Efficiency by Design – Layout, Facilities & Labor

Charles Fletcher Purdy, Missouri July 8, 2009



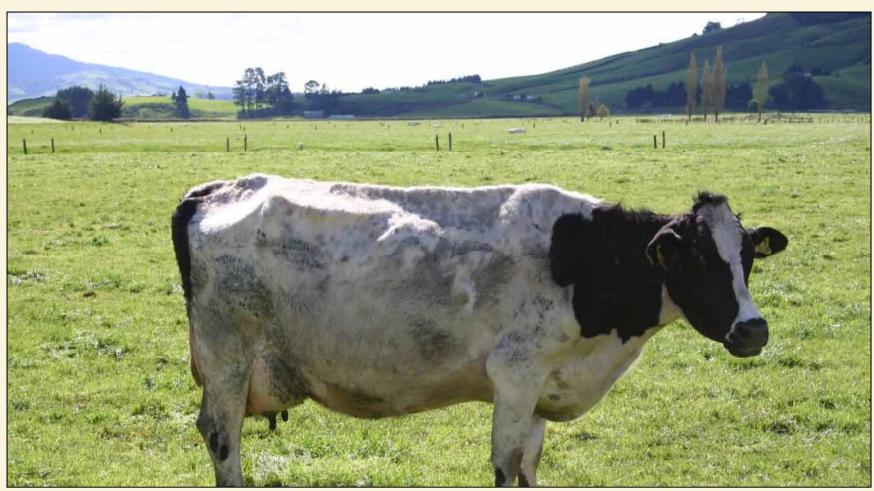
I have a farm, now what?

How many cows can I milk?





One cow?





A few cows?





Lot's of cows?





How many cows can I milk?

- Effective acres x stocking rate (1.25-1.50)
 determines potential cow numbers
- Stocking rate (1.25-1.50) depends upon type and size of cow
 - Large cow lower stocking rate
 - Smaller cow higher stocking rate
- Supplemental feeding rate
- Soil type and fertility
- Climate or region









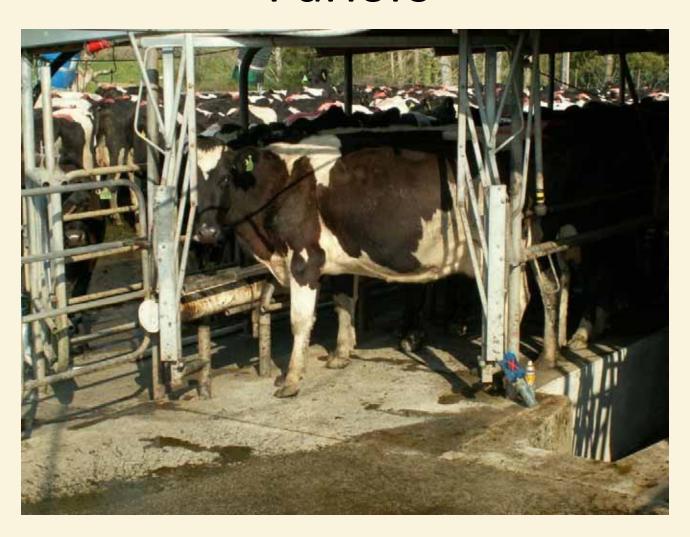
How many cows?

How much grass can the farm grow? How many cows are needed to consume it?





Parlors





Milk barn





Milk shed



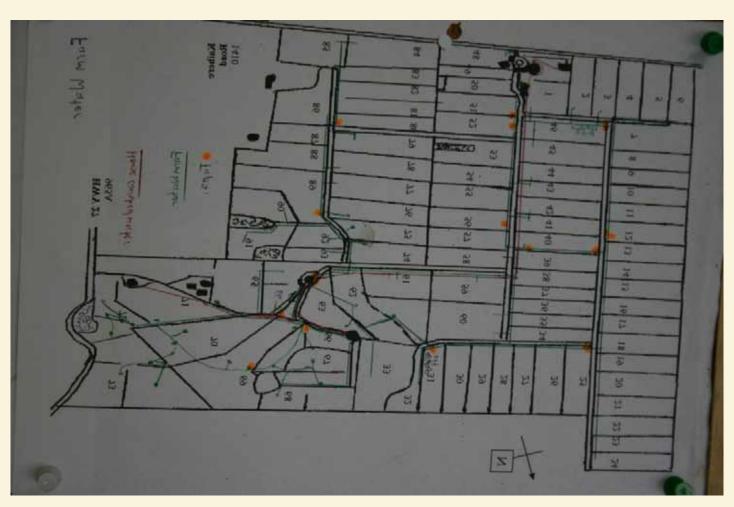


What size parlor do I build?

- Milk harvest in 1.5-2.0 hours
- Determining size of parlor
 - 10 sides/milking
 - Number milking cows \div 10 = total units
 - 150 cows ÷ 10 = 15 swing
 - Multiple herds
 - If milking time exceeds 2 hour limit group



Layout

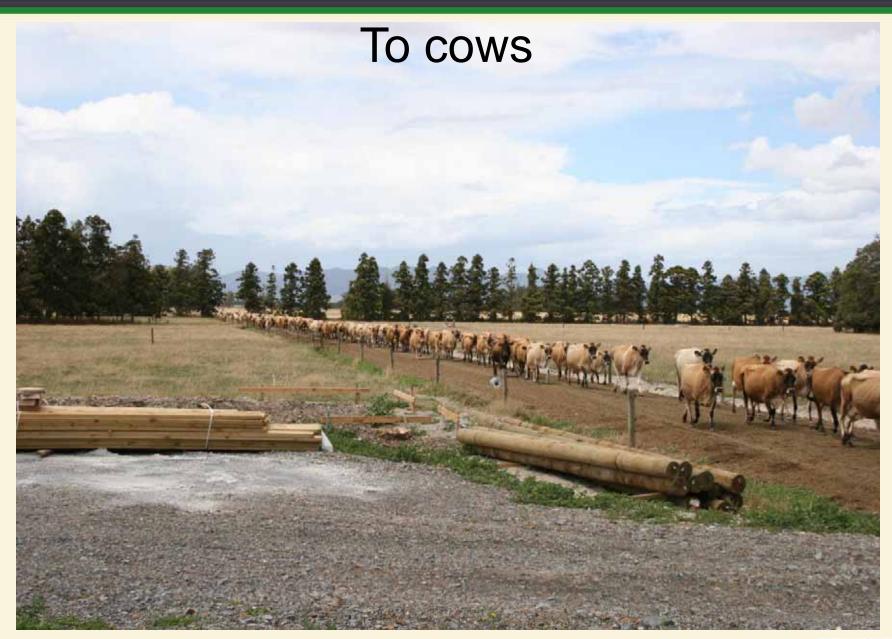




Parlor should be easily accessible

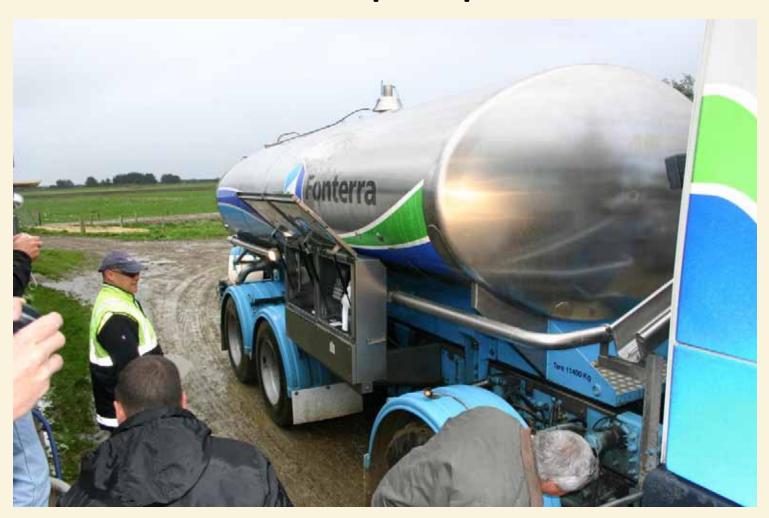








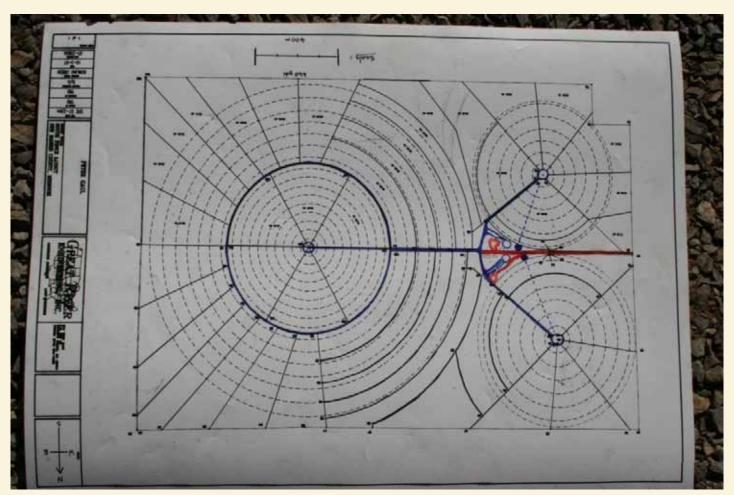
And people



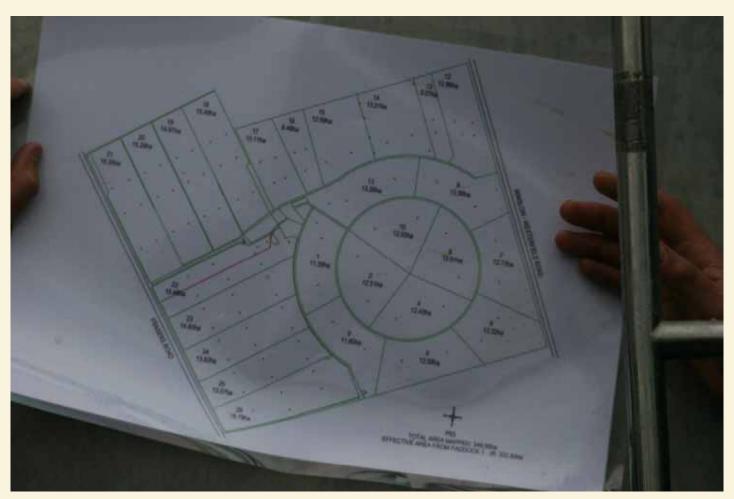














Paddocks

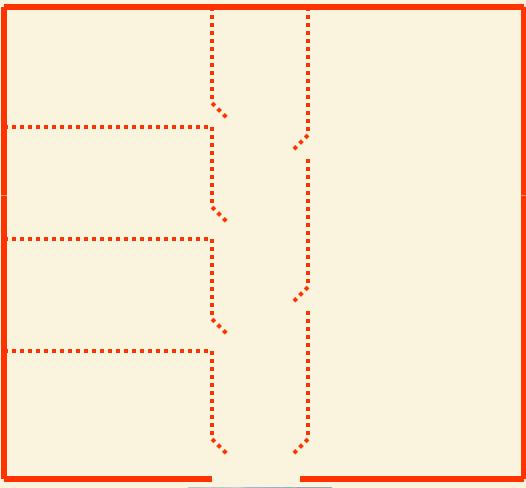
- Similar grazing capacity
 - Forage type
 - Topography
 - Soil type
- Shape
 - As square as possible
 - More uniform grazing
 - Rectangular no more than 4 times as long as wide







FLEXIBLE – High tensile perimeter, polywire subdivision







Gates

NO Yes

Lanes

- Width
 - Animals Only
 - 10-14 feet (varies with herd size)
 - Equipment
 - 14-24 feet
- Materials
 - Dirty base, clay
 - Top with sand mix, sand chat or limestone
- Crown
 - Slope 3%







Water

- Maximum 800 feet from cattle
 - 17% increase in pasture utilization compared to 1400 feet (University of Illinois)
- Not at gate
- Elevate??







Calf raising





Or calf rearing





Labor





Can I run it by myself?













Thanks

