



# Dairy cow housing – animal welfare and handling options for high performance.

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Driven to Discover<sup>SM</sup>

# Not your Grandpa's Cow!

- Average Milk Production in 1955
  - 6,410 pounds per cow
    - 754 gallons of milk
    - 641 pounds of Cheese
    - 534 gallons of Ice Cream
- Average Milk Production in 2016
  - 22,000 pounds
    - 2,558 Gallons of Milk
    - 2200 Pounds of Cheese
    - 1833 Gallons of Ice Cream
- Several herds average over 30,000 lbs



Record cow "My Gold"  
77,480 lbs of milk in a year  
(212 lbs or 24.7 gallons/d)

# Cow Comfort

## “The Ancient Cow Contract”

“Dairy farming includes a contract with the cattle – a barter of housing, feeding, safety and comfort in exchange for milk and meat.”

Neil Anderson, DVM, MSc

Ontario Ministry of Agriculture, Food and Rural Affairs  
Fergus, Ontario, Canada



# Calf hutches are the most common form of individual housing





# Automatic Calf Feeder with group housing are growing in popularity





# Automatic Calf Feeder



# Tie-Stall Barn





Bedded Pack or Compost barn are very comfortable and often used for calving or special needs (lame, sick or just calved cows)





Rubber filled, memory foam or waterbeds mattresses are popular lying surfaces



Deep bedded sand or solids  
are very comfortable





# Types of Ventilation

- Natural ventilation
- Tunnel ventilation
- Cross-ventilation



Natural Ventilated barns have an open peak and curtains that are open up in the summer and closed in the winter



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# Naturally ventilated barns have fans over the feed bunk and stalls and sprinklers over the feed bunk



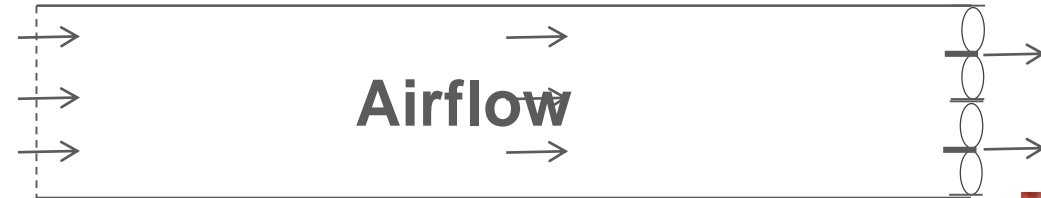
Cow are fed  
a total  
mixed ration  
along a  
bunkline



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# Tunnel ventilation pulls air the length of the barn

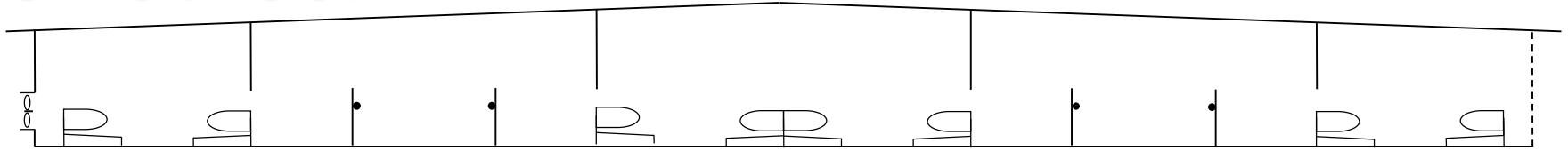


Cross-ventilated barns contain baffles to keep air down at cow level





Low-profile Cross-ventilated are the newest style of barn. They are wide with a flat roof.



# Milking robots are growing in popularity





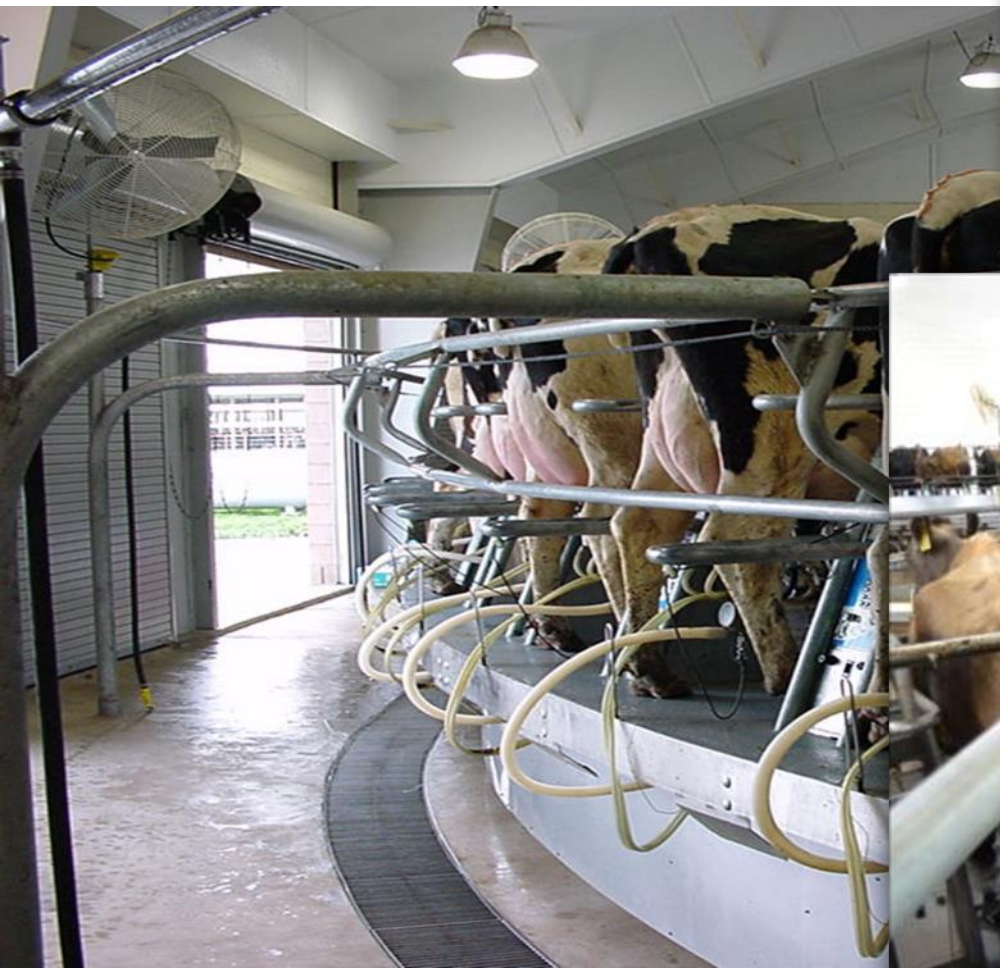
There are also large rotary robots being considered by producers



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Rotary parlors are often used by very large farms





Most cows are still milked in herringbone or parallel parlors





# Sand lanes allow farms to reuse the sand





# Conclusion

- Cow comfort has become a priority on farms.
  - Soft stall surfaces
  - Well ventilated barns
  - Additional cooling for summer



Excuse me,  
I have a question.

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