

DOMESTIC DAIRY SEMEN SALES (1)
UNITS OF SEMEN

BREED	1988	1987	%+/-
HOLSTEIN	11,990,336	11,932,258	0.49%
JERSEY	603,750	576,637	4.70%
GUERNSEY	196,225	208,209	-5.76%
BROWN SWISS	137,090	138,539	-1.05%
AYRSHIRE	48,101	56,010	-14.12%
MILKING SHORTHORN	18,761	17,780	5.52%
OTHER DAIRY	175	251	-30.28%
TOTAL	12,994,438	12,929,684	0.50%

CUSTOM FROZEN DAIRY SEMEN (1)
UNITS OF SEMEN

BREED	1988	1987	%+/-
HOLSTEIN	572,047	635,491	-9.98%
JERSEY	38,740	30,078	28.80%
GUERNSEY	14,134	12,298	14.93%
BROWN SWISS	58,865	51,993	13.22%
AYRSHIRE	7,040	1,032	582.17%
MILKING SHORTHORN	3,597	4,422	-18.66%
OTHER DAIRY	89	0	0.00%
TOTAL	694,512	735,314	-5.55%

DAIRY SEMEN EXPORT SALES (1)
UNITS OF SEMEN

BREED	1988	1987	%+/-
HOLSTEIN	3,730,155	3,193,547	16.80%
BROWN SWISS	406,890	353,344	15.15%
JERSEY	121,351	112,732	7.65%
GUERNSEY	14,673	18,081	-18.85%
OTHER DAIRY	3,472	2,406	44.31%
	4,276,541	3,680,110	16.21%

DAIRY SEMEN EXPORT SALES (2)
UNITS OF SEMEN

REGION	1988	1987	%+/-
EUROPEAN COMMUNITY	1,463,025	1,288,747	13.52%
OTHER WESTERN EUROPE	97,622	113,191	-13.75%
EASTERN EUROPE	191,829	170,888	12.25%
SOUTH AMERICA	1,343,278	1,069,404	25.61%
NORTH AMERICA	525,014	540,565	-2.88%
MIDDLE EAST	147,537	209,205	-29.48%
OTHER ASIA	279,713	232,685	20.21%
CENTRAL AMERICA	92,825	95,355	-2.65%
CARRIBEAN	6,766	14,165	-52.23%
AFRICA	84,790	54,855	54.57%
OCEANIA	88,727	49,514	0.00%
TOTAL	4,321,126	3,838,574	12.57%

DAIRY SEMEN EXPORT SALES (2)
DOLLAR VALUE

REGION	1988	1987	%+/-
EUROPEAN COMMUNITY	\$18,938,849	\$14,672,359	29.08%
OTHER WESTERN EUROPE	956,985	1,385,848	-30.95%
EASTERN EUROPE	1,636,726	1,743,015	-6.10%
SOUTH AMERICA	5,119,007	4,932,941	3.77%
NORTH AMERICA	3,222,792	3,032,389	6.28%
MIDDLE EAST	1,170,092	1,657,491	-29.41%
OTHER ASIA	2,198,964	1,906,175	15.36%
CENTRAL AMERICA	316,894	349,003	-9.20%
CARRIBEAN	15,293	27,586	-44.56%
AFRICA	868,131	468,301	85.38%
OCEANIA	667,361	396,819	0.00%
TOTAL	\$35,111,094	\$30,571,927	14.85%

DOMESTIC BEEF SEMEN SALES (1)
UNITS OF SEMEN

BREED	1988	1987	%+/-
ANGUS	319,071	300,351	6.23%
SIMMENTAL	128,082	116,879	9.59%
POLLED HEREFORD	112,577	110,917	1.50%
LIMOUSIN	21,134	14,209	48.74%
CHIANINA	10,807	12,259	-11.84%
BRAHMAN	50,539	41,552	21.63%
CHAROLAIS	18,266	17,699	3.20%
RED ANGUS	17,952	19,629	-8.54%
MAINE ANJOU	12,908	4,594	180.98%
HEREFORD	12,239	13,539	-9.60%
BRANGUS	3,561	4,955	-28.13%
GELBVIEWH	18,885	16,544	14.15%
SALERS	17,514	13,608	28.70%
OTHER BEEF	37,309	22,892	62.98%
TOTAL	780,844	709,627	10.04%

BEEF SEMEN EXPORT SALES (1)
UNITS OF SEMEN

BREED	1988	1987	%+/-
BRAHMAN	53,747	37,789	42.23%
SIMMENTAL	66,948	38,879	72.20%
BRANGUS	2,111	955	121.05%
POLLED HEREFORD	23,123	26,054	-11.25%
ANGUS	40,576	22,799	77.97%
RED ANGUS	14,548	7,280	99.84%
CHAROLAIS	9,908	11,874	-16.56%
SANTA GERTRUDIS	1,245	510	144.12%
CHIANINA	2,174	836	160.05%
HEREFORD	4,142	5,495	-24.62%
LIMOUSIN	6,609	2,928	125.72%
OTHER BEEF	19,028	6,483	193.51%
TOTAL	244,159	161,882	50.83%

CUSTOM FROZEN BEEF SEMEN (1)
UNITS OF SEMEN

BREED	1988	1987	%+/-
ANGUS	146,965	105,896	38.78%
RED ANGUS	10,588	5,354	97.76%
CHIANINA	48,651	49,461	-1.64%
SIMMENTAL	128,279	58,292	120.06%
POLLED HEREFORD	60,748	28,179	115.58%
LIMOUSIN	95,532	35,300	170.63%
CHAROLAIS	64,284	52,420	22.63%
HEREFORD	67,062	62,521	7.26%
BRANGUS	91,484	22,095	314.05%
GELBVIEH	37,957	31,252	21.45%
SALERS	36,523	43,195	-15.45%
BEEFMASTER	31,171	23,608	32.04%
SANTA GERTRUDIS	31,159	16,874	84.66%
BRAHMAN	21,958	41,556	-47.16%
MAINE ANJOU	63,342	40,050	58.16%
OTHER BEEF	150,457	113,058	33.08%
TOTAL	1,086,160	729,111	48.97%

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BEEF SEMEN EXPORT SALES (2)
UNITS OF SEMEN

REGION	1988	1987	%+/-
SOUTH AMERICA	144,514	97,154	48.75%
NORTH AMERICA	52,432	32,735	60.17%
CENTRAL AMERICA	16,671	11,980	39.16%
AFRICA	4,182	1,193	250.54%
OTHER ASIA	12,600	6,102	106.49%
EUROPEAN COMMUNITY	2,693	4,535	-40.62%
EASTERN EUROPE	1,151	0	
OTHER WESTERN EUROPE	280	880	-68.18%
CARRIBEAN	7,984	3,565	123.96%
OCEANIA	11,819	4,865	142.94%
TOTAL	254,326	163,009	56.02%

BEEF SEMEN EXPORT SALES (2)
DOLLAR VALUE

REGION	1988	1987	%+/-
SOUTH AMERICA	\$573,695	\$421,176	36.21%
NORTH AMERICA	470,231	256,264	83.49%
CENTRAL AMERICA	77,567	61,069	27.02%
CARIBBEAN	12,640	14,782	-14.49%
AFRICA	48,014	19,205	150.01%
OTHER ASIA	54,409	32,060	69.71%
EUROPEAN COMMUNITY	29,733	54,133	-45.07%
OTHER WESTERN EUROPE	1,635	4,000	-59.13%
EASTERN EUROPE	11,091	0	
OCEANIA	96,792	30,291	219.54%
TOTAL	\$1,375,807	\$892,980	54.07%

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(1) BASED ON QUARTERLY REPORTS OF SEMEN SOLD AND CUSTOM FROZEN

(2) BASED ON SURVEY OF SEMEN SOLD FOR EXPORT
BEEF SEMEN EXPORT SALES (2)
UNITS OF SEMEN