns

- Group pens
- Feeder room
  - Water
  - Drain
  - Electricity
  - Heat
  - Easy access
Ventilation

- Fresh air is needed to remove gases, moisture, heat, and reduce airborne bacteria counts

- Three ways
  - Mechanically
  - Naturally
  - Combination of natural and mechanical
Figure 3. Mechanically ventilated drive through calf barn with four rows of individual pens.
Other Considerations

- Utility/Mixing/Washing Room
- Drains for washing down
- Cleaning access
- Feed/Supply Storage
- Location
Repurposing Buildings
Many Considerations

- Why is it available?
- Condition and needed repairs
- Degree of concrete removal and replacement
- Time to remove unneeded equipment
- Electrical Service
- Water
- Structural compromises
Structural Considerations
Ventilation Considerations

- Mechanical versus Natural
  - Is natural ventilation possible?
- Ease of “making it work”
- Poor ventilation can do irreparable damage to calves
Commonly Repurposed in Iowa
Ventilation Considerations
Many Convenience Considerations

- Convenience
  - Feeding
  - Cleaning
  - Bedding
  - Loading/unloading cattle

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Hoop Buildings $8-9.00 /ft$^2$
Curtain Sided Building: $10-12.00 /ft²
Mechanically Ventilated Facility with ceiling $12-14.00 /ft^2
Other Useful Costs

- Labor to build: $2-4.00 /ft^2
- Concrete: $200.00 labor and materials
- Cost per calf space: $1200-1500 is common
Summary

- Many different types of calf facilities.
  - Two most important factors
    - Dry bedding area
    - Proper ventilation where the calf is, not the human!
  - When repurposing buildings, make sure calf conditions aren’t compromised
For Calf Facility Information

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The End! Questions?