What is InCalf?

InCalf is a learning package developed in Australia and is revised for New Zealand conditions, and made available thanks to an agreement between DairyNZ and Dairy Australia.

In 2008 the InCalf programme was launched by DairyNZ, including The InCalf Book for New Zealand Dairy Farmers, Fertility Focus Report and other Herd Assessment tools, plus the Adviser Training Course.

InCalf in Australia also developed a farmer training programme called the InCalf Farmer Action Group. InCalf intends to establish a similar programme for New Zealand dairy farmers.

The InCalf Farmer Action Group

InCalf’s Farmer Action Group is unlike any group farmers might be used to. The Farmer Action Group takes you on a year’s journey through reproductive management on your farm. Farmers enrol in a twelve month programme of learning following the four seasons of Calving, Mating, Mid-late lactation, and the Dry period.

This group-based programme is designed around an “action learning cycle” of “Prepare - Do - Review” (Fig. 1) and seeks to consolidate participants learning experiences into plans and actions towards improved herd reproductive performance into the future.

The InCalf NZ team were keen to evaluate the Farmer Action Group format in New Zealand and initiated three pilot groups in 2008, two in Waikato and one in Canterbury.

We were also keen to explore this training programme with herd managers in typical South Island herd situations, where their plans need to be actioned within a corporate management environment.

This Farmer Action Group started in the Dunsandel area with a My Herds Fertility discussion session in late June 2008, followed by the Calving Prepare session in early July. This programme pitched at herd managers concludes in early June 2009 with the Dry-period Review session.
Each Prepare session is followed by an “on-farm Action phase” and a Review session. In the Prepare session, plans and actions are developed within small farmer buddy groups using a Farmer Action Group workbook.

![Diagram](image)

**Figure 1.** The InCalf Farmer Action Group programme incorporating the “Prepare-Do-Review” action learning cycle into the annual Fertility Management Cycle

In the Review sessions farmers reflect on the on-farm Action phase, and the results they see happening both good and bad, in relation to planned actions. They share their experiences within the group and capture their learning’s, recording what they would differently next time.

More importantly, they record into a twelve month calendar what they will do next year and every year, which leads into development of on-farm policies that further consolidate their learnings into future plans and actions.

**Progress to date**

The full twelve month cycle of this Farmer Action Group has not concluded yet, although we can report on outcomes at several levels from the programme so far:

- **Participant reaction.** The herd managers have responded positively to the Farmer Action Group training format and process. Ratings for the both the Prepare and Review sessions are very encouraging.
- **Documented learning.** The herd managers have documented their learnings from the “Prepare – Do – Review” action learning cycle (Fig. 1), and have been able to consolidate what they have learnt into a calendar for the future. Some of these actions have been further
developed with the InCalf adviser using *InCalf Herd Assessment tools* into farm policies; for example, a Bull Management policy for sourcing, managing bulls and having enough bull power for the herd.

- **Skill development.** Training activities such as Heat Detection and Body Condition Scoring have occurred for farm managers and staff.

- **Communication and decision making.** Action plans developed within the group involve other people at various levels in the farm organisation. Implementation depends on communicating these intentions effectively to others in the farm business with decision making authority, and with those whose job it is to implement agreed plans.

- **Herd Records.** The quality of herd records has improved dramatically as evidenced by more herds with fully aged pregnancy test records, and detailed Fertility Focus Reports for 2008. Consequently, expected calving dates for the herd are more reliable to use for planning calving and feeding through the dry period. Some herds were previously unable to produce an *InCalf Fertility Focus Report* due to “too many funny calvings”, meaning the individual cow calving date records were inaccurately recorded.

- **Reproductive Performance.** It would be nice to report large rapid gains already in herd reproductive performance from this Farmer Action Group starting in July 2008. The reality is if we start a group just prior to calving, many of the factors likely to affect reproductive performance at next mating are already locked in. Calving pattern, heifer liveweights at first calving, body condition score at calving. Add to this low quality herd records, changing and expanding herds, and moving herd managers.

- **Appreciation of the opportunities ahead.** It takes time to shift the 6-week in-calf rate and empty rate for typical large herds like those participating in this Canterbury group, which all have significant gaps to close in herd reproductive performance. The potential value of closing existing gaps in future is estimated conservatively to be worth over $100 per cow or $1 million dollars in operating profit for the 10,000 cows represented in the group herds.

Within the group there is the full range of performance from top quartile to bottom quartile, demonstrating that achieving the industry targets for reproductive performance is just as possible in the new large dairy herds in the South Island as anywhere else.

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**Notes:**
InCalf underlying themes

Underlying InCalf is a solid basis of research from Australia and New Zealand, and practical experience in the management of herd level reproduction. The themes that come through InCalf are:

- That herd reproduction management is multi-factorial – it is affected by management actions throughout the year, not just at the actual time of mating.
- Performance improvement is generally only achieved through step by step gains over several seasons and years.
- InCalf is providing a standard, industry-wide method of describing and assessing herd reproductive performance. You can only be sure if you actually measure it.
- Strategic and targeted advisory input is likely to enhance farmers’ chances of successful outcomes.

The implications are that herd managers can hardly transform overnight the herd situation they inherit. But within a year they can with InCalf support, build a foundation for step-by-step improvement over time.

InCalf emphasises that Goals and Actions should be constructed in a SMART format, meaning they need to be Specific, Measurable, Achievable, Realistic and Time-bound.

If the plans are not SMART you cannot conduct an effective Review phase. All you have is good intentions without any accountability.

The InCalf 'continuous improvement' process

InCalf takes an integrated approach to herd reproductive management based on setting one’s own targets and striving for incremental gains in performance, year by year, through a 4-step ‘continuous improvement’ process. (Fig. 2)

The Farmer Action Group format incorporates this process into its design.

The Fertility Focus Report is the InCalf tool used to complete Step 1 for the whole herd. At an introductory My Herd’s Fertility event, the current herd reproductive performance is assessed based on previous performance.

In the Calving Prepare session the same process is applied to relevant management areas, at this time Calving Pattern, Cow Health, and Nutrition in early lactation.

In the Mating Prepare session the same process is applied to achieving Submission Rate and Conception Rate targets through efficient Heat Detection, dealing proactively with Non-cyclers, good AB practices and Bull Management.

Gaps in performance and opportunities to improve are identified for each management area. Priority is given to selected best options and strategies relevant to each herd’s circumstances. Even herds achieving “5 star” performance overall find areas they can improve, or risks to manage better.
Figure 2. The InCalf Continuous Improvement Cycle for improving herd reproductive performance

Summary

Progress is encouraging although the InCalf Farmer Action Group is still in an early stage of roll-out with limited numbers of InCalf Trainers yet available to run Farmer Action Groups. In the meantime farmers can still take advantage of the InCalf tools and resources and the services of over 50 trained InCalf Advisers in the South Island listed on www.dairynz.co.nz/incalf.

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