

## DOMESTIC DAIRY SEMEN SALES (1)

UNITS OF SEMEN

BREED	1989	1988	%+/-
HOLSTEIN	11,799,125	11,990,336	-1.59%
JERSEY	602,618	603,750	-0.19%
GUERNSEY	174,311	196,225	-11.17%
BROWN SWISS	124,251	137,090	-9.37%
AYRSHIRE	51,049	48,101	6.13%
MILKING SHORTHORN	18,034	18,761	-3.88%
OTHER DAIRY	144	175	-17.71%
TOTAL	<u>12,769,532</u>	<u>12,994,438</u>	<u>-1.73%</u>

## CUSTOM FROZEN DAIRY SEMEN (1)

UNITS OF SEMEN

BREED	1989	1988	%+/-
HOLSTEIN	630,298	572,047	10.18%
BROWN SWISS	53,054	58,865	-9.87%
JERSEY	43,234	38,740	11.60%
AYRSHIRE	23,367	7,040	231.92%
MILKING SHORTHORN	7,204	3,597	100.28%
GUERNSEY	3,639	14,134	-74.25%
OTHER DAIRY	0	89	-100.00%
TOTAL	<u>760,796</u>	<u>694,512</u>	<u>9.54%</u>

## DAIRY SEMEN EXPORT SALES (1)

UNITS OF SEMEN

BREED	1989	1988	%+/-
HOLSTEIN	3,831,228	3,730,155	2.71%
BROWN SWISS	331,974	406,890	-18.41%
JERSEY	133,871	121,351	10.32%
GUERNSEY	7,057	14,673	-51.90%
OTHER DAIRY	2,776	3,472	-20.05%
TOTAL	<u>4,306,906</u>	<u>4,276,541</u>	<u>0.71%</u>

IV41

## DAIRY SEMEN EXPORT SALES (2)

UNITS OF SEMEN

REGION	1989	1988	%+/-
EUROPEAN COMMUNITY	1,677,977	1,463,025	14.69%
SOUTH AMERICA	841,229	1,343,278	-37.37%
NORTH AMERICA	628,799	525,014	19.77%
ASIA	413,207	279,713	47.73%
MIDDLE EAST	206,004	147,537	39.63%
OTHER WESTERN EUROPE	179,741	97,622	84.12%
OCEANIA	127,774	88,727	44.01%
EASTERN EUROPE	122,135	191,829	-36.33%
CENTRAL AMERICA	115,753	92,825	24.70%
AFRICA	68,405	84,790	-19.32%
CARRIBEAN	22,239	6,766	228.69%
TOTAL	4,403,263	4,321,126	1.90%

## DAIRY SEMEN EXPORT SALES (2)

DOLLAR VALUE

REGION	1989	1988	%+/-
EUROPEAN COMMUNITY	\$23,009,057	\$18,938,849	21.49%
NORTH AMERICA	3,750,507	3,222,792	16.37%
SOUTH AMERICA	3,160,285	5,119,007	-38.26%
ASIA	2,873,547	2,198,964	30.68%
OTHER WESTERN EUROPE	1,627,093	956,985	70.02%
MIDDLE EAST	1,390,673	1,170,092	18.85%
EASTERN EUROPE	1,318,124	1,636,726	-19.47%
OCEANIA	879,095	667,361	31.73%
AFRICA	799,638	868,131	-7.89%
CENTRAL AMERICA	391,781	316,894	23.63%
CARRIBEAN	46,204	15,293	202.13%
TOTAL	\$39,246,004	\$35,111,094	11.78%

IV42

## DOMESTIC BEEF SEMEN SALES (1)

UNITS OF SEMEN

BREED	1989	1988	%+/-
ANGUS	374,469	319,071	17.36%
SIMMENTAL	126,366	128,082	-1.34%
POLLED HEREFORD	96,395	112,577	-14.37%
BRAHMAN	47,232	50,539	-6.54%
LIMOUSIN	23,892	21,134	13.05%
GELBVIEH	21,537	18,885	14.04%
RED ANGUS	20,953	17,952	16.72%
CHAROLAIS	19,140	18,266	4.78%
HEREFORD	17,687	12,239	44.51%
MAINE ANJOU	12,351	12,908	-4.32%
SALERS	12,350	17,514	-29.48%
CHIANINA	11,678	10,807	8.06%
BRANGUS	2,559	3,561	-28.14%
OTHER BEEF	35,595	37,309	-4.59%
TOTAL	822,204	780,844	5.30%

## BEEF SEMEN EXPORT SALES (1)

UNITS OF SEMEN

BREED	1989	1988	%+/-
ANGUS	55,214	40,576	36.08%
SIMMENTAL	49,793	66,948	-25.62%
BRAHMAN	38,311	53,747	-28.72%
POLLED HEREFORD	31,243	23,123	35.12%
RED ANGUS	17,779	14,548	22.21%
CHAROLAIS	10,442	9,908	5.39%
LIMOUSIN	5,598	6,609	-15.30%
SANTA GERTRUDIS	3,862	1,245	210.20%
HEREFORD	2,817	4,142	-31.99%
CHIANINA	869	2,174	-60.03%
BRANGUS	662	2,111	-68.64%
OTHER BEEF	25,922	19,028	36.23%
	242,512	244,159	-0.67%

IV43

# CUSTOM FROZEN BEEF SEMEN (1)

UNITS OF SEMEN

BREED	1989	1988	%+/-
ANGUS	168,558	146,965	14.69%
SIMMENTAL	142,108	128,279	10.78%
POLLED HEREFORD	97,368	60,748	60.28%
BRANGUS	96,044	91,484	4.98%
LIMOUSIN	69,055	95,532	-27.72%
CHAROLAIS	64,952	64,284	1.04%
HEREFORD	54,727	67,062	-18.39%
MAINE ANJOU	46,643	63,342	-26.36%
CHIANINA	44,780	48,651	-7.96%
SALERS	41,657	36,523	14.06%
BEEFMASTER	38,987	31,171	25.07%
GELBVIEH	37,915	37,957	-0.11%
SANTA GERTRUDIS	17,760	31,159	-43.00%
BRAHMAN	14,611	21,958	-33.46%
RED ANGUS	6,447	10,588	-39.11%
OTHER BEEF	127,864	150,457	-15.02%
TOTAL	1,069,476	1,086,160	-1.54%

IV44

## BEEF SEMEN EXPORT SALES (2)

UNITS OF SEMEN

REGION	1989	1988	%+/-
SOUTH AMERICA	147,489	144,514	2.06%
NORTH AMERICA	61,215	52,432	16.75%
CENTRAL AMERICA	24,783	16,671	48.66%
OCEANIA	6,724	11,819	-43.11%
ASIA	5,494	12,600	-56.40%
OTHER WESTERN EUROPE	4,180	280	1392.86%
CARRIBEAN	3,227	7,984	-59.58%
EUROPEAN COMMUNITY	2,857	2,693	6.09%
AFRICA	2,242	4,182	-46.39%
EASTERN EUROPE	1,147	1,151	-0.35%
MIDDLE EAST	480	0	
TOTAL	259,838	254,326	2.17%

## BEEF SEMEN EXPORT SALES (2)

DOLLAR VALUE

REGION	1989	1988	%+/-
SOUTH AMERICA	\$380,504	\$573,695	-33.67%
NORTH AMERICA	371,841	470,231	-20.92%
CENTRAL AMERICA	83,131	77,567	7.17%
OCEANIA	73,853	96,792	-23.70%
EASTERN EUROPE	62,998	11,091	468.01%
OTHER WESTERN EUROPE	51,992	1,635	3079.94%
EUROPEAN COMMUNITY	37,630	29,733	26.56%
ASIA	34,129	54,409	-37.27%
AFRICA	29,535	48,014	-38.49%
CARIBBEAN	15,258	12,640	20.71%
MIDDLE EAST	5,245	0	
TOTAL	\$1,146,116	\$1,375,807	-16.70%

IV45

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

(2) BASED ON SURVEY OF SEMEN SOLD FOR EXPORT