

PRO
Agria

CowCompass Profit Prognosis - better use of milk recording data

Sanna Nokka

Association of ProAgria Centers , Finland

ICAR 2012, Cork, Ireland

sanna.nokka@proagria.fi

CowCompass for milk production

- One day calculation: evaluation of feed consumption, economy and nutrition
- Feeding optimization: Milk yield minus feed cost
- Profit prognosis: prediction for milk yield, percentage of protein and fat, somatic cell account and monthly milk revenue

KarjaKompassi



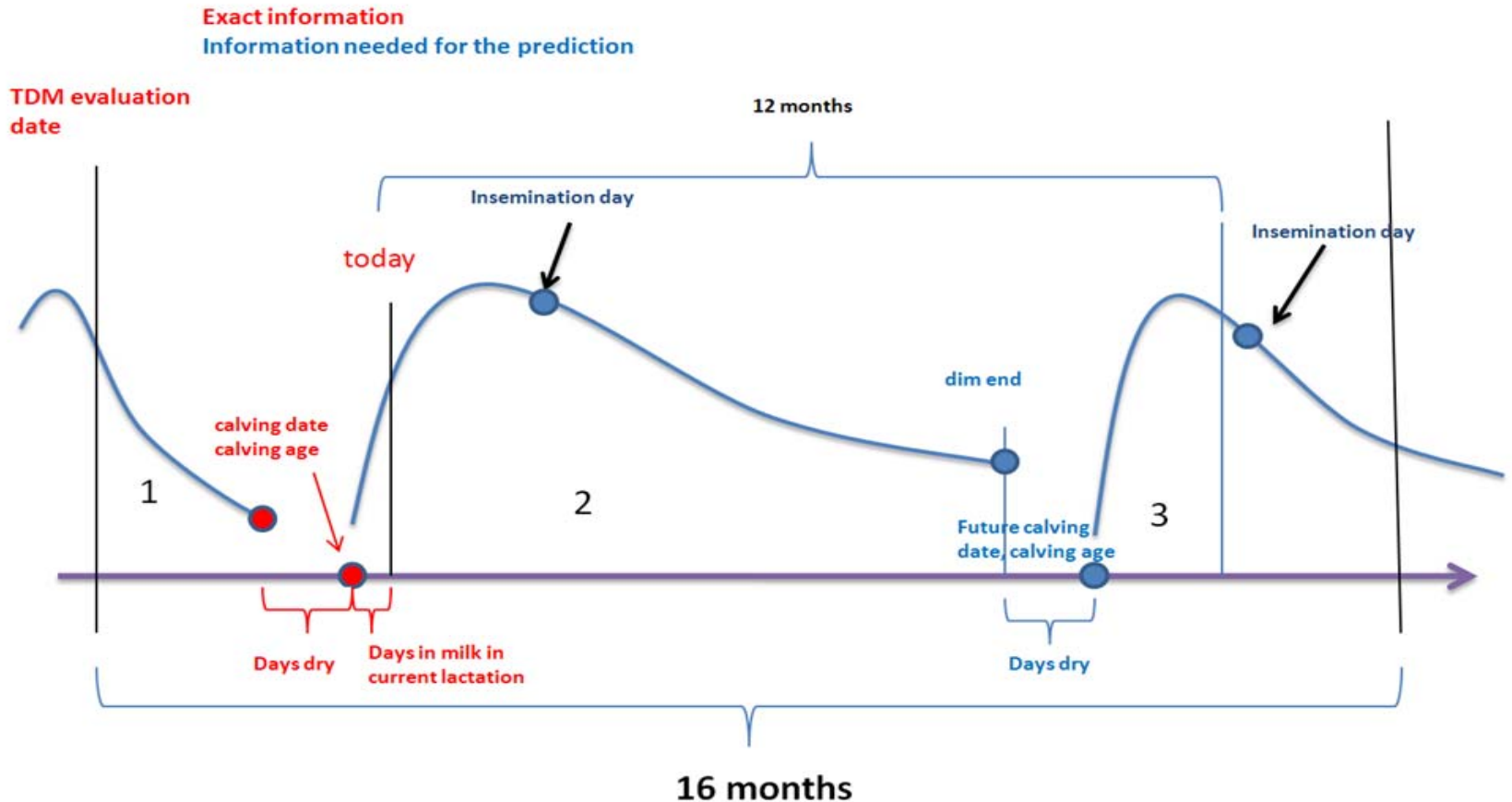


Profit Prognosis

- gives prognosis for every cow in milk recording
- Prognosis calculated for next 12 months
- Based on nordic test day model data

Predicting yields

Source: Timo Pitkänen, Agricultural Research Center, Finland



PRO Agria CowCompass Profit Prognosis



- Netsolution that can be used by advicers and farmers
- Easy to use because almost all initial data is automatically collected from milk recording database
- User have to input planned cullings and planned purchases of animals

Initial data for prognosis



Home | Milk | Plant | Meat | CowCompass | Log Off

Profit prognosis

Herd Id **Owner**
Plan name **Calc.period** 17.04.2012 - 31.12.2012
Chosen animal groups Cows Heifers Bulls

[Start page](#) [Save](#) [Calculate prognosis](#) [Undo](#) [Set default values](#) [Result data](#) [Printing](#) [Notes](#)
[Planned purchases](#) [Planned cullings](#) [Milk price data](#) [Intermediate target periods](#) [Update animal status](#)

Show animal groups Cows Heifers

Cows		Heifers	
Prev. 12 m	17.04.2012 31.12.2012	Prev. 12 m	17.04.2012 31.12.2012

- Animal places >
- Purchases and cullings >
- Youngstock rearing >
- Milk data >
- Fertility data >

	Cows		Heifers	
	Prev. 12 m	17.04.2012 31.12.2012	Prev. 12 m	17.04.2012 31.12.2012
Animal places <input type="button" value="v"/>				
Dairy cows, head	0	120		
- in milk, head	0	100		
Heifers, head			0	103
Bulls, head				
Purchases and cullings <input type="button" value="v"/>				
Planned purchases, head	0	0	2	0
Planned cullings, head	16	0	2	0
Culling rate	30,01	28,67		
Mortality over 3 m	9,1	8,2	0	0
Calf mortality < 3 m	6,2	7,3		
Youngstock rearing <input type="button" value="v"/>				
Outsourced, % of heifers			0	0
if outsourced, departure age m			0	0
if outsourced, return days-to-calving			0	0
Calves sold				
Sales age, d				
Slaughter age, m				7
Liveweight at slaughter, kg				



Youngstock rearing



Milk data



Milk quota, l	1114847	1114847
Dairy delivery rate	86	95
Dairy fat content	4,03	
Dairy protein content	3,36	
Recorded fat content	4,11	4,09
Recorded protein content	3,42	3,41
Protein price, c/decimal	0	0,65
Fat price, c/decimal	0	0,24
Seasonal price, c/l	0	9,75
Quality bonus (E), c/l	0	0
Quality bonus (I), c/l	0	-2,5
Quality bonus (II), c/l	0	-32,5
Contract bonus (E), c/l	0	0
Contract bonus (I/II), c/l	0	0
Organic bonus, c/l	0	0
Subsidy, c/l	0	8,3
Dairy milk, c/l	0	
Other milk, c/l	0	0

Fertility data



Chosen animal groups

Cows Heifers Bulls

Show animal groups

Cows Heifers

	Cows		Heifers	
	Prev. 12 m	17.04.2012 31.12.2012	Prev. 12 m	17.04.2012 31.12.2012
Animal places	>			
Purchases and cullings	>			
Youngstock rearing	>			
Milk data	>			
Fertility data	v			
Services begun, d from calving	87	84		
Services begun, m from birth			16	16
Service period, d	143	125	22	33
Pregnancy probability %	35,8	38,3	41,1	39,6
Dry period, d	78	76		

Profit prognosis, printouts

Printing period: since - until

Print data:

Animal groups & subperiods to print

Prognosis for cows

- Production curve
- Milk production, m
- Animal figures, m
- Milk production, period
- Animal figures, period

Individual prognosis for cows

Prognosis for heifers

Notes



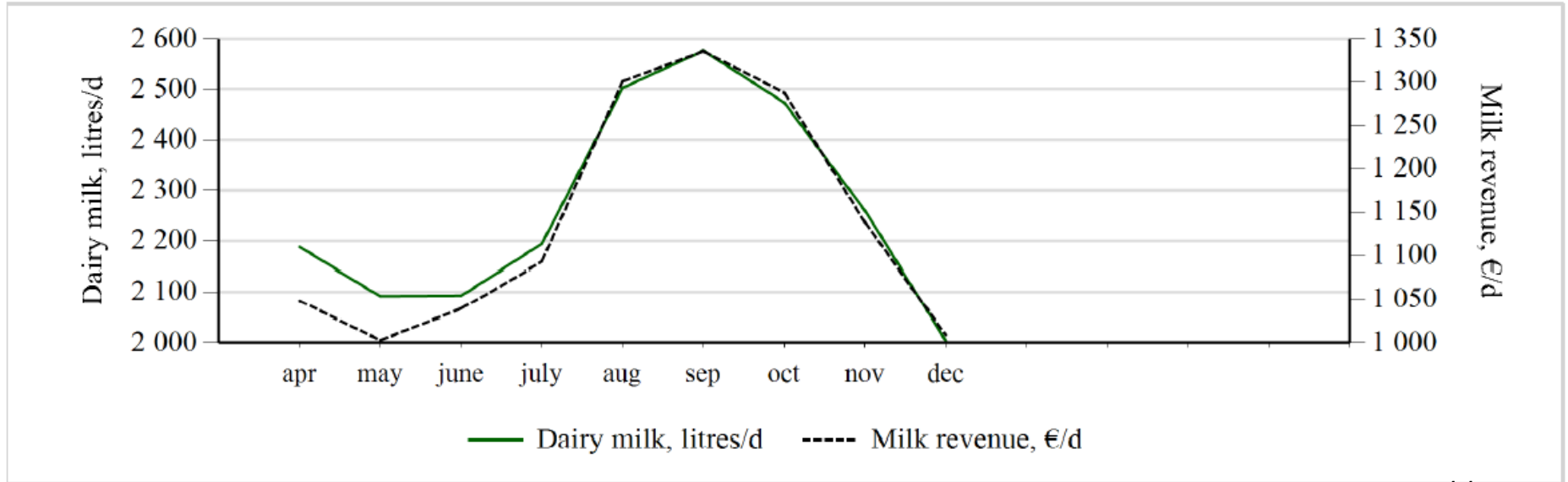
Production curve

Prognosis

Chosen animal groups Cows

Prognosis for cows 04/2012 - 12/2012

Production curve 04/2012 - 12/2012



Milk production and animal figures

Milk production, m 04/2012 - 12/2012

	apr	may	june	july	aug	sep	oct	nov	dec
kg/cow-in-milk/d	28,6	27,4	28,4	26,5	27,2	28,0	28,0	28,9	29,8
Dairy milk l/d	2 188	2 092	2 093	2 194	2 503	2 577	2 474	2 260	2 004
Fat %	4,21	4,19	4,15	4,15	4,16	4,10	4,13	4,20	4,21
Protein %	3,38	3,39	3,36	3,39	3,41	3,41	3,43	3,45	3,45
Dairy milk, l/m	30 632	64 854	62 802	68 012	77 588	77 315	76 697	67 802	62 112
Milk price, c/l	47,90	47,92	49,63	49,83	51,98	51,84	52,04	50,34	50,36
Milk revenues, €/m	14 673	31 078	31 169	33 890	40 330	40 080	39 913	34 132	31 280

Animal figures, m 04/2012 - 12/2012

	apr	may	june	july	aug	sep	oct	nov	dec
Cows at the end of month	101	110	113	119	113	107	99	97	96
- in milk, head	83	83	80	90	100	100	96	85	73
Calvings	1	16	7	19	25	6	6	3	
- 1st lactation	1	9	3	9	6	3	2		
Purchases									
Cullings	3			1	14	7	7	1	1
Dead				2			4		

Milk production and animal figures/period

Chosen animal groups Cows

Milk production, period	04/2012 - 12/2012	
	Act. 12 m	Progn. 9 m
Avg yield kg	8 628	6 065
Fat %	4,11	4,16
Fat yield, kg	355	253
Protein %	3,42	3,41
Protein yield, kg	295	207
ECM yield, kg	8 751	6 188
Dairy milk, l	694 904	587 814
Dairy delivery rate	86	95
Milk price, c/l		50,45
Milk revenue, €		296 545

Animal figures, period	04/2012 - 12/2012	
	Act. 12 m	Progn. 9 m
Avg cow number	96	105
Calvings	110	83
- 1st lactation	43	33
Purchases		
Cullings	16	34
Dead	1	6
Renewal rate	45	31

PRO Agria Better use of milk recording data



- For budgeting
- For investment planning
- For culling decisions
- For animal selling and purchase
- Effective use of milking robot

Thank you very much!

