

GENETIC IMPROVEMENT

Sires Ranked by Number of Sons Registered, 2021

In 2021, there were 129,213 animals recorded by the American Jersey Cattle Association. Those animals were sired by 3,359 different bulls (*3,212 recorded sires*). Which bulls are used most widely? Who are the leading sires of sons?

A total of 61 bulls sired 10 or more sons registered in 2021. In total, these bulls sired 36% of all Jerseys—male and female (46,525)—and 59.1% of all males recorded (2,754) during the year. The 40 bulls siring 10 or more sons are listed below.

Studying the top 10, 20 or 30 of these bulls is important for two reasons. First, they are largely determining the breed's production capability in the near future. Second, they are going to continue to exert their influence upon the breed's genetic merit for production and functional fitness for many years through their registered sons. For the past several years, it has been trending towards GCode bulls making up a large part of this group. However, this year we also see proven sires like "Listowel-P" and "Chrome" among the top 10.

The relative genetic contribution of the 61 sires with 10 or more sons to the genetic pool for 2021, is indicated by the weighted average

(bottom line of the table). The average GJPI is +87 of the sires and they have a +3.0 Productive Life (PL) and are +6.1 for GJUI. This average is higher than the raw average of their PTAs. The bulls with the highest PTAs are contributing the most to the average genetic merit of sons registered in 2021.

Bulls by Group

The top 10 bulls ranked by the number of sons registered sired a total of 12,994 offspring, of which 658 were sons. The group carried the highest GJPI average at +125 and averaged +627 for PTA Milk; \$573 Cheese Merit Dollars; and \$561 for Net Merit dollars. Other averages are +4.1 for PL, and 82% Reliability. This is the fourth year for "Chrome" to rank among the top 10 sires of sons.

The second group of 10 sires, was very similar to the first group in traits and carries the highest PTA Milk of +781 and +108 GJPI. The group sired 313 sons and 10,046 daughters.

The last two groups of bulls are made up of an even mix of high production and high type bulls with more than 400 registered sons.

* Bulls included are Generation Count 4 or higher with a BBR 94 or above.

Rank	2021	2020	Sire Name	Registered Progeny %							Genomic Predicted Transmitting Ability										% PTA					
				JH1	JNS	Sons	Daus.	Total	REL	Milk	Fat	Protein	CM\$	NMS	FM\$	SCS	PL	DPR	CCR	HCR	EFI	REL	FS	GJPI	GJUI	
1			HILLVIEW LISTOWEL-P	F	C	95	552	647	99	1211	53	52	702	689	609	2.78	5.4	-2.4	-0.8	0.4	8.9	99	0.4	145	0.0	
2			VICTORY S-S-I MIAMI HOLEINONE-ET	F	G	88	1,382	1,470	77	657	50	41	621	610	510	3.00	3.8	-0.7	0.1	1.1	9.3	79	1.5	129	9.8	
3	6		ISDK VJ RAASTRUP HIHL GISLEV	F	F	85	520	605	89	-299	44	22	457	431	275	2.63	2.5	2.3	3.4	4.4	3.4	80	-0.6	123	-1.6	
4			ROWLEYS 1996 DANIEL TUCKER {6}-ET	F	G	78	511	589	74	812	50	41	708	698	619	2.95	6.1	0.3	0.8	1.5	7.6	77	1.1	148	14.0	
5			AVI-LANCHE KIWA DIMITRI-P-ET	C	G	65	924	989	77	198	48	28	545	529	421	2.83	4.3	-1.6	-0.4	1.9	7.3	79	0.7	111	9.4	
6			JX JER BEL MALDINI ARCHIE {5}-ET	F	G	60	2,721	2,781	78	667	46	36	493	479	398	2.78	2.8	-1.4	-1.5	3.1	7.9	80	1.1	105	9.1	
7			TOG FEDERER 37562-P-ET	F	F	53	152	205	76	23	49	27	586	569	442	2.89	4.7	0.7	2.0	3.5	7.4	78	-0.1	126	-0.9	
8		1	RIVER VALLEY CECE CHROME-ET	F	D	49	4,842	4,891	99	491	32	16	359	355	344	2.83	2.4	0.2	0.9	1.0	9.6	99	2.1	83	15.6	
9			VIERRA TENPENNY-ET	F	F	44	668	712	78	1713	59	59	643	639	603	3.00	3.1	-1.8	-0.7	1.2	8.3	79	0.5	139	3.1	
10			TOG ISNER-P-ET	F	F	41	64	105	77	798	39	29	620	613	583	2.79	6.3	2.7	3.5	2.7	8.1	79	0.6	144	5.8	
			<i>Summary for Bulls 1-10</i>				658	12,336	12,994	82	627	47	35	573	561	480	2.85	4.1	-0.2	0.7	2.1	7.8	83	0.7	125	6.4
11			AHLEM KIWA ENSIGN 24617-ET	F	D	40	1,207	1,247	77	292	12	14	425	421	394	2.94	5.6	0.4	2.0	3.5	8.5	80	0.8	93	15.5	
12			JER-Z-BOYZ JADYN-ET	C	G	38	796	834	77	667	53	38	521	513	432	3.10	2.6	0.0	0.4	1.4	8.1	79	1.1	107	3.7	
13			JX DODAN LH TROOPER {4}	F	G	38	514	552	77	695	56	43	655	641	535	2.92	4.7	0.4	1.0	1.1	9.1	80	0.8	139	4.4	
14	4		JX CDF JLS PILGRIM THRASHER {6}-ET	F	G	34	3,308	3,342	77	747	37	35	499	491	432	2.98	4.4	2.6	3.4	3.8	7.0	79	-0.2	111	-3.9	
15			S-S-I VICTORY DASHIELL RENFROW-ET	F	D	33	261	294	77	215	51	31	471	456	339	2.94	2.8	0.3	1.7	3.2	7.8	79	1.0	98	-1.2	
16			JX FARIA BROTHERS LEONARD {5}-ET	F	G	28	247	275	76	1051	72	55	611	597	486	2.96	2.2	-2.6	-2.6	0.0	7.1	78	0.9	112	1.9	
17			SUN VALLEY ABS JUGGERNAUT {6}	F	G	27	27	54	77	143	70	40	652	628	456	2.84	3.4	0.6	0.6	1.2	8.7	79	0.6	144	2.2	
18			PRIMUS VICEROY CALIBAN-ET	F	G	26	3,228	3,254	79	625	31	30	445	436	380	2.87	4.0	1.0	2.4	2.5	8.9	81	0.6	99	5.3	
19	29		JX RIVER VALLEY TRIUMPH {5}-ET	F	G	25	308	333	98	2161	55	60	403	406	428	3.00	-1.8	-3.5	-2.7	2.6	8.4	95	0.8	80	-0.8	
20			JX VIERRA SINATRA {4}-ET	F	F	24	150	174	76	1212	42	40	521	516	494	2.86	4.4	-1.4	-1.1	0.3	7.9	79	2.0	100	18.2	
			<i>Summary for Bulls 11-20</i>				313	10,046	10,359	79	781	48	39	520	511	438	2.94	3.2	-0.2	0.5	2.0	8.2	81	0.8	108	4.5
21	11		JX RIVER VALLEY CHIEF {6}-ET	F	F	23	2,384	2,407	96	1809	74	56	839	836	825	2.89	4.6	-0.7	0.1	1.7	7.9	94	2.3	178	14.3	
22			JX CAL-MART NORM HENRY {4}-ET	F	D	23	191	214	76	753	57	40	520	510	429	3.00	2.0	-0.1	-0.1	0.7	7.1	79	0.8	115	8.2	
23			JX JER-Z-BOYZ SSI GOALS {5}-P-ET	F	G	23	78	101	76	797	34	29	574	568	540	2.87	6.2	1.4	2.7	2.8	6.2	78	1.0	124	3.4	
24			PINE-TREE CHROME NAVIDAD {6}-ET	F	G	22	1,639	1,661	79	805	52	40	501	492	418	2.99	1.8	-1.6	-0.8	2.4	9.0	80	1.5	101	4.1	
25			JX SUNSET CANYON GOT MAID {5}-ET	F	G	22	1,210	1,232	99	1587	75	66	755	740	646	2.76	4.9	-3.3	-2.6	-0.9	8.5	99	0.5	138	-5.5	
26			CAL-MART COMPLETELY WORTHY {6}-ET	C	G	22	129	151	78	644	57	42	502	491	388	3.07	1.7	0.4	1.3	0.9	8.2	80	0.1	109	-3.0	
27			ISNZ CRESCENT EXCELL MISTY-ET			22	57	79	67	-2253	-36	-43	-393	-409	-526	2.92	-0.5	4.9	3.1	0.6	2.7	57	-2.6	-65	-13.7	
28			HILMAR MAGNUS MCCLAIN-ET	F	F	21	145	166	77	586	49	32	465	456	387	2.96	1.8	-1.7	-0.7	1.8	8.7	79	0.5	100	3.1	
29			PROGENESIS SPIRAL-ET	F	F	21	77	98	77	1362	57	53	727	718	657	2.89	4.6	-1.7	-0.8	2.9	8.2	79	1.9	147	12.6	
30			PEAK RAZOR SHARP-ET	F	G	21	32	53	76	565	65	40	656	641	529	2.89	4.8	-1.2	0.5	2.2	8.5	79	0.3	130	-0.6	
			<i>Summary for Bulls 21-30</i>				220	5,942	6,162	80	666	48	36	515	504	429	2.92	3.2	-0.4	0.3	1.5	7.5	80	0.6	108	2.3
31	30		ELLIOTTS REGENCY CASINO-ET	F	G	20	1,431	1,451	99	-434	-2	9	102	92	-8	3.09	1.4	-0.1	0.3	1.1	9.1	99	1.9	19	15.9	
32			RIVER VALLEY VENUS VIP-ET	F	F	20	601	621	98	-2058	-72	-62	-544	-542	-536	3.12	-0.1	0.8	0.4	-0.3	4.4	96	1.4	-126	21.9	
33			JX VIERRA ELVIS {6}-ET	F	F	20	105	125	78	499	69	42	583	570	447	3.10	2.9	-2.9	-1.5	1.6	7.6	80	1.2	104	4.1	
34			JX AVI-LANCHE VICEROY DASHIELL {6}-ET	C	G	18	3,493	3,511	96	543	35	29	349	344	287	3.09	2.5	0.7	2.3	3.9	6.0	95	1.2	76	4.2	
35			JX TWINRIDGE ALTASSO {4}-ET	F	G	17	45	62	75	600	63	41	634	622	516	3.03	3.2	0.6	1.0	2.5	5.7	76	1.3	144	15.4	
36			PEAK ENLITE-ET	C	G	17	37	54	76	850	65	52	569	557	436	3.09	1.7	-2.1	-0.6	3.1	8.7	79	0.6	119	1.9	
37		31	DUTCH HOLLOW OLIVER-P	F	G	16	924	940	99	290	15	2	89	93	124	3.01	0.2	-2.2	-2.4	-1.3	9.2	99	1.4	5	11.2	
38			ISAU CAIRNBRAE BONTINO			16	289	305	65	-812	-6	-11	-51	-57	-117	3.07	0.3	-0.1	0.2	0.8	9.5	95	0.4	-10	3.6	
39		17	CHILLI ACTION COLTON-ET	F	F	15	655	670	99	-1801	-28	-43	-267	-269	-312	3.24	-0.9	0.7	0.3	0.2	6.5	99	1.7	-61	16.1	
40			VICTORY S-S-I MIAMI FRINGE-ET	F	G	15	624	639	77	418	35	30	512	501	418	2.94	4.0	1.1	1.5	1.3	8.5	78	1.2	113	11.2	
			<i>Summary for Bulls 31-40</i>				174	8,204	8,378	86	-191	17	9	198	191	126	3.08	1.5	-0.4	0.1	1.3	7.5	85	1.2	38	10.5

For 61 bulls siring 10 or more sons:

Genetic Evaluation Average

1,629 44,896 46,525 82 408 36 27 422 413 341 2.95 3.0 -0.4 0.2 1.5 7.9 83 0.9 87 6.1