tion of their days in milk. Each * represents 15 days and the! represents a month. The following columns are the days in milk, their last milk production, their ME305 day value as a percentage of the herd mean, and the reason reported for leaving.

List 2. Animals culled during third+ lactation in the case farm.

Name		DIM	MILK % of ME	Reason left
17	*!*	49	32 43	SOLD HEALTH
11	* *	53	46 52	SOLD HEALTH
176	* *	54	31	SOLD MASTITIS
132	* *	59	65 65	SOLD HEALTH
547	* *	65	19 25	SOLD LOW PROD
180	* * *	77	48 55	SOLD MASTITIS
273	* * * *	130	81 92	SOLD OTHER
230	* * * * * *	198	43 65	SOLD LOW PROD
210	* * * * * * *	229	32 72	SOLD INJURY
131	* * * * * * * *	265	16 71	SOLD ABORTION
24	* * * * * * * *	271	29 41	SOLD LOW PROD
141	* * * * * * * * *	307	58 83	SOLD HEALTH
21	* * * * * * * * *	307	38 71	SOLD INFERTIL
168	* * * * * * * * * *	310	45 90	SOLD INFERTIL
150	* * * * * * * * *	311	93	DIED
200	* * * * * * * * *	314	42 81	SOLD ABORTION
214	* * * * * * * * *	315	37 64	SOLD INFERTIL
152	* * * * * * * * *	327	116	DIED
30	* * * * * * * * * *	363	24 68	SOLD INFERTIL
96	* * * * * * * * * * * ->	368	21 110	SOLD INFERTIL
47	* * * * * * * * * * * ->	380	44 71	SOLD INFERTIL
169	* * * * * * * * * * * ->	399	40 99	SOLD INFERTIL
128	* * * * * * * * * * * ->	472	96	DIED
159	* * * * * * * * * * * ->	508	33 106	SOLD INFERTIL

There is heavy culling during the first 75 days of milk. Six animals were culled primarily for health and mastitis problems. The overriding reason for culling is reproductive problems (infertility and abortion). Only 2

animals were sold for low production. Most animals were below the 52 pound "cull level" established above, but a few were culled with higher milk production. Only 3 animals had ME305 day values above the herd mean. In general, this culling is for involuntary reasons.

Let's look at the cost for culling cow 273. If she had been milked for the entire lactation, she would have produced approximately 21,000 pounds of milk. However, in the 129 days that she was in the herd, she only produced 10,000 pounds. We can assume a return over variable cost of \$2/cwt; therefore, approximately \$220 was lost by the decision to cull her. If the need to cull her could have been avoided by a change in management practices, then an additional \$220 would have been realized for fixed expenses and net farm income.

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Abstract

A serological comparison of some animal herpesviruses.

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Bovine herpesvirus 1 (BHV-1) isolates (Cooper-type strain 4975 and Oxford) were compared in neutralization tests with bovine herpesvirus 4 (BHV-4) isolate (85/16TV) and the herpesviruses of red deer (D2839/1) and goats (E/CH). Hyperimmune antiserum was prepared in rabbits against the plaque-selected viruses and endpoint and kinetic neutralization tests were made. BHV-4 was clearly different from the other four viruses. The

closely-related BHV-1 strains were also related in these tests to the red deer herpesvirus. The Oxford strain seemed rather closer antigenically than the Cooper-type strain to the red deer herpesvirus. Antiserum to the caprine herpesvirus failed to neutralize either BHV-1 strain or red deer virus, but antiserum to the Cooper-type and red deer herpesviruses did neutralize caprine virus to a limited extent.