

## DOMESTIC DAIRY SEMEN SALES (1)

UNITS OF SEMEN

BREED	2022	2021	% +/-
HOLSTEIN	12,856,399	13,611,785	-5.55%
JERSEY	2,466,816	2,690,548	-8.32%
DAIRY CROSSBREED	369,736	120,518	206.79%
R&W/RED HOLSTEIN	205,318	253,451	-18.99%
HOLSTEIN-RED CARRIER	108,868	159,462	-31.73%
BROWN SWISS	83,141	71,359	16.51%
AYRSHIRE	28,300	28,301	0.00%
GUERNSEY	16,251	19,428	-16.35%
MILKING SHORTHORN	15,216	11,813	28.81%
OTHER DAIRY	13,490	17,776	-24.11%
TOTAL	16,163,535	16,984,441	-4.83%

## DAIRY SEMEN IMPORT SALES (1)

UNITS OF SEMEN

BREED	2022	2021	% +/-
HOLSTEIN	98,782	156,629	-36.93%
NORWEGIAN RED	57,806	35,479	62.93%
MONTBELIARDE	19,296	24,759	-22.06%
FLECKVIEH	17,783	20,133	-11.67%
HOLSTEIN RED CARRIER	9,370	14,129	-33.68%
JERSEY	6,913	23,550	-70.65%
DAIRY CROSSBREED	5,076	7,901	-35.75%
OTHER DAIRY	11,326	14,352	-21.08%
TOTAL	226,352	296,932	-23.77%

## CUSTOM FROZEN DAIRY SEMEN (1)

UNITS OF SEMEN

BREED	2022	2021	% +/-
HOLSTEIN	1,194,107	1,369,255	-12.79%
JERSEY	57,970	84,618	-31.49%
BROWN SWISS	36,121	46,890	-22.97%
R&W/RED HOLSTEIN	28,566	6,704	326.10%
GUERNSEY	17,501	24,983	-29.95%
MILKING SHORTHORN	12,272	3,721	229.80%
FLECKVIEH	10,313	5,857	76.08%
DAIRY CROSSBREED	8,971	368	2337.77%
SWEDISH RED	6,740	9,725	-30.69%
AYRSHIRE	3,380	3,985	-15.18%
AMERICAN LINEBACK	3,235	3,088	4.76%
MONTBELIARDE	1,399	2,152	-34.99%
OTHER DAIRY	1,297	775	67.35%
TOTAL	1,381,872	1,562,121	-11.54%

## DAIRY SEMEN EXPORT SALES (1)

UNITS OF SEMEN

<u>BREED</u>	<u>2022</u>	<u>2021</u>	<u>%+/-</u>
HOLSTEIN	29,638,149	27,990,043	5.89%
JERSEY	1,246,731	1,675,340	-25.58%
R&W/RED HOLSTEIN	386,449	490,100	-21.15%
BROWN SWISS	184,486	236,930	-22.13%
HOLSTEIN-RED CARRIER	112,502	186,770	-39.76%
AYRSHIRE	53,433	64,479	-17.13%
DAIRY CROSSBREED	32,544	30,594	6.37%
GUERNSEY	5,925	5,987	-1.04%
MILKING SHORTHORN	1,492	2,940	-49.25%
OTHER DAIRY	1,277	3,130	-59.20%
TOTAL	<u>31,662,988</u>	<u>30,686,313</u>	<u>3.18%</u>

## DAIRY SEMEN EXPORT SALES (2)

UNITS OF SEMEN

	<u>2022</u>	<u>2021</u>	<u>%+/-</u>
WORLD TOTAL	<u>32,090,128</u>	<u>31,501,343</u>	<u>1.87%</u>

## DAIRY SEMEN EXPORT SALES (2)

DOLLAR VALUE

	<u>2022</u>	<u>2021</u>	<u>%+/-</u>
WORLD TOTAL	<u>\$286,242,726</u>	<u>\$266,005,702</u>	<u>7.61%</u>

## DOMESTIC BEEF SEMEN SALES (1)

UNITS OF SEMEN

BREED	2022	2021	%+/-
ANGUS	4,807,323	4,600,655	4.49%
CROSSBREED	1,372,710	1,278,462	7.37%
SIMMENTAL	1,132,330	1,178,912	-3.95%
CHAROLAIS	754,781	597,553	26.31%
LIMOUSIN	467,910	653,508	-28.40%
WAGYU	216,286	108,613	99.13%
RED ANGUS	111,171	125,628	-11.51%
POLLED HEREFORD	81,191	90,340	-10.13%
AMERICAN AKAUSHI	15,273	3,455	342.05%
HEREFORD	8,609	9,170	-6.12%
BRANGUS	5,230	3,014	73.52%
GYR	4,819	2,701	78.42%
BRAHMAN	4,645	6,044	-23.15%
MAINE ANJOU	3,724	2,443	52.44%
SHORTHORN	3,201	3,320	-3.58%
BELGIAN BLUE	2,230	529	321.55%
HEREFORD (BLACK)	2,102	9,121	-76.95%
OTHER BEEF (a)	15,073	12,182	23.73%
TOTAL	9,008,608	8,685,650	3.72%

(a) Other Beef includes: Amerifax, Ankina, Barzona, Beefmaster, Belted Galloway, Braford, Brahman (Red), Brangus (Red), Braunvieh, Chianina, Dutch Belted, Galloway, Gelbvieh, Guzerat, Horned Hereford, Lowline (Loala), Nellore, Normande, Piedmontese, Salers, Santa Gertrudis, Scotch Highland, Scotch Shorthorn, Senapol, Simbrah, Tarantaise, Texas Longhorn, White Park and Misc. Beef.

## BEEF SEMEN IMPORT SALES (1)

UNITS OF SEMEN

BREED	2022	2021	%+/-
CHAROLAIS	8,080	3,270	147.09%
PIEDMONTESE	400	360	11.11%
BELGIAN BLUE	415	205	102.44%
NORMANDE	332	160	107.50%
BRAUNVIEH	140	110	27.27%
HEREFORD (POLLED)	120	0	0.00%
OTHER BEEF (b)	327	666	-50.90%
TOTAL	9,814	4,771	105.70%

(b) Other Beef includes: Angus, Braford, Brangus (Red), Crossbreed, Maine-Anjou, Red Dane, Shorthorn (Polled), Simmental, Tarantaise, Texas Longhorn and Misc. Beef.

## BEEF SEMEN EXPORT SALES (1)

UNITS OF SEMEN

BREED	2022	2021	%+/-
ANGUS	3,388,837	6,601,967	-48.67%
CROSSBREED	334,419	628,571	-46.80%
RED ANGUS	284,459	301,518	-5.66%
SIMMENTAL	256,181	206,306	24.18%
BRANGUS	114,936	174,882	-34.28%
POLLED HEREFORD	82,352	85,537	-3.72%
WAGYU	72,270	35,096	105.92%
CHAROLAIS	68,052	97,966	-30.54%
LIMOUSIN	32,223	36,278	-11.18%
BRAHMAN	22,696	37,066	-38.77%
BRAHMAN (RED)	21,883	30,567	-28.41%
GYR	18,033	54,282	-66.78%
AMERICAN AKAUSHI	12,203	363	3261.71%
SENAPOL	11,826	17,968	-34.18%
BRANGUS (RED)	5,077	12,433	-59.17%
OTHER BEEF (c)	4,997	7,756	-35.57%
TOTAL	4,730,444	8,328,556	-43.20%

(c) Other Beef includes: Beefmaster, Belgian Blue, Braunvieh, Gelbvieh, Guezerat, Horned Hereford, Maine-Anjou, Scotch Highland, Shorthorn (Polled) and Simbrah.

## BEEF SEMEN EXPORT SALES (2)

UNITS OF SEMEN

	2022	2021	%+/-
WORLD TOTAL	4,979,725	8,640,430	-42.37%

## BEEF SEMEN EXPORT SALES (2)

DOLLAR VALUE

	2022	2021	%+/-
WORLD TOTAL	\$17,461,585	\$27,062,144	-35.48%

## CUSTOM FROZEN BEEF SEMEN (1)

### UNITS OF SEMEN

BREED	2022	2021	%+/-
ANGUS	2,600,541	2,430,595	6.99%
SIMMENTAL	542,077	740,621	-26.81%
CROSSBREED	528,898	235,796	124.30%
WAGYU	526,293	310,072	69.73%
LIMOUSIN	395,015	632,165	-37.51%
CHAROLAIS	233,399	293,111	-20.37%
RED ANGUS	130,691	439,757	-70.28%
POLLED HEREFORD	109,445	102,913	6.35%
BEEFMASTER	87,734	82,222	6.70%
BRANGUS	69,224	69,967	-1.06%
GELBVIEWH	66,196	61,815	7.09%
MAINE-ANJOU	58,889	54,372	8.31%
BRAHMAN	56,891	61,035	-6.79%
AMERICAN AKAUSHI	51,702	48,758	0.00%
BRAHMAN (RED)	48,448	35,378	36.94%
HEREFORD	47,179	45,433	3.84%
SHORTHORN	40,928	41,924	-2.38%
CHIANINA	25,230	27,039	-6.69%
PIEDMONTESE	23,184	34,861	0.00%
MASHONA	21,657	3,479	522.51%
SCOTCH HIGHLAND	21,141	7,587	178.65%
TEXAS LONGHORN	20,704	16,342	26.69%
SANTA GERTRUDIS	19,151	27,973	-31.54%
RED BRANGUS	17,956	13,813	29.99%
WHITE PARK	15,574	561	2676.11%
AMERICAN BUCKING BULL	13,910	12,909	7.75%
CHI-MAINE	13,850	17,285	-19.87%
BLACK HEREFORD	10,272	23,731	-56.71%
SALERS	7,189	6,565	9.50%
BRAUNVIEH	7,082	5,659	25.15%
SHORTHORN (SCOTCH)	4,581	886	0.00%
CORRIENTE	4,557	26	17426.92%
SIMBRAH	2,933	10,161	-71.13%
LOWLINE (LOALA)	2,714	4,055	-33.07%
DEXTER	2,645	3,914	-32.42%
OTHER BEEF (d)	45,411	30,386	49.45%
TOTAL	5,873,291	5,933,166	-1.01%

(d) Other Beef includes: Amerifax, Ankina, Beefalo, Belgian Blue, Belted Galloway, Bonsmara, Braford, British White, Buelingo, Chi-Angus, Devon, Dutch Belted, Galloway, Gelbray, Guzerat, Gyr, Indu-Brazil, Murray Grey, Nellore, Normande, Pinzgauer, Red Poll, Romagnola, Senapol, Scotch Highland, South Devon, Tarentaise, Yak and Misc. Beef.

(1) Based on Quarterly Reports of Semen Sold and Custom Frozen

(2) Based on Quarterly Survey of Semen Sold for Export