



Dairy Farm Management Course: Herd Nutrition, Fertility, Milk Quality and Economics



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Introduction:

Dairy farm management, covering herd nutrition, fertility, milk quality and economics, is a 5-day course for dairy farm managers, herd supervisors and dairy agribusiness staff, ending with a Dairy Herd Performance Review and Improvement Plan for a case farm. Dairy enterprises lose margin when rations drift from what lactating cows need, calving intervals lengthen, somatic cell counts climb and summer heat cuts yield and conception. Nominees already supervise milking cows, feeding or herd records, and work through case studies built on herd recording data, bulk tank results and cost sheets. CoreConcept Training Center delivers this dairy farm management course.

Course Objectives:

- Assess a dairy production system, barn layout and herd structure against lactation curve and yield benchmarks
- Formulate and monitor total mixed rations by lactation group using forage analysis, dry matter intake and income over feed cost
- Calculate and act on reproduction indices such as conception rate, days open, calving interval and pregnancy rate
- Organise colostrum, calf feeding, replacement heifer growth and milking parlour routines that protect udder health and herd continuity
- Interpret somatic cell count and bacterial count results and set mastitis control, heat stress cooling, cow comfort and manure routines
- Model cost per litre and margin over feed and build a Dairy Herd Performance Review and Improvement Plan

Target Audience:

- Managers responsible for the output, costs and staff of dairy cattle farms
 - Supervisors responsible for feeding, milking and daily routines of lactating and dry cow groups
 - Veterinary staff in management roles responsible for herd health planning and udder health targets
 - Nutrition and technical advisory staff responsible for rations and performance advice to dairy farms
 - Agribusiness staff responsible for budgets, milk supply planning and performance reporting in dairy enterprises
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Course Outline:

Day 1: Dairy Production Systems, Farm Layout and Herd Baseline

- Housed, Semi-Intensive and Pasture-Based Dairy Systems Compared by Cost
- Freestall Barn, Feed Lane and Cow Flow Layout Review
- Herd Structure Inventory of Lactating, Dry, Heifer and Calf Groups
- Lactation Curve Reading and Peak Yield Benchmarks
- Dairy Herd Baseline Assessment Using Herd Recording Data

Day 2: Dairy Cattle Nutrition, Total Mixed Rations and Forage Planning

- Dry Matter Intake and Energy Requirements by Lactation Stage
- Total Mixed Ration Formulation for High, Mid and Late Groups
- Forage Analysis of Dry Matter, Crude Protein and Fibre
- TMR Mixing Consistency, Sorting Checks and Feed Bunk Management
- Forage Inventory Budget and Income Over Feed Cost

Day 3: Reproduction, Calf and Heifer Rearing and Milking Parlour Routine

- Heat Detection, Artificial Insemination Timing and Conception Rate
- Calving Interval, Days Open and Pregnancy Rate Calculation
- Colostrum Management and Calf Feeding From Birth to Weaning
- Replacement Heifer Growth Targets and Age at First Calving
- Herringbone, Parallel and Rotary Parlour Milking Routine Standards

Day 4: Milk Quality, Udder Health, Heat Stress and Cow Welfare

- Somatic Cell Count and Bacterial Count Interpretation for Milk Quality
- Mastitis Control Plan With Dry Cow Management and Culling Rules
- Heat Stress Cooling With Shade, Fans and Sprinkler Soaking
- Cow Comfort Indicators Including Lying Time, Lameness and Body Condition
- Manure Handling, Nutrient Management Plan and Barn Hygiene

Day 5: Case Study: Dairy Herd Performance Review and Improvement Plan

- Case Dairy Farm Records Pack and Herd KPI Dashboard
 - Case Analysis of Ration Cost Against Milk Yield Response
 - Case Review of Fertility, Udder Health and Cooling Gaps
 - Cost per Litre and Margin Over Feed Model
 - Dairy Herd Performance Review and Improvement Plan Completion
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Skills You Will Gain:

- Lactation Curve Analysis
- Total Mixed Ration Monitoring
- Forage Budgeting
- Reproduction Index Analysis
- Calf and Heifer Rearing Planning
- Udder Health Management
- Heat Stress Abatement
- Dairy Cost per Litre Modelling

Why Attend This Course:

- Deliver a Dairy Herd Performance Review and Improvement Plan to the farm owner or dairy operations manager for approval and follow-up
- Decide which ration, breeding, milking or cooling change to make first using herd records rather than impressions
- Avoid lost milk, extended calving intervals and penalties for high somatic cell counts that raise the cost per litre
- Share ration check sheets, fertility calculation templates and milking routine standards with herd supervisors and farm staff

Conclusion:

Back at work, the participant gives the farm owner or dairy operations manager a Dairy Herd Performance Review and Improvement Plan that sets ration, fertility, udder health, cooling and cost per litre targets for each cow group. Management uses it to decide where to spend on forage, cooling equipment, breeding support and parlour upgrades, and which advisers to involve. After the first full summer and breeding season, the team should review yield per cow, calving interval, bulk tank somatic cell count and margin over feed against the plan.

Frequently Asked Questions FAQ:

What should participants know before a dairy farm management course?

Participants should already supervise milking cows, feeding, breeding or herd records and know how their farm records yield, inseminations and feed use. Bringing recent herd recording data, bulk tank results or a cost sheet helps them apply the case work to their own herd.

How does dairy farm management differ from a general livestock or agribusiness course?

It concentrates on lactating cow herds: rations by lactation group, reproduction indices, calf and heifer rearing, milking routine, milk quality, heat stress and cost per litre. General livestock and agribusiness courses cover other species or investment and value chains, and milk processing is touched only lightly.

Why does somatic cell count matter in dairy farm management?

Somatic cell count shows how many white blood cells are in milk, so a rising count signals udder infection. It affects milk quality and payment, and individual cow counts reveal infected cows that a bulk tank result can hide, guiding mastitis control and culling decisions.

What do participants take back from the dairy farm management course?

Participants take back a Dairy Herd Performance Review and Improvement Plan for a case farm, with a herd KPI dashboard, ration and forage budget sheets, fertility index calculations, a milking routine standard and a cost per litre model they can adapt to their own herd.