

Стойността на Израз на Репродуктивните Програми

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Бременност изразена в пари

ТРУД

семенен
материал

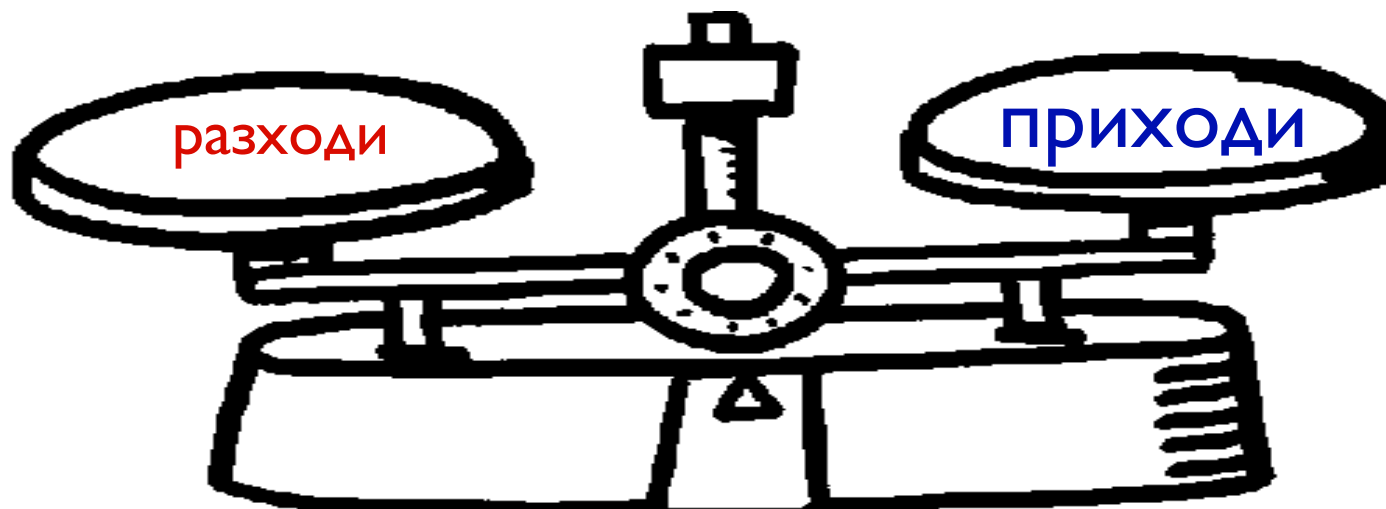
Хормони

МЛЯКО

телета

разходи

приходи



Цел



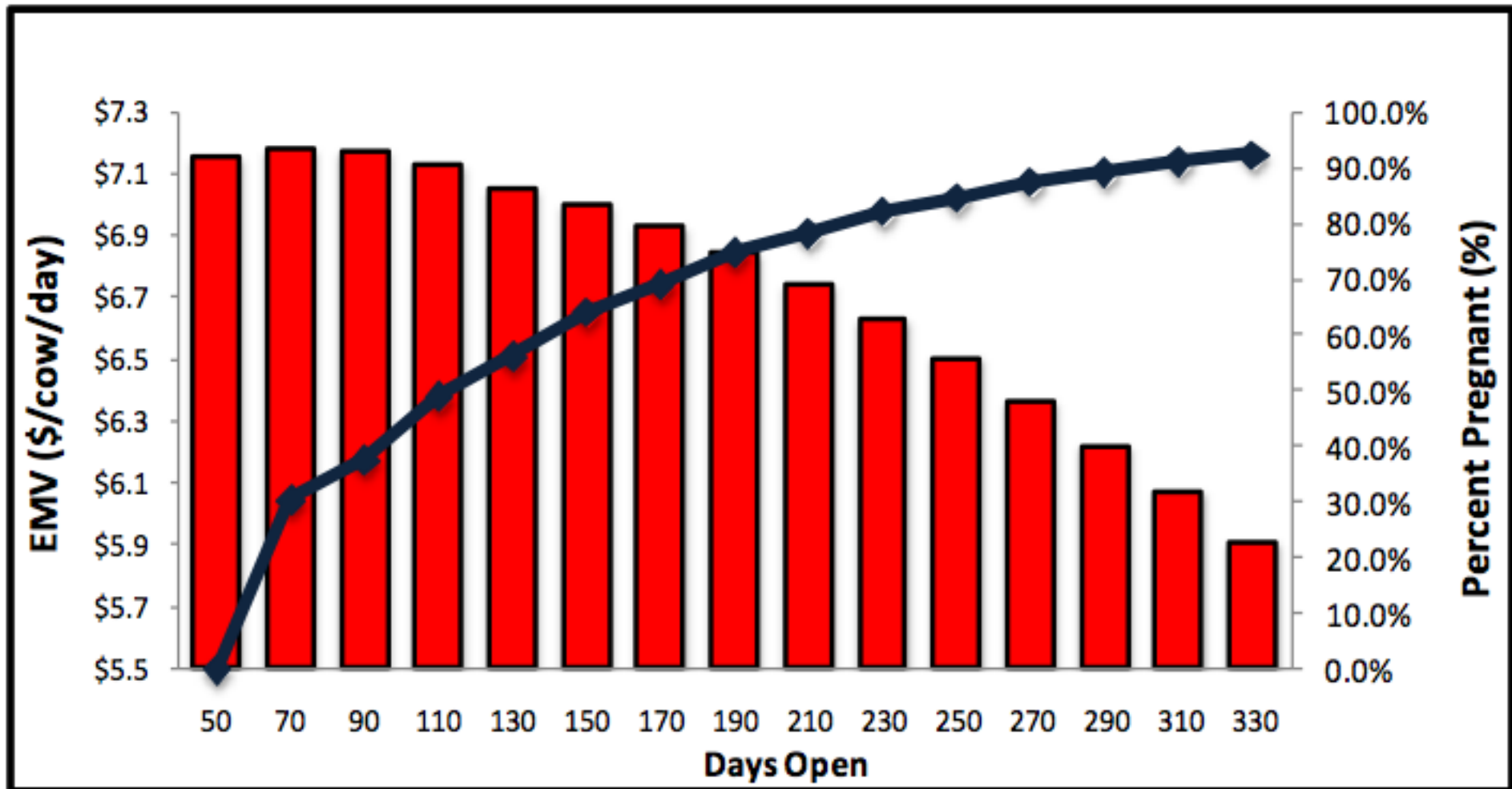
- Да създаде **Средство за насърчаване правилните решения** за оценка на **Икономическата стойност** на **Програмите за управление на репродукцията** в млечната ферма

Очаквана Парична Стойност (ОПС)

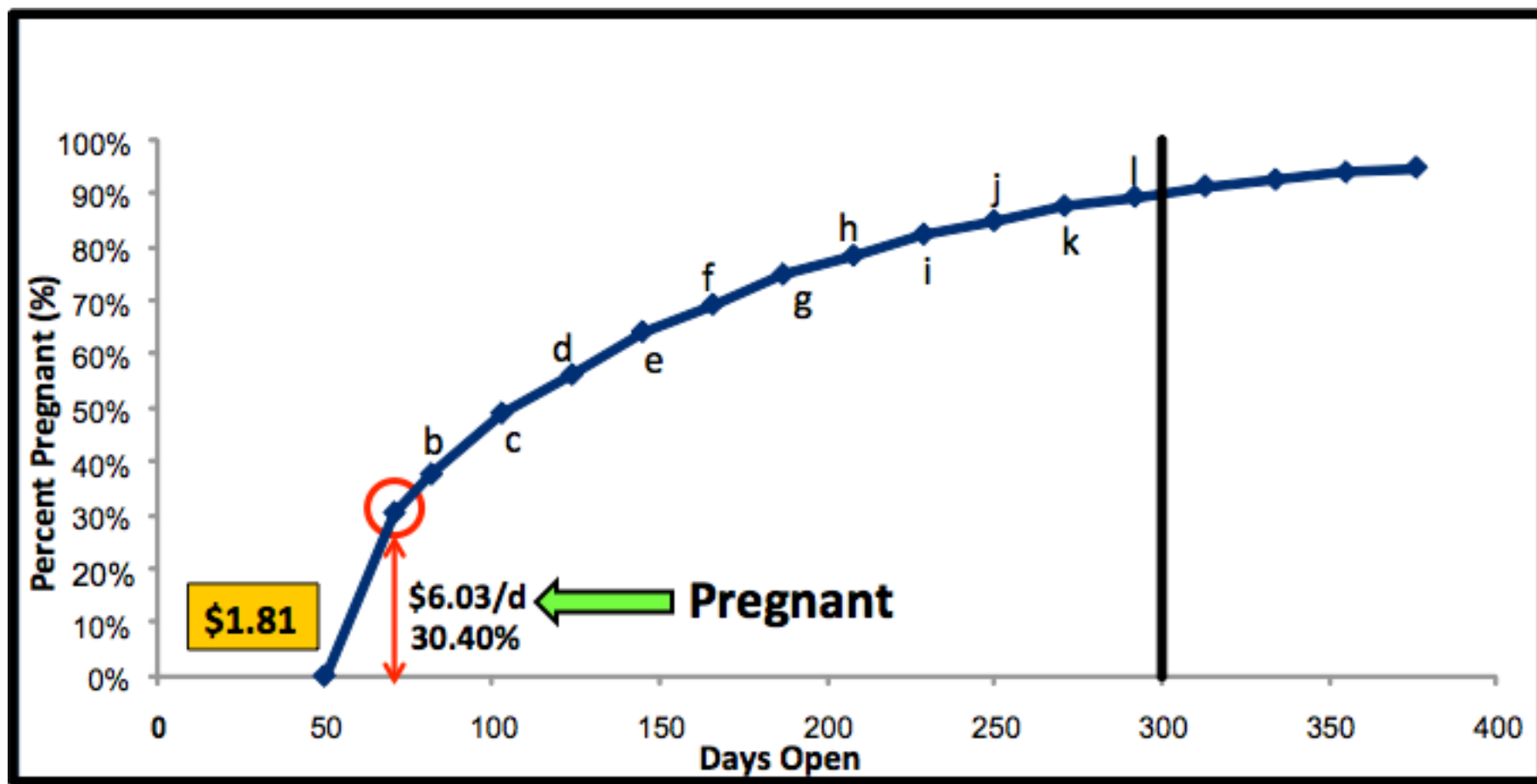
- Разлика в стойността на **притока на пари** и на **изтичането на пари** при различните **стратегии на управление на репродукцията**



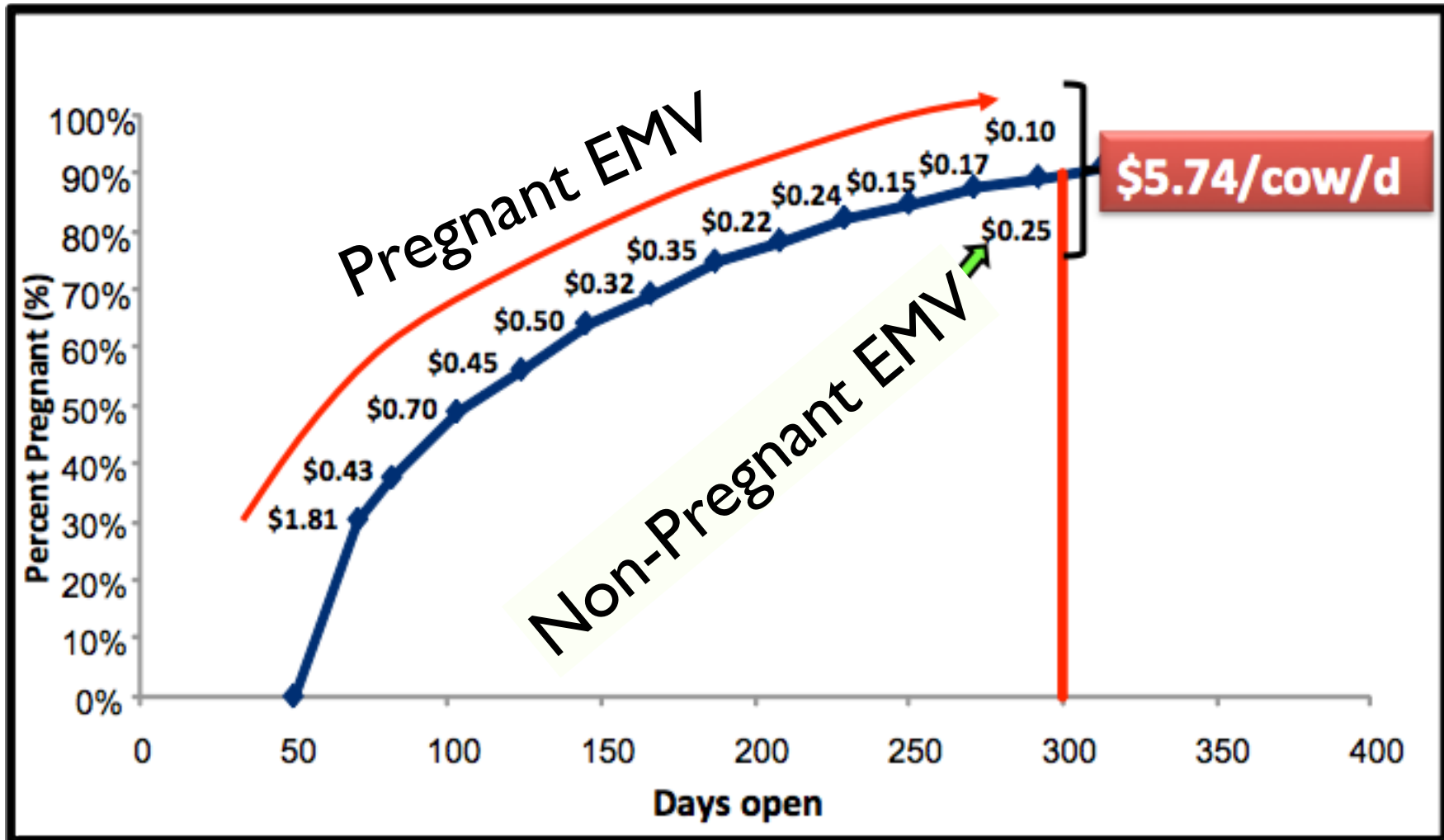
ОПС & Репродуктивни результати



Колко ни струва репродукцията



Колко ни струва репродукцията



Университета в Уисконсин- Репродукцията в млечното стадо в \$Плюс

UW-Dairy Repro\$ Plus
Victor E. Cabrera & Julio O. Giordano
Department of Dairy Science

UW Extension
University of Wisconsin-Extension

Farm Name: _____ Location: _____

1. Herd Parameters

Lactating Cows, #	500
Parity 1	175
Parity 2	125
Parity ≥ 3	200
Body Weight, lb/cow	
Parity 1	1,350
Parity 2	1,400
Parity ≥ 3	1,450
Involuntary Culling, %/yr	20.0%
Mortality, %/yr	6.0%
Stillbirth, %/yr	6.0%

2. Economic Parameters

Milk Price, \$/cwt	15.00
Cost Feed Lactating, \$/b DM	0.10
Dry Period Fixed Cost, \$/d	2.20
Female Calf Value, \$	125
Male Calf Value, \$	50
Heifer Replacement Value, \$	1,250
Cow Salvage Value, \$	650
Labor Cost for Injection, \$/hr	15.00
Heat Detection Cost, \$/hr	15.00
AI Cost, \$/cow	15.00
Interest Rate, %/yr	5.0%

3. Lactation Curves (lb/cow/yr)

Test	Parity 1	Parity 2	Parity ≥ 3
1	77	105	107
2	91	123	128
3	94	120	128
4	94	118	125
5	93	112	120
6	91	107	112
7	89	98	104
8	87	91	94
9	83	82	86
10	79	75	81
11	76	68	71
12	72	61	61
13	70	57	60
14	60	53	55

4. Reproductive Program

	Current	Start day	Alternative	Start day
1 st Service postpartum	Ovsynch	2	Presynch-Ovsynch-12	2
2 nd and subsequent services	Ovsynch	2	Ovsynch	2
Resynch before preg check	NO		YES	

5. Do you know total breeding costs (semen, hormones, and pregnancy diagnosis)?
"Yes" check box:

6. Reproductive Program Parameters

	Current	Alternative
Voluntary Waiting Period, d	60	72
Estrus Cycle Duration, d	22	
Maximum DIM for Breeding, d	330	
DIM to 1 st TAI, d	60	72
Interbreeding Interval, d	49	35
Heat Bred Before 1 st TAI, %	0%	0%
CR Heat Bred Before 1 st TAI, %	0%	0%
Heat Bred After 1 st TAI, %	0%	0%
CR Heat Bred After 1 st TAI, %	0%	0%
CR 1 st Service TAI, %	33%	42%
CR 2 nd + Services TAI, %	30%	30%
Cost of 1 st Service TAI, \$		
Cost of 2 nd + Services TAI, \$		
Cost of Heat Breeding, \$		
Cost resynch before preg check, \$		
Calving Interval, d	13.7	
Dry Period, d	60	

7. Heat Detection Labor Cost

	Current	Alternative
Laborers /hr/d	1	1
	2.5	2.5

8. Activity Monitors for Heat Detection

	Current	Alternative
System Cost, \$	7,000	0
Number of monitors	250	0
Cost per monitor, \$	100	0
Maintenance, \$/yr	250	0
Life expectancy, yr	10	0
Salvage value, %	25%	0%

9. Pregnancy Diagnosis Cost

	Current	Alternative
Palpation, \$/hr	105	
Ultrasound, \$/hr		135
Blood Test, \$/cow		

10. Labor Required for Injections and Labor Required for Pregnancy Diagnosis

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Current	Injections	2	1				
	# Cows	50	30				
	Pregnancy Diagnosis	1					
Alternative	Injections	2	1				
	# Cows	75	60				
	Pregnancy Diagnosis	1					

11. Hormones Cost

	Vial #	# Doses
GnRH	1	10
Factrel	20	10
PGF	25	10
P4 Insert		
CIDR		
Chorulon		

Parity Group to ANALYZE:

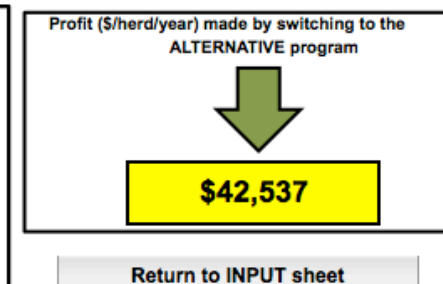
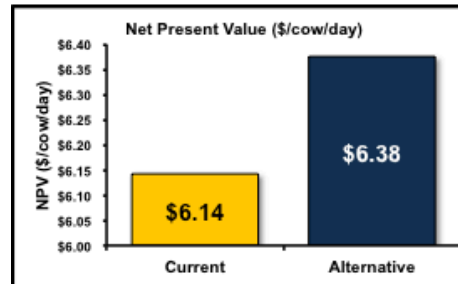
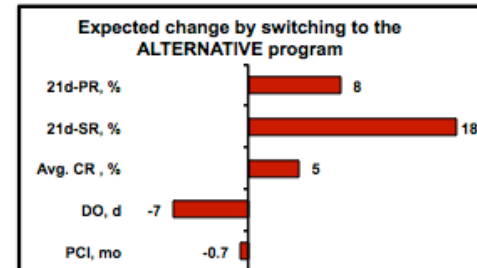
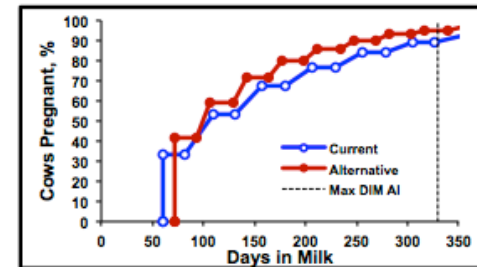
Run ANALYSIS

UW-Dairy Repro\$ Plus
Victor E. Cabrera & Julio O. Giordano
Department of Dairy Science

UW Extension
University of Wisconsin-Extension

Reproductive Programs Summary

	Current	Alternative
1 st Service Postpartum	Ovsynch	Presynch-Ovsynch-12
2 nd and Following Services	Ovsynch	Ovsynch
Voluntary Waiting Period, d	60	72
Maximum DIM for Breeding, d	330	
DIM 1 st TAI, d	60	72
Interbreeding Interval, d	49	35
Heat Bred Before 1 st TAI, %	0%	0%
CR Heat Bred Before 1 st TAI, %	0%	0%
Heat Bred After 1 st TAI, %	0%	0%
CR Heat Bred After 1 st TAI, %	0%	0%
CR 1 st Service TAI, %	33%	42%
CR 2 nd + Services TAI, %	30%	30%
Cost 1 st Service Breeding, \$	26.7	34.5
Cost Resynch Breedings, \$	26.7	28.5
Cost Heat Breedings, \$	18.5	19.5
Pregnancy Diagnosis Method	Palpation	Ultrasound
Pregnancy Diagnosis Cost, \$	3.5	4.5
Activity Monitors for Heat Detection		
System + monitors cost, \$	32000	0
Salvage value, \$	8000	0
Value after depreciation, \$	24000	0
Total cost per d of period, \$/d	6.58	0.00
Maintenance, \$/d	0.68	0.00
Cost Per Cow/d, \$	0.017	0.000



Изрази Твоята Ферма

ИКОНОМИЧЕСКИ

Стадо

Lactating Cows, #	500
Parity 1	175
Parity 2	125
Parity \geq 3	200
Body Weight, lb/cow	
Parity 1	1,350
Parity 2	1,400
Parity \geq 3	1,450
Involuntary Culling, %/yr	20.0%
Mortality, %/yr	6.0%
Stillbirth, %/yr	6.0%

Икономика

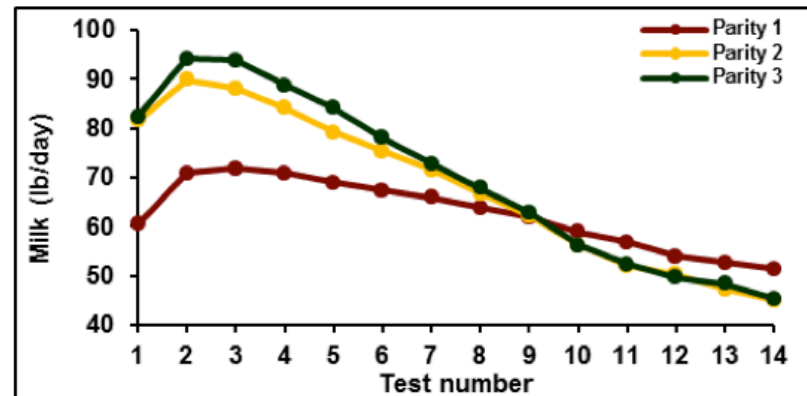
Milk Price, \$/cwt	15.00
Cost Feed Lactating, \$/lb DM	0.10
Dry Period Fixed Cost, \$/d	2.20
Female Calf Value, \$	125
Male Calf value, \$	50
Heifer Replacement Value, \$	1,250
Cow Salvage Value, \$	650
Labor Cost for Injection, \$/hr	15.00
Heat Detection Cost, \$/hr	15.00
AI Cost, \$/cow	15.00
Interest Rate, %/yr	5.0%

Изрази Твоята Ферма ИКОНОМИЧЕСКИ

Лактационни криви

Own Farm Lactations (Enter/Edit NUMBERS Below)

Test	Parity 1	Parity 2	Parity ≥ 3
1	77	105	107
2	91	120	126
3	94	120	128
4	94	116	125
5	93	112	120
6	91	107	112
7	89	98	104
8	87	91	94
9	83	82	86
10	79	75	81
11	76	68	71
12	72	61	61
13	70	57	60
14	60	53	55



Изрази Твоята Ферма ИКОНОМИЧЕСКИ

Репродуктивни програми

	Current	Start day	Alternative	Start day
1 st Service postpartum	Ovsynch	Mon	Presynch-Ovsynch-12	Thu
2 nd and subsequent services	Ovsynch	Mon	Ovsynch	Mon
Resynch before preg check	NO		YES	

Изрази твоята ферма ИКОНОМИЧЕСКИ

Reproductive Programs

	Current	Alternative
Voluntary Waiting Period, d	60	72
Estrus Cycle Duration, d	22	
Maximum DIM for <u>Breeding</u> ,d	330	
DIM to 1 st TAI, d	60	72
Interbreeding Interval, d	49	35
Heat Bred Before 1 st TAI, %	50%	50%
CR Heat Bred Before 1 st TAI, %	35%	35%
Heat Bred After 1 st TAI, %	40%	40%
CR Heat Bred After 1 st TAI, %	35%	35%
CR 1 st Service TAI, %	33%	42%
CR 2 nd + Services TAI, %	30%	30%
Cost of 1 st Service TAI, \$		
Cost of 2 nd + Services TAI, \$		
Cost of Heat Breeding, \$		
Cost resynch before <u>preg</u> check, \$		
Calving Interval, d	13.7	
Dry Period, d	60	

Изрази твоята ферма икономически

Expected TAI Performance for First Service

Synchronization Program	VWP (d)	Conception Rate (%)	
		Mean	Range
Presynch-Ovsynch-14	70-85	37	(32-42)
Presynch-Ovsynch-12	70-85	42	(37-47)
Presynch-Ovsynch-11	70-85	43	(37-47)
Presynch-Ovsynch-10	70-85	44	(37-47)
Double-Ovsynch	70-85	47	(40-50)
G-6-G	70-85	45	(37-47)
Ovsynch	60-75	33	(30-37)
Cosynch-72	60-75	26	(25-33)
Presynch-Ovsynch-12 w/CIDR	70-85	45	(40-50)
Double-Ovsynch w/ CIDR	70-85	50	(43-53)
Ovsynch w/ CIDR	60-75	36	(40-50)
Cosynch-72 w/ CIDR	60-75	32	(33-40)

Изрази твоята ферма ИКОНОМИЧЕСКИ

Expected TAI Performance for Later Services

Synchronization Program	Interbreeding Interval	Conception Rate (%)	
	(d)	Mean	Range
Ovsynch-Day 25	35	27	(24-30)
Ovsynch-Day 32	42	30	(25-35)
Ovsynch-Day 39	49	28	(25-32)
Double-Ovsynch	49	38	(33-42)
Short-Double-Ovsynch	42	34	(30-38)
HGPG (hCG-7d-Ovsynch)	35	37	(33-41)
GGPG (GnRH-7d-Ovsynch)	35	34	(27-37)
G-6-G	49	35	(32-38)
Cosynch-72-Day 25	35	23	(20-25)
Cosynch-72-Day 32	42	28	(24-32)
Cosynch-72-Day 39	49	25	(23-28)
Ovsynch-Day 32 w/ CIDR	42	33	(28-38)
Double-Ovsynch w/ CIDR	49	41	(36-45)
Short-Double-Ovsynch w/CIDR	42	37	(33-41)
HGPG (hCG-7d-Ovsynch) w/CIDR	35	40	(36-41)
GGPG (GnRH-7d-Ovsynch) w/ CIDR	35	35	(30-40)
G-6-G w/CIDR	49	38	(33-41)
Cosynch-72-Day 32 w/CIDR	42	31	(27-35)

Изрази твоята ферма

ИКОНОМИЧЕСКИ

Разход на труд за
откриване на Разгоненост

	Current	Alternative
Laborers	1	1
hr/d	2.5	2.5

Установяване на
бременност

	Current	Alternative
Palpation, \$/hr	105	
Ultrasound, \$/hr		135
Blood Test, \$/cow		

Монитори за откриване на разгненост

	Current	Alternative
System Cost, \$	0	7,000
Number of monitors	0	350
Cost per monitor, \$	0	110
Maintenance, \$/yr	0	350
Life expectancy, yr	0	10
Salvage value, %	0%	25%

Изрази твоята ферма ИКОНОМИЧЕСКИ

Разход на труд за инжектиране и установяване
на бременност

			Mon	Tue	Wed	Thu	Fri	Sat	Sun
Current	Injections	Laborers	1		1				
		hr/d	2		1				
		# Cows	50		30				
	Pregnancy Diagnosis	hr/d	1						
		# Cows	30						

Alternative	Injections	Laborers		2		1			
		hr/d		2.5		2			
		# Cows		75		60			
	Pregnancy Diagnosis	hr/d		1					
		# Cows		30					

Изрази твоята ферма ИКОНОМИЧЕСКИ

Цена на Хормоните


			Vial, \$	# Doses
GnRH	Factrel	▼	20	10
PGF	Estrumate	▼	25	10
P4 Insert	CIDR	▼		
hCG	Chorulon	▼		

Да подложим на анализ

Parity Group to ANALYZE

All

Run ANALYSIS



Анализ на Резултатите

	Current	Alternative
1 st Service Postpartum	Ovsynch	Presynch-Ovsynch-12
2 nd and Following Services	Ovsynch	Ovsynch
Voluntary Waiting Period, d	60	72
Maximum DIM for Breeding, d	330	
DIM 1st TAI, d	60	72
Interbreeding Interval, d	49	35
Heat Bred Before 1 st TAI, %	50%	50%
CR Heat Bred Before 1 st TAI, %	35%	35%
Heat Bred After 1 st TAI, %	40%	40%
CR Heat Bred After 1 st TAI, %	35%	35%
CR 1 st Service TAI, %	33%	42%
CR 2 nd + Services TAI, %	30%	30%
Cost 1st Service Breeding, \$	26.7	34.5
Cost Resynch Breedings, \$	26.7	28.5
Cost Heat Breedings, \$	18.5	19.5
Pregnancy Diagnosis Method	Palpation	Ultrasound
Pregnancy Diagnosis Cost, \$	3.5	4.5

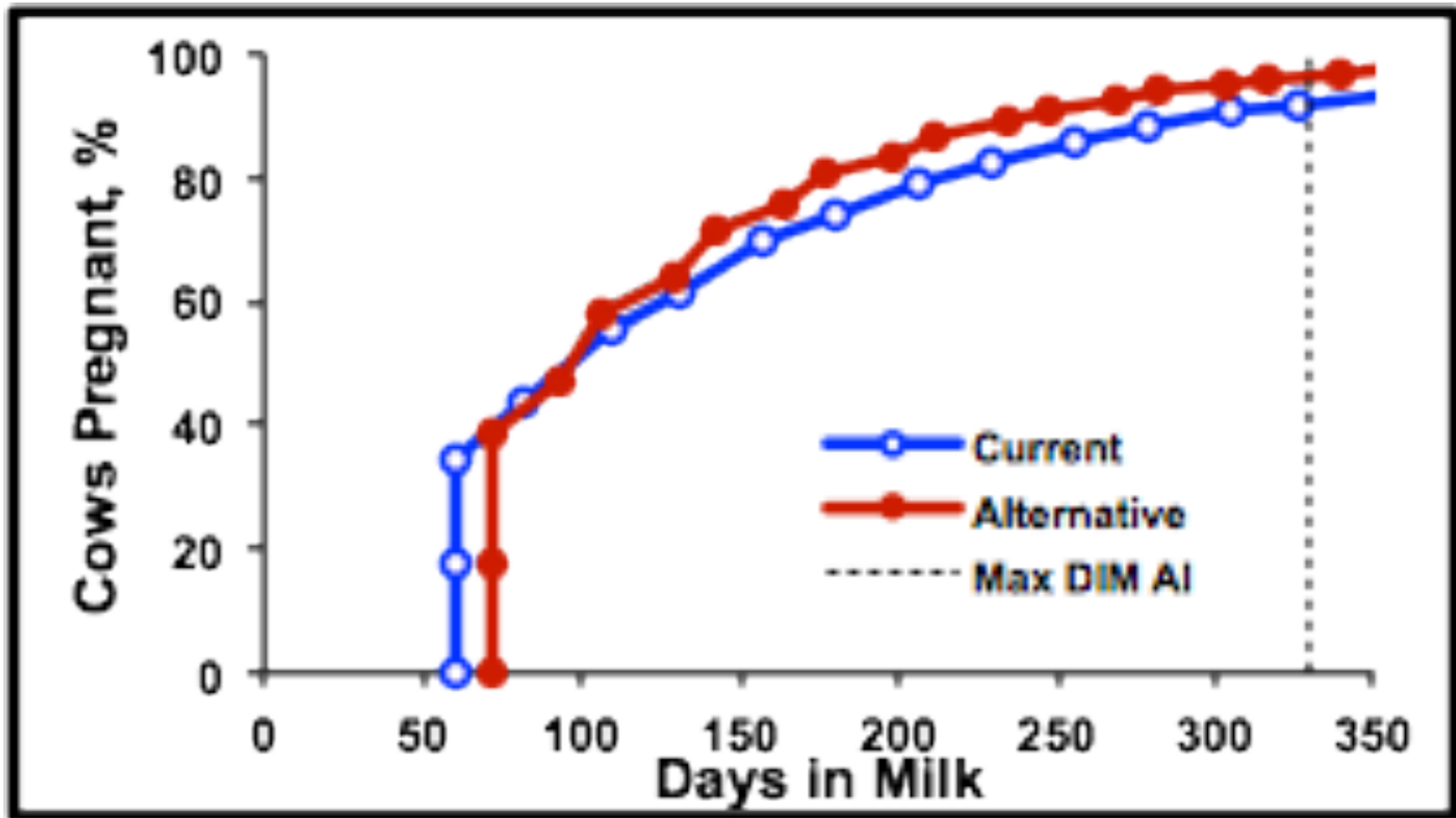
Резюме на проучените
репродуктивни програми

Анализ на Резултатите

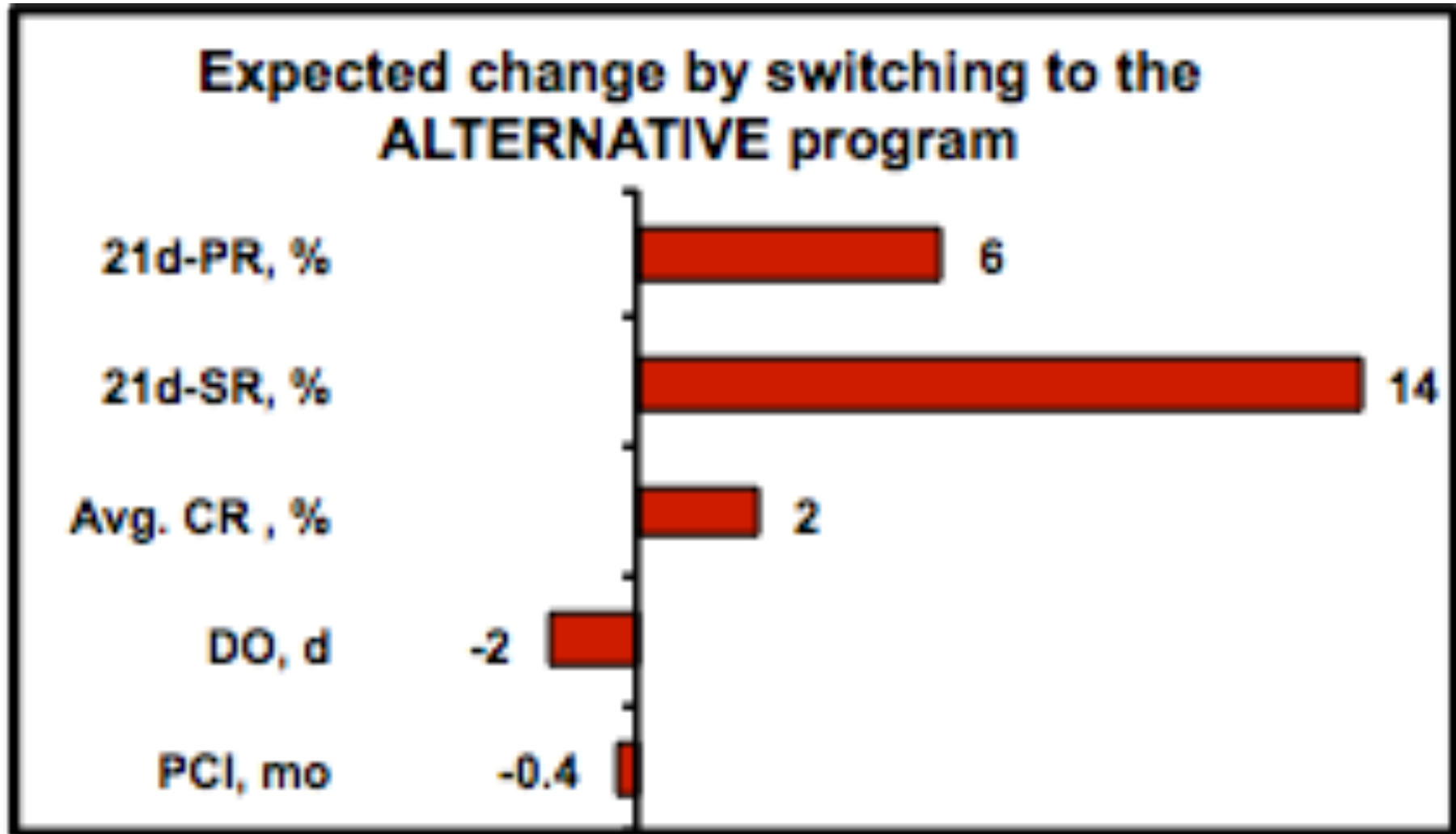
Монитори за откриване на разгненост

	Current	Alternative
System + monitors cost, \$	0	32000
Salvage value, \$	0	8000
Value after depreciation, \$	0	24000
Total cost per d of period, \$/d	0.00	6.58
Maintenance, \$/d	0.00	0.68
Cost Per Cow/d, \$	0.000	0.017

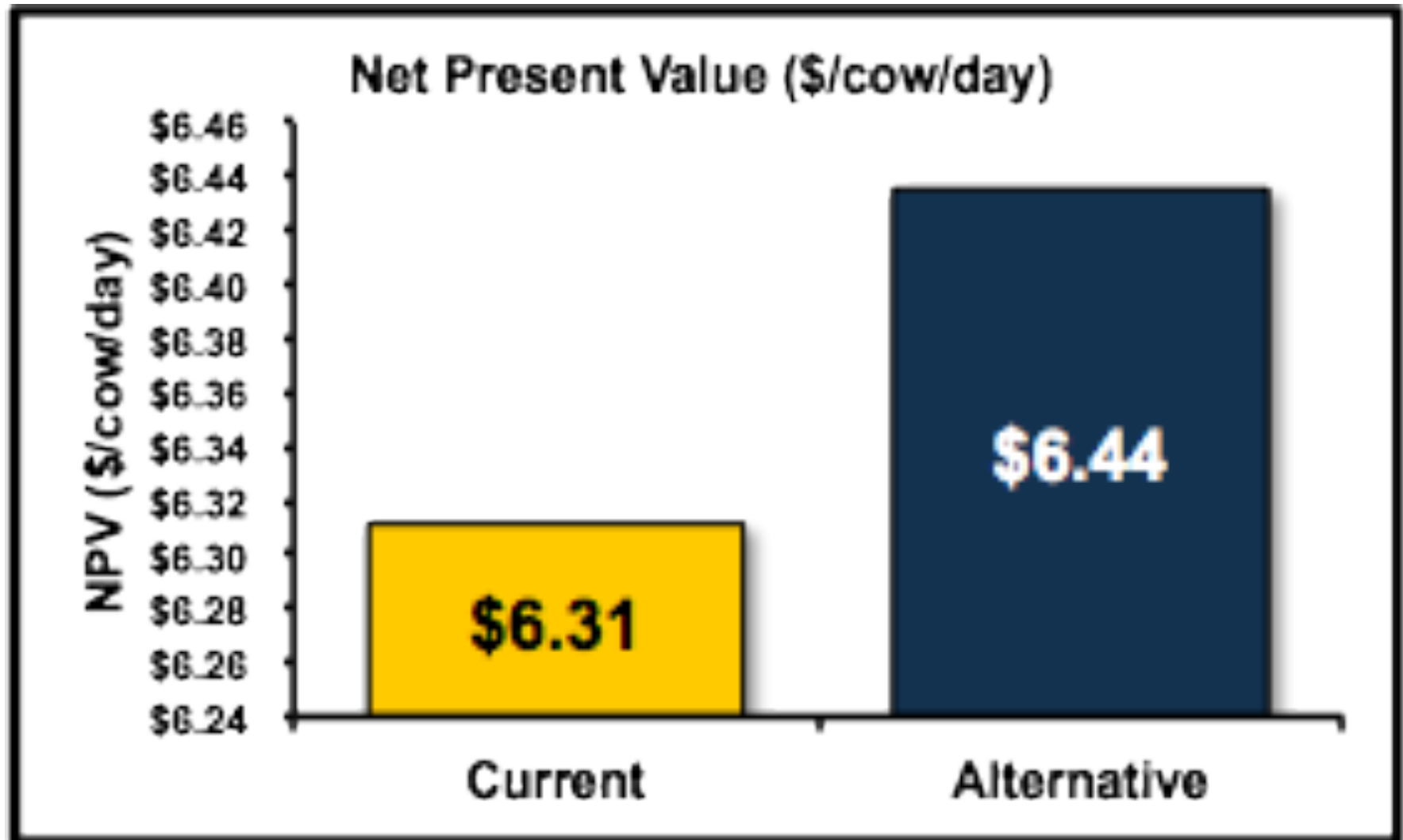
Анализ на Резултатите



Анализ на Резултатите



Анализ на Резултатите



Анализ на Резултатите

**Profit (\$/herd/year) made by switching to the
ALTERNATIVE program**



\$22,616

Университета в Уисконсин- Репродукцията в млечното стадо в \$Плюс

DairyMGT.info

Dairy Management UW-Extension
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Dairy Management

Dairy Management site is designed to support dairy farming decision-making focusing on model-based scientific research. The ultimate goal is to provide user-friendly computerized decision support systems to help dairy farms improve their economic performance. Dr. Victor Cabrera focuses on model-based decision support in dairy cattle and in dairy farm production systems. Dr. Cabrera's primary interest is to improve cost-efficiency and profitability along with environmental stewardship in dairy farms by using simulation techniques, artificial intelligence, and expert systems. Dr. Cabrera's research and Extension programs involve interdisciplinary and participatory approaches towards the creation of user-friendly decision support systems. As an Extension Specialist, Dr. Cabrera works in close relationships with county-based Extension faculty, dairy producers, consultants, and related industry.

Latest Projects

- Genomic Selection and Herd Management
- Dairy Reproduction Decision Support Tools
- Strategies of Pasture Supplementation
- Improving Dairy Cow Fertility
- LGM-Dairy

UW

- University of Wisconsin - Madison
- UW - Cooperative Extension
- UW - Dairy Science
- Understanding Dairy Markets
- UW Dairy Nutrient
- UW Center for Dairy Profitability

Dairy News

- UW-Extension Dairy News

Helpful Link

- Bears Money Program
- Contact

TOOLS

Dairy Management Tools

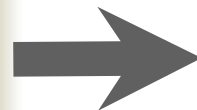
Click to find out more about tools provided by DairyMGT

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Professional Page

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средства

Reproduction

- Economic Value of Sexed Semen Programs for Dairy Heifers
- UW-DairyRepro: A Reproductive Economic Analysis Tool

Calculates and compares the economic value of dairy reproductive programs including timed artificial insemination (TAI), heat detection (HD), and combinations of TAI and HD programs. It applies probabilistic reproduction survival curves with expected monetary values to assess the net present value (NPV) of defined reproductive programs. The overall NPV of a specific reproduction program is the aggregation of the expected monetary values (EMV) of reproductive events according to defined economic parameters.

Excel Spreadsheet ([Download](#))
Instructions and Documentation ([Download](#))
Slides of Power Point Presentation ([Download](#))
Instrument for Data Collection ([Download](#))
Press Release ([Read](#))
Podcast ([Listen](#))
Demo ([Click to View/Hide the Video](#))

Program	Labors	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Inject	Labors	2	1	0	0	0	0	0
h/d	h/d	2	2	2	2	2	2	2
Covers Treated	h/d	55	0	0	0	0	0	0
Preg	# Cows	30	0	0	0	0	0	0
Diag	h/d	1.75	1.75	0	0	0	0	0

5.a. Injections and Pregnancy Diagnosis Labor Cost: Alternative Program

Program	Labors	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Inject	Labors	2	1	0	0	0	0	0
h/d	h/d	2	2	2	2	2	2	2
Covers Treated	h/d	55	0	0	0	0	0	0
Preg	# Cows	30	0	0	0	0	0	0
Diag	h/d	1.75	1.75	0	0	0	0	0

5.b. Heat Detection Labor Cost

Program	Labors	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Heat Detect	Labors	1	1	1	1	1	1	1
h/d	h/d	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Preg	# Cows	30	0	0	0	0	0	0
Diag	h/d	1.75	0	0	0	0	0	0

Show Results for Parity: All Run ANALYSIS

Spanish (Argentinian) version:
Hoja de Cálculo en Excel ([Abrir](#))
Instrucciones en PDF ([Descargar](#))

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Thanks