



SEMEX

5653  
GLOBAL  
HEADQUARTERS

# PRODUCT DEVELOPMENT

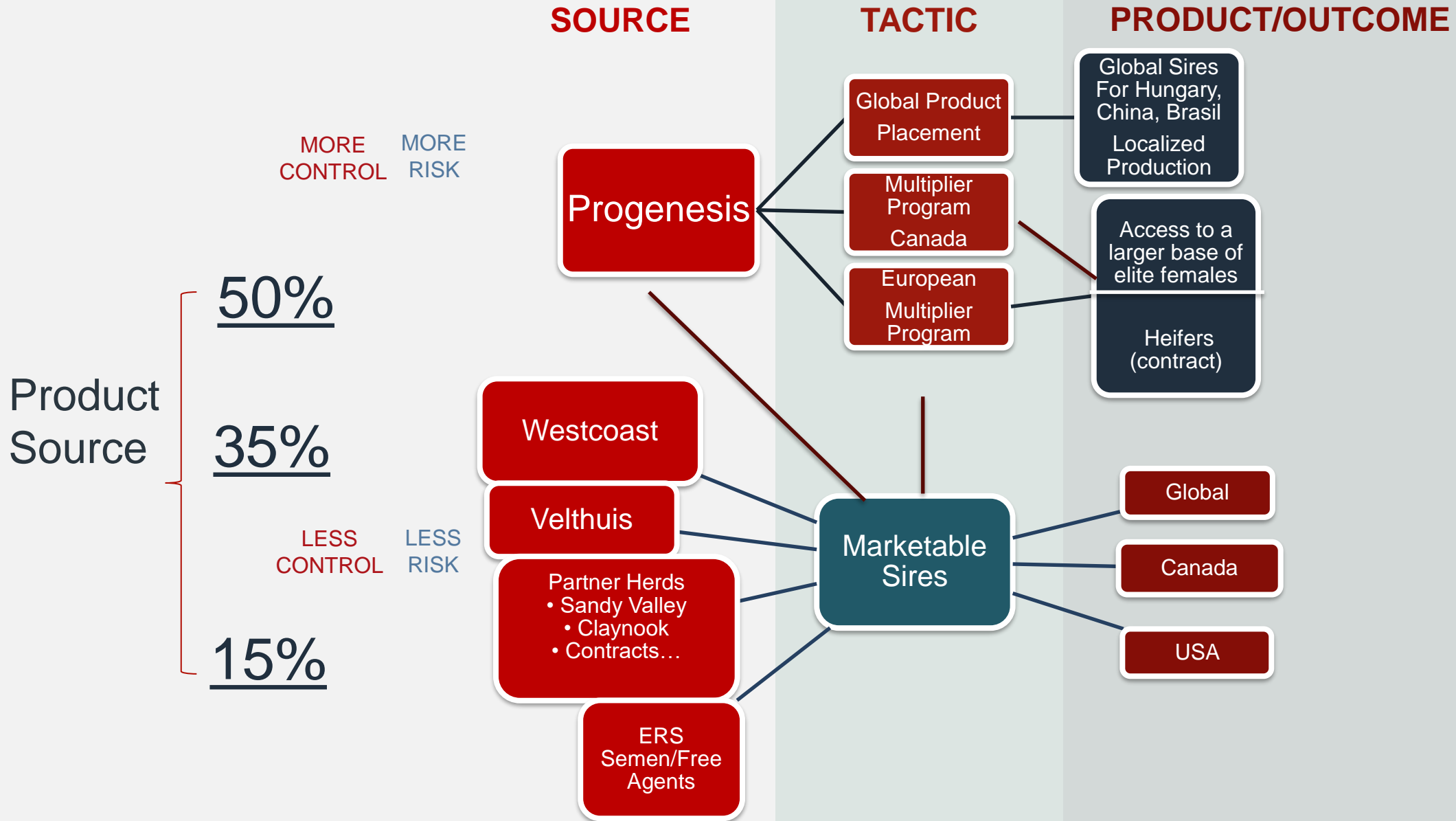
By Brian Carscadden



Euroopa Maaelu Arengu  
Põllumajandusfond:  
Euroopa investeringud  
maapiirkondadesse

# Where do Our Bulls Come From?

- Global Approach
- Progenesis – Semex’s internal program
- Westcoast & Velthuis(Silverridge) Holsteins - long-term exclusive partnerships
- Sandy-Valley, Claynook, OCD, Siemers, AOT, Kings-Ransom, Cookiecutter – leading North American herds partnered with Semex



- With genomics, many A.I. organizations implemented programs to take advantage of this new technology.

- Many large A.I. companies have purchased high genetic merit females to produce bulls to supply part of their own requirement of young sires.

- To remain competitive and offer the best genetics to our customers, Semex implemented **Progenesis** as its internal program.



*Han Hopman*

# IVF at Boviteq

- elite females undergo regular IVF
- recipients carrying elite embryos are moved to a farm where they receive top care until the birth of the calf
- 800-1000 recipients at all times
- Biopsy strategy employed



# Calving Facility

- Character Calving Facility
- 80 - 100 calvings per month





## Progenesis calving facility

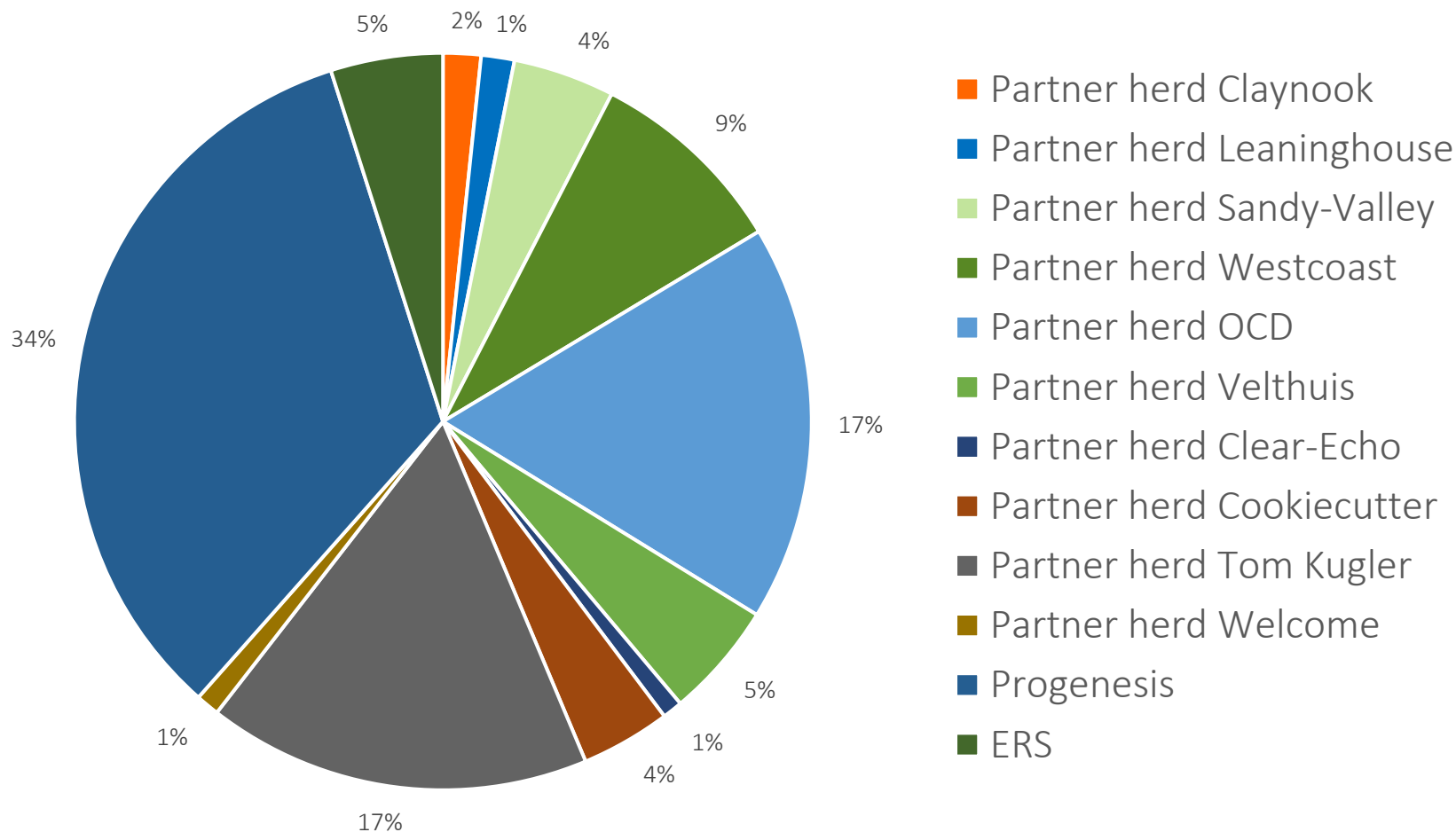
- 1<sup>st</sup> class calf nursery
- very low mortality rate

# Experts in calf care

Healthcare is professionally  
administrated and scheduled



# Percentage of males expected by program



## Swingman

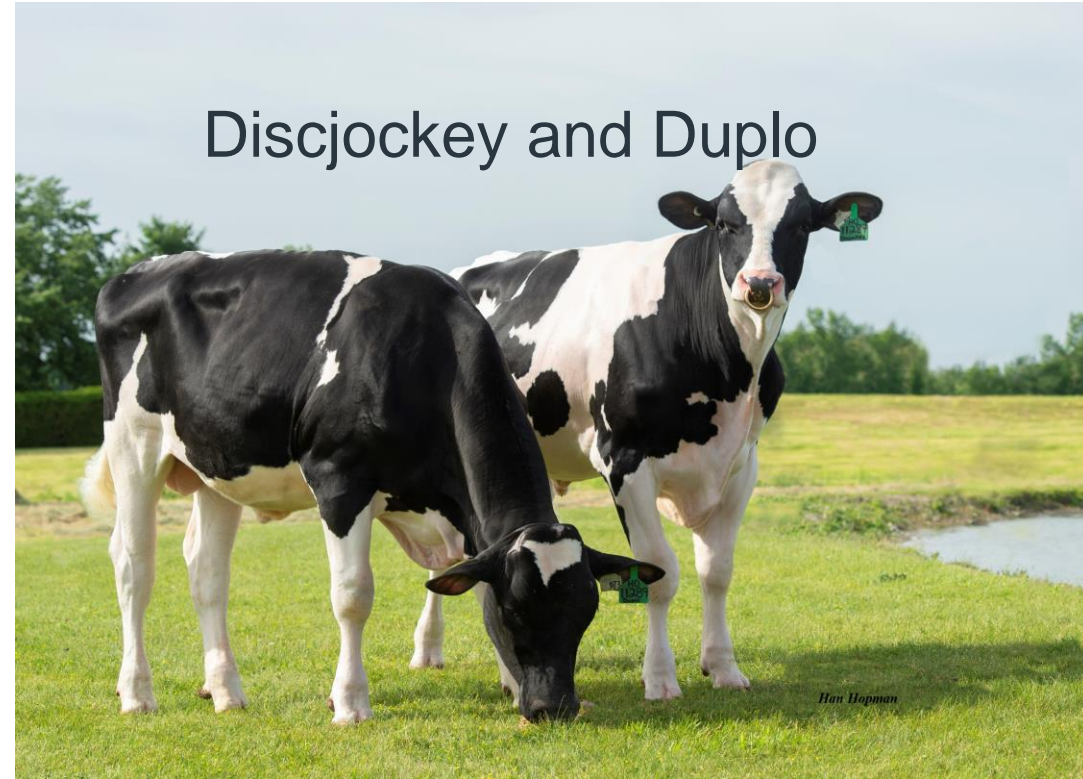


- 7500 cows in Western Canada
- focus on TPI/NM/LPI/Type
- long-time exclusive Semex partner
- enrolled in Elevate

# SANDY ALLEY FARMS



- milk 500 cows in Northern Wisconsin
- long time Semex genetic partner
- enrolled in Elevate



- milk 180 cows in Ontario
- focus on high TPI/LPI/Type
- enrolled in Elevate



- milk 2500 cows in Eastern Wisconsin
- focus on TPI/Red/Type
- enrolled in Elevate





JONATHAN AND ALICIA LAMB

-MILK 5000 COWS IN  
WESTERN NY AND OHIO

-AGGRESSIVE IVF FLUSH  
PROGRAM

-COMMITTED TO BREED  
IMPROVEMENT

-ENROLLED IN ELEVATE

SANDY-VALLEY

VELTHUIS

WESTCOAST

CLAYNOOK



*Han Hopman*

# Market Segments

Global Progressive Commercial	Global Breeder	Local Index Focus	Global Niche Markets
<ul style="list-style-type: none"> <li>• Production First</li> <li>• NM\$</li> <li>• Health</li> <li>• Fertility</li> </ul>	<ul style="list-style-type: none"> <li>• Productivity and Type focus</li> <li>• TPI, LPI</li> <li>• Components %Fat, Protein</li> <li>• Health and Fertility</li> </ul>	<ul style="list-style-type: none"> <li>• Western Europe</li> <li>• Australia, NZ</li> </ul>	<ul style="list-style-type: none"> <li>• Polled-not mainstream yet</li> <li>• Red-steady</li> <li>• Show type</li> </ul>

# Market Focus

Productivity	Health	Fertility	Function and Efficiency
<ul style="list-style-type: none"><li>• Combined Fat and Protein</li><li>• % Fat, % Protein</li><li>• BB, A2A2</li><li>• Milk Volume</li></ul>	<ul style="list-style-type: none"><li>• Immunity + Disease resistance</li><li>• Calf-heifer-cow</li></ul>	<ul style="list-style-type: none"><li>• Female fertility</li><li>• Easy calving</li><li>• Transition</li></ul>	<ul style="list-style-type: none"><li>• Sound udders</li><li>• Mobility</li><li>• Medium size</li><li>• Focus on breed challenged traits like leg set and teat length</li></ul>

## New Jobs On The Farm

Our clients are challenged with new decisions using new tools

More information and data available

Influences decision on the farm

Consumers having more influence on farm operations



# What's really important?

Nice to have traits—lifestyle and personal preference

Need to have—productivity, function, profit

Profit-driven by less cost

Efficient

Healthy

Pregnant



# The Next Generation

- Resilient-Tough
- Efficient
- Functional
- Productive
- Pregnant



# What Does The Future Look Like?

- Crossbreeding?
- Smaller, healthier cows
- Feed efficiency
- Productivity and reproductivity



# Technology and Product Development

- Immunity+
- Genetic probability modelling-selection
- IVF embryo production
- Animal management
- Embryo biopsy



# DISEASE RESISTANT GENETICS

 **Immunity+<sup>®</sup>**





**29**

**I+ sires  
over +2800  
GTPI**

**Claynook Zasberilla**  
(Casper x Duke x Yoder)  
leads this group at +2914 GTPI  
and +723 NM\$





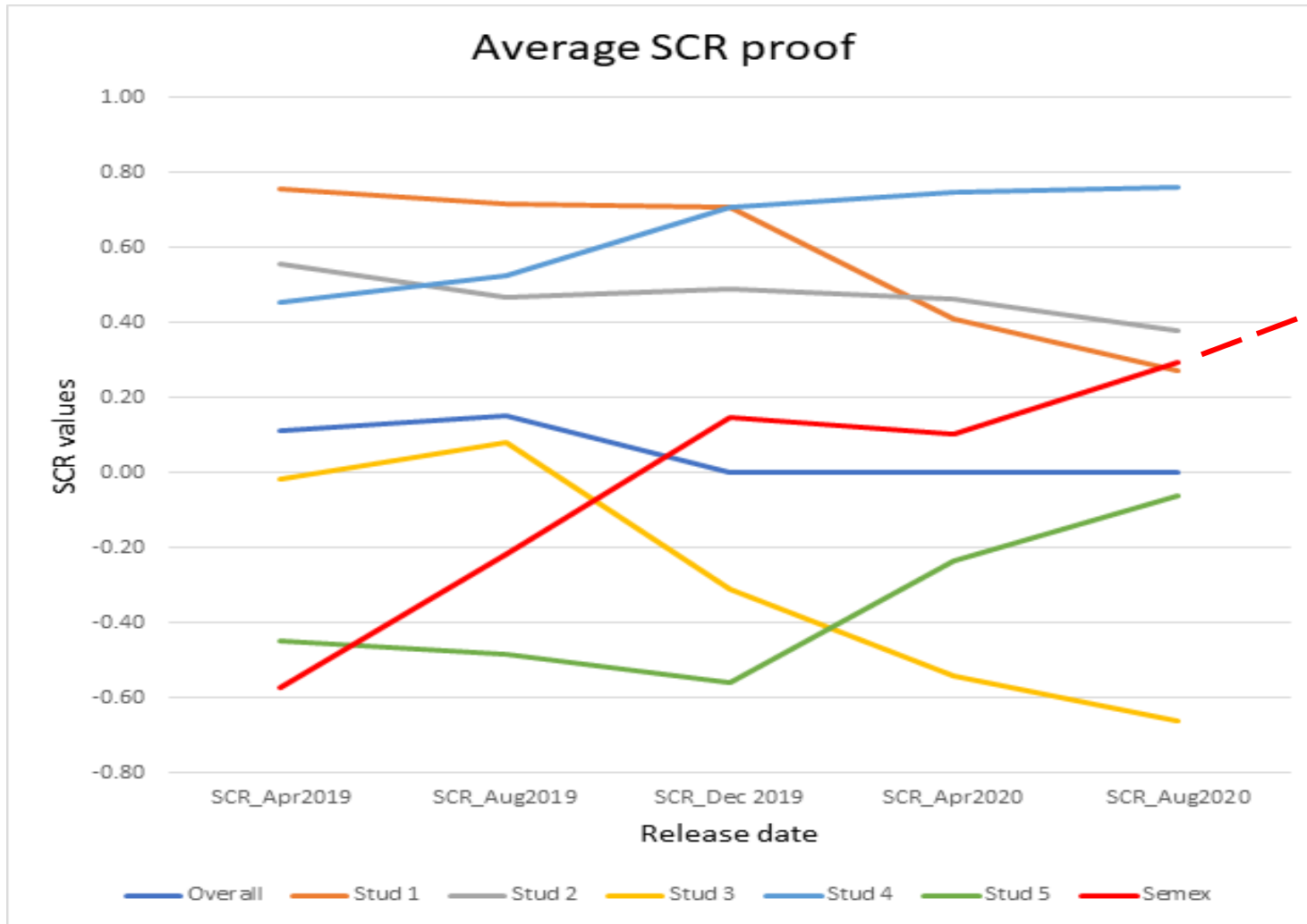
**Stantons  
Cockpit**

*Holly McFarlane*

Semex Sire	GTPI	NM\$	LPI	Pro \$
CLAYNOOK ZASBERILLA	2914	723	3457	3293
PROGENESIS MEZZOFORTE	2903	756	3780	3300
SILVERRIDGE V EINSTEIN	2887	734	3505	3288
STANTONS COCKPIT	2883	725	3674	3300
OCD FERRARO-ET	2876	669	3524	3313
REGANCREST CHEESEBOY-ET	2860	709	3378	3122
CLAYNOOK SEAPORT	2851	643	3640	3213
FAIRMONT RIDGELINE-ET	2847	663	3361	2972
SILVERRIDGE V CIRCUS	2823	642	3323	3006
PROGENESIS MOLIERE	2810	631	3519	3253

**Group Average**

+2865 GTPI  
 + 689 NM\$  
 +3516 GLPI  
 +3206 PRO\$





# TOP GTPI FERTILITY BULLS



Semex Sire	GTPI
PROGENESIS MOTIVATED	+2899
PROGENESIS MAESTRO	+2899
PROGENESIS POSITIVE	+2867
SILVERRIDGE CIRCUS	+2823
PROGENESIS METROPOLIS	+2821
PROGENESIS MENDEL	+2810
SANDY-VALLEY LENNY	+2797
PROGENESIS PYRAMID	+2796
WESTCOAST GREENWICH	+2790
WESTCOAST ICEBREAKER	+2786

### Group Average

+2829 GTPI

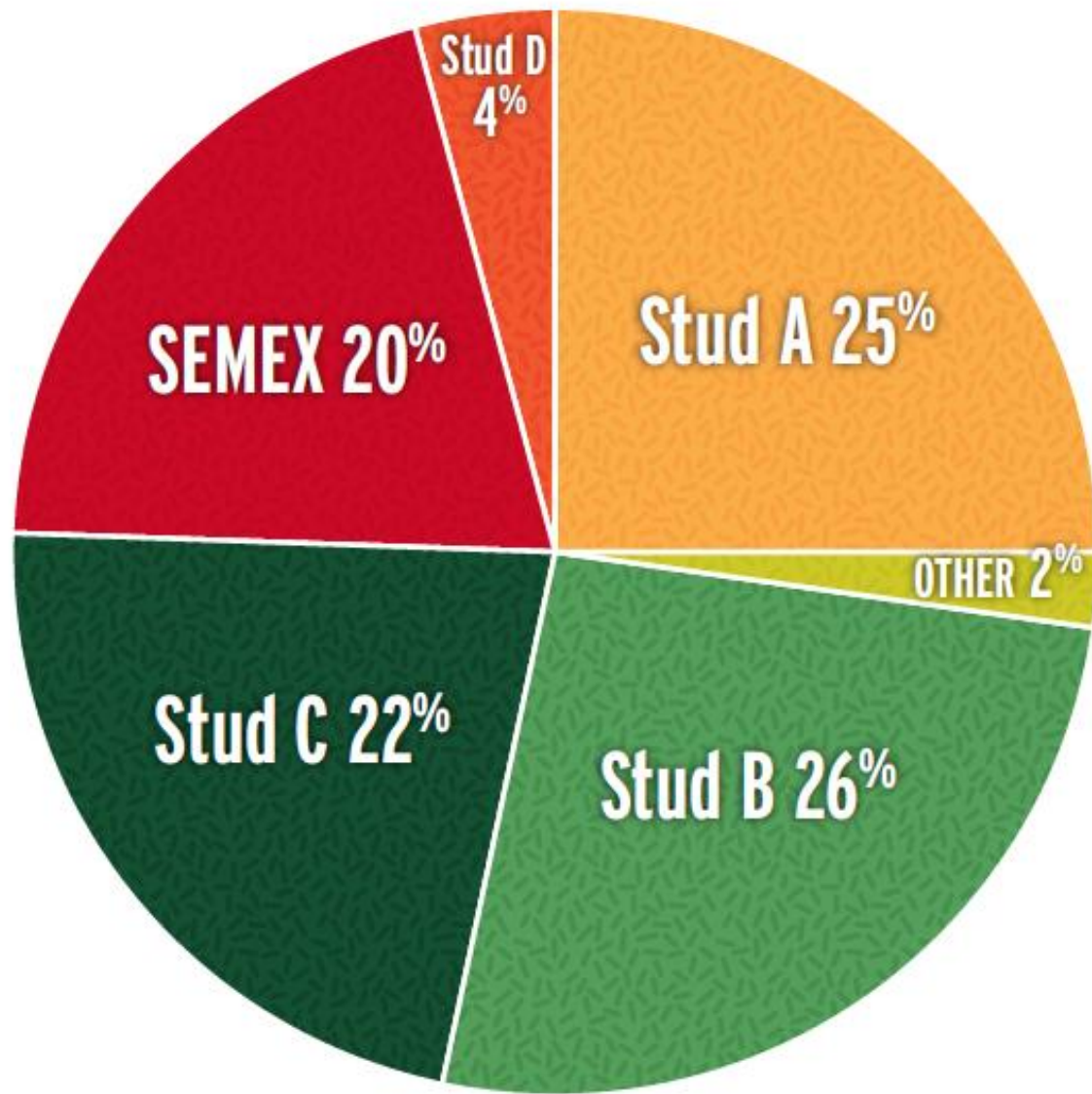
+1286 Milk

## Top 10 GPA LPI (Available)



Semex Sire	GPA LPI
PROGENESIS MANHATTAN	+3795
PROGENESIS MEZZOFORTE	+3780
DUDOC SPEEDUP P	+3698
STANTONS COCKPIT	+3674
PROGENESIS PITTSBURGH	+3656
CLAYNOOK SEAPORT	+3640
PROGENESIS METALLICA	+3635
WESTCOAST JUPITER	+3626
PROGENESIS PINBALL	+3618

**Group Average**  
+3680 GLPI



# Top 500 GTPI Genomic Tested Sires

Source: CDCB August 2020



OCD  
Silverchair

## Genomic Bulls GTPI & NM\$

Semex Sire	GTPI	NM\$
OCD SILVERCHAIR-ET	+2934	800
CLAYNOOK ZONE	+2926	805
PROGENESIS MANHATTAN	+2920	760
CLAYNOOK ZURICH	+2915	769
CLAYNOOK ZASBERILLA	+2914	723
STANTONS EPOXY	+2901	806
PROGENESIS MONTBLANC	+2901	798
PEAK MAJORDOMO	+2911	783
PROGENESIS BANKSY	+2907	773
PROGENESIS MEZZOFORTE	+2903	756

**Group Average**  
+2913 GTPI  
+777 NM\$



**NUMBER ONE**

**978 NM\$**

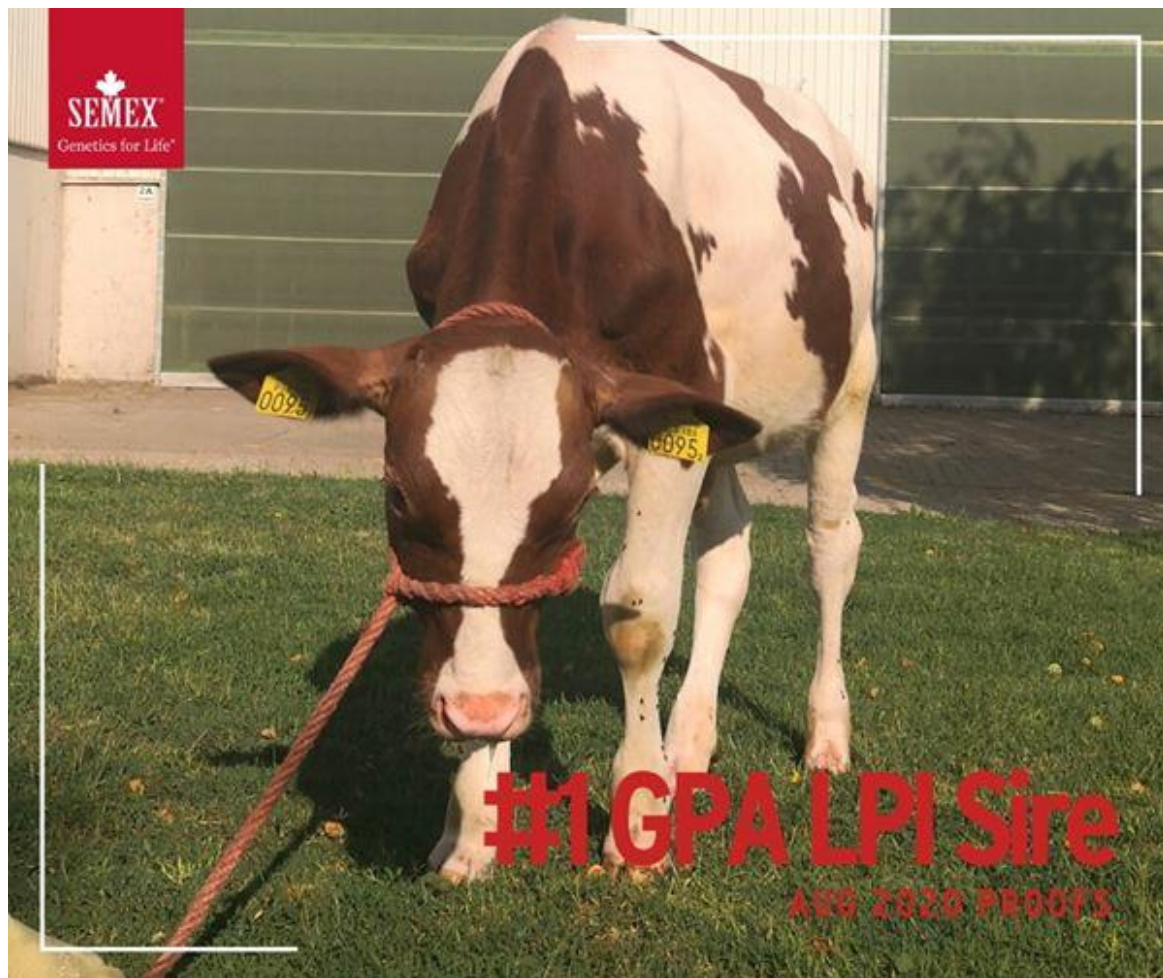
**Winstar  
*Graziano***



**NUMBER ONE**

**3114 GTPI**

**Cookiecutter**  
***Holysmokes***  
*Highjump son*



**NUMBER ONE**

**3846 GLPI**

**3STAR OH  
RANGER RED**

**THANK YOU**

