

DOMESTIC DAIRY SEMEN SALES (1)

UNITS OF SEMEN

BREED	2023	2022	%+/-
HOLSTEIN	12,437,839	12,856,399	-3.26%
JERSEY	2,193,228	2,466,816	-11.09%
DAIRY CROSSBREED	385,779	369,736	4.34%
R&W/RED HOLSTEIN	204,358	205,318	-0.47%
HOLSTEIN-RED CARRIER	90,719	108,868	-16.67%
BROWN SWISS	57,245	83,141	-31.15%
AYRSHIRE	21,938	28,300	-22.48%
GUERNSEY	12,017	16,251	-26.05%
FLECKVIEH	10,598	9,580	10.63%
MILKING SHORTHORN	8,632	15,216	-43.27%
AMERICAN LINEBACK	1,769	2,425	-27.05%
HETEROSPERMIC DAIRY	1,251		
OTHER DAIRY	52,947	1,485	3465.45%
TOTAL	15,478,320	16,163,535	-4.24%

*Heterospermic Dairy data reporting began in 2023

DAIRY SEMEN IMPORT SALES (1)

UNITS OF SEMEN

BREED	2023	2022	%+/-
NORWEGIAN RED	89,494	57,806	54.82%
HOLSTEIN	31,543	98,782	-68.07%
MONTBELIARDE	15,366	19,296	-20.37%
BROWN SWISS	10,821	5,596	93.37%
DAIRY CROSSBREED	6,617	5,076	30.36%
R&W/RED HOLSTEIN	4,132	2,983	38.52%
FLECKVIEH	4,101	17,783	0.00%
HOLSTEIN RED CARRIER	2,968	9,370	-68.32%
JERSEY	1,695	6,913	-75.48%
OTHER DAIRY	2,866	2,747	4.33%
TOTAL	169,603	226,352	-25.07%

CUSTOM FROZEN DAIRY SEMEN (1)

UNITS OF SEMEN

BREED	2023	2022	%+/-
HOLSTEIN	1,654,643	1,194,107	38.57%
HOLSTEIN RED CARRIER	130,307	1,297	9946.80%
BROWN SWISS	68,172	36,121	88.73%
JERSEY	59,774	57,970	3.11%
GUERNSEY	21,987	17,501	25.63%
AMERICAN LINEBACK	13,602	3,235	320.46%
MILKING SHORTHORN	10,430	12,272	-15.01%
AYRSHIRE	9,956	3,380	194.56%
FLECKVIEH	7,350	10,313	-28.73%
DAIRY CROSSBREED	6,303	8,971	-29.74%
SWEDISH RED	4,632	6,740	-31.28%
OTHER DAIRY	360	29,965	-98.80%
TOTAL	1,987,516	1,381,872	43.83%

DAIRY SEMEN EXPORT SALES (1)

UNITS OF SEMEN

<u>BREED</u>	<u>2023</u>	<u>2022</u>	<u>%+/-</u>
HOLSTEIN	27,103,066	29,638,149	-8.55%
JERSEY	1,441,573	1,246,731	15.63%
R&W/RED HOLSTEIN	387,287	386,449	0.22%
BROWN SWISS	159,378	184,486	-13.61%
HOLSTEIN-RED CARRIER	99,392	112,502	-11.65%
AYRSHIRE	73,338	53,433	37.25%
DAIRY CROSSBREED	10,369	32,544	-68.14%
GUERNSEY	5,871	5,925	-0.91%
MONTBELIARDE	2,022	715	182.80%
MILKING SHORTHORN	1,108	1,492	-25.74%
OTHER DAIRY	1,010	562	79.72%
TOTAL	<u>29,284,414</u>	<u>31,662,988</u>	<u>-7.51%</u>

DAIRY SEMEN EXPORT SALES (2)

UNITS OF SEMEN

	<u>2023</u>	<u>2022</u>	<u>%+/-</u>
WORLD TOTAL	<u>31,211,828</u>	<u>32,090,128</u>	<u>-2.74%</u>

DAIRY SEMEN EXPORT SALES (2)

DOLLAR VALUE

	<u>2023</u>	<u>2022</u>	<u>%+/-</u>
WORLD TOTAL	<u>\$287,226,175</u>	<u>\$286,242,726</u>	<u>0.34%</u>

DOMESTIC BEEF SEMEN SALES (1)

UNITS OF SEMEN

BREED	2023	2022	%+/-
ANGUS	4,670,695	4,807,323	-2.84%
HETEROSPERMIC BEEF*	1,353,780		
SIMMENTAL	1,067,246	1,132,330	-5.75%
CROSSBREED	856,131	1,372,710	-37.63%
CHAROLAIS	680,648	754,781	-9.82%
LIMOUSIN	310,742	467,910	-33.59%
WAGYU	212,080	216,286	-1.94%
RED ANGUS	119,630	111,171	7.61%
POLLED HEREFORD	84,116	81,191	3.60%
AMERICAN AKAUSHI	29,311	15,273	91.91%
HEREFORD (HORNED)	5,355	8,609	-37.80%
BRAHMAN	4,700	4,645	1.18%
BRAHMAN (RED)	4,405	1,831	140.58%
SHORTHORN	3,503	3,201	9.43%
GELBVIEWH	3,248	1,438	125.87%
MAINE ANJOU	3,171	3,724	-14.85%
BRANGUS	3,071	5,230	-41.28%
SENEPOL	2,287	0	0.00%
OTHER BEEF (a)	8,862	20,955	-57.71%
TOTAL	9,422,981	9,008,608	4.60%

(a) Other Beef includes: Ankina, Beefmaster, Belgian Blue, Blonde D'Aquit., Brahman (Red), Brangus (Red), Braunvieh, Chianina, Chi-Maine, Dutch Belted, Guzerat, Gyr, Hereford (Black), Lowline (Loala), Nellore, Normande, Salers, Santa Gertrudis, Scotch Highland, Scotch Shorthorn, Speckle Park, Tarantaise, Texas Longhorn, White Park and Misc. Beef.

*Heterospermic Beef data reporting began in 2023

BEEF SEMEN IMPORT SALES (1)

UNITS OF SEMEN

BREED	2023	2022	%+/-
BELGIAN BLUE	372	415	-10.36%
BRAUNVIEH	203	140	45.00%
PIEDMONTESE	180	400	-55.00%
OTHER BEEF (b)	37	8,859	-99.58%
TOTAL	792	9,814	-91.93%

(b) Other Beef includes: Charolais, Hereford (Polled), Maine-Anjou, Normande, Red Dane, Shorthorn (Polled), Simmental, and Misc. Beef.

BEEF SEMEN EXPORT SALES (1)

UNITS OF SEMEN

BREED	2023	2022	%+/-
ANGUS	2,688,636	3,388,837	-20.66%
HETEROSPERMIC BEEF*	446,790		
CROSSBREED	365,633	334,419	9.33%
SIMMENTAL	305,478	256,181	19.24%
RED ANGUS	200,412	284,459	-29.55%
WAGYU	119,714	72,270	65.65%
POLLED HEREFORD	93,940	82,352	14.07%
BRANGUS	68,792	114,936	-40.15%
CHAROLAIS	49,346	68,052	-27.49%
BRAHMAN (RED)	48,975	21,883	123.80%
LIMOUSIN	26,715	32,223	-17.09%
BRAHMAN	22,621	22,696	-0.33%
GYR	9,513	18,033	-47.25%
SENAPOL	6,652	11,826	-43.75%
HEREFORD (HORNED)	3,987	2,510	58.84%
BRANGUS (RED)	3,732	5,077	-26.49%
AMERICAN AKAUSHI	3,650	12,203	-70.09%
OTHER BEEF (c)	3,192	2,487	28.35%
TOTAL	<u>4,467,778</u>	<u>4,730,444</u>	<u>-5.55%</u>

(c) Other Beef includes: Belgian Blue, Braunvieh, Chianina, Gelbvieh, Maine-Anjou, Santa Gertrudis, Shorthorn (Polled), Shorthorn (Scotch) and Simbrah.

*Heterospermic Beef data reporting began in 2023

BEEF SEMEN EXPORT SALES (2)

UNITS OF SEMEN

	2023	2022	%+/-
WORLD TOTAL	<u>4,861,415</u>	<u>4,979,725</u>	<u>-2.38%</u>

BEEF SEMEN EXPORT SALES (2)

DOLLAR VALUE

	2023	2022	%+/-
WORLD TOTAL	<u>\$19,263,234</u>	<u>\$17,461,585</u>	<u>10.32%</u>

CUSTOM FROZEN BEEF SEMEN (1)

UNITS OF SEMEN

BREED	2023	2022	%+/-
ANGUS	1,848,026	2,600,541	-28.94%
SIMMENTAL	673,450	542,077	24.24%
CROSSBREED	625,686	528,898	18.30%
WAGYU	450,941	526,293	-14.32%
LIMOUSIN	438,867	395,015	11.10%
CHAROLAIS	304,829	233,399	30.60%
RED ANGUS	160,911	130,691	23.12%
MAINE-ANJOU	94,532	58,889	60.53%
POLLED HEREFORD	75,108	109,445	-31.37%
BRANGUS	65,985	69,224	-4.68%
BEEFMASTER	55,792	87,734	-36.41%
BRAHMAN	52,797	56,891	-7.20%
SHORTHORN	46,192	40,928	12.86%
BRAHMAN (RED)	44,089	48,448	-9.00%
GELBVIEWH	38,914	66,196	-41.21%
HEREFORD (HORNED)	33,472	47,179	-29.05%
AMERICAN AKAUSHI	27,695	51,702	-46.43%
CHI-MAINE	21,838	13,850	57.68%
SANTA GERTRUDIS	21,074	19,151	10.04%
SCOTCH HIGHLAND	20,610	21,141	-2.51%
MASHONA	14,338	21,657	-33.80%
CHIANINA	13,210	25,230	-47.64%
AMERICAN BUCKING BULL	13,023	13,910	-6.38%
HETEROSPERMIC BEEF*	11,932		
TEXAS LONGHORN	11,628	20,704	-43.84%
PIEDMONTESE	10,906	23,184	-52.96%
BRAFORD	10,649	2,156	393.92%
DUTCH BELTED	10,055	1,533	555.90%
BEEF FRIESIAN	9,487	0	0.00%
BLACK HEREFORD	9,068	10,272	-11.72%
SALERS	8,458	7,189	17.65%
MARCHIGIANA	7,162	0	0.00%
SOUTH POLL	7,157	0	0.00%
SIMBRAH	7,024	2,933	139.48%
BRAUNVIEH	5,042	7,082	-28.81%
AMERIFAX	3,746	165	2170.30%
BRALER	3,007	0	0.00%
OTHER BEEF (d)	46,856	89,584	-47.70%
TOTAL	<u>5,303,556</u>	<u>5,873,291</u>	<u>-9.70%</u>

(d) Other Beef includes: American Breed, Amerifax, Ankina, Andole Watusi, Barzona, Beefalo, Belted Galloway, Bonsmara, Braford, Brangus (Red), British White, Buelingo, Chi-Angus, Corriente, Devon, Dexter, Galloway, Gelbray, Guzerat, Gyr, Indu-Brazil, Irish Black, Lowline (Loala), Murray Grey, Nellore, Normande, Pinzgauer, Red Poll, Romagnola, Senapol, Shorthorn (Scotch), South Devon, Tarentaise, Tuli, White Park, Yak and Misc. Beef.

*Heterospermic Beef data reporting began in 2023

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

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