# Dairy Management Systems

The dairy herd is split into ‘High Stocking Rate/ High Input’ and ‘Low Stocking Rate/ Low input’ management systems. Researchers study the effects of these contrasting systems on cow performance and health, the environment, and the overall productivity of the systems.

## High Stocking Rate / High Supplemental Feed Input
- 65 lactating cows
- 100% North American Holstein

## Low Stocking Rate / Low Supplemental Feed Input
- 85 lactating cows
- 30% New Zealand Friesian
- 70% North American Holstein

### Animals – Grazing Season
- 60 lactating cows
- 100% North American Holstein

### Animals - Winter
- 60 lactating cows
- 100% North American Holstein

### Calving Season
- Split spring and fall calving

### Pasture area
- 40 acres
- 20 acres ryegrass and white clover
- 20 acres orchardgrass, fescue, alfalfa, white and red clover

### Pasture Management
- Strategic irrigation
- 2 grazing breaks per day
- Pre-grazing forage mass 2,200 pounds per acre
- Post-grazing forage mass 1,500 pounds per acre

### Feed System – Grazing Season
- 60% Pasture
- 15% pTMR
- 25% Concentrate

### Feed System – Winter
- 80% TMR
- 20% Concentrate

### Expected Daily Milk Output – Grazing Season
- 2.5 milkings per cow
- 65 pounds of milk per cow
- 4,050 lb of milk per AMS
- 170 milkings/day per AMS

### Expected Daily Milk Output – Winter
- 3.1 milkings per cow
- 75 pounds of milk per cow
- 4,400 lbs per AMS
- 185 milkings/day per AMS

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TMR= Total mixed ration, a mixed feed including grain and forage typically fed to dairy cattle in confinement systems.  
pTMR= Partial total mixed ration, a mixed feed including grain and forage typically fed to dairy cattle to provide supplemental feed to cattle on pasture.

Note: These systems are strategically designed and managed to achieve a same level of forage utilization per acre and milk production per AMS, but a different milk production per cow.