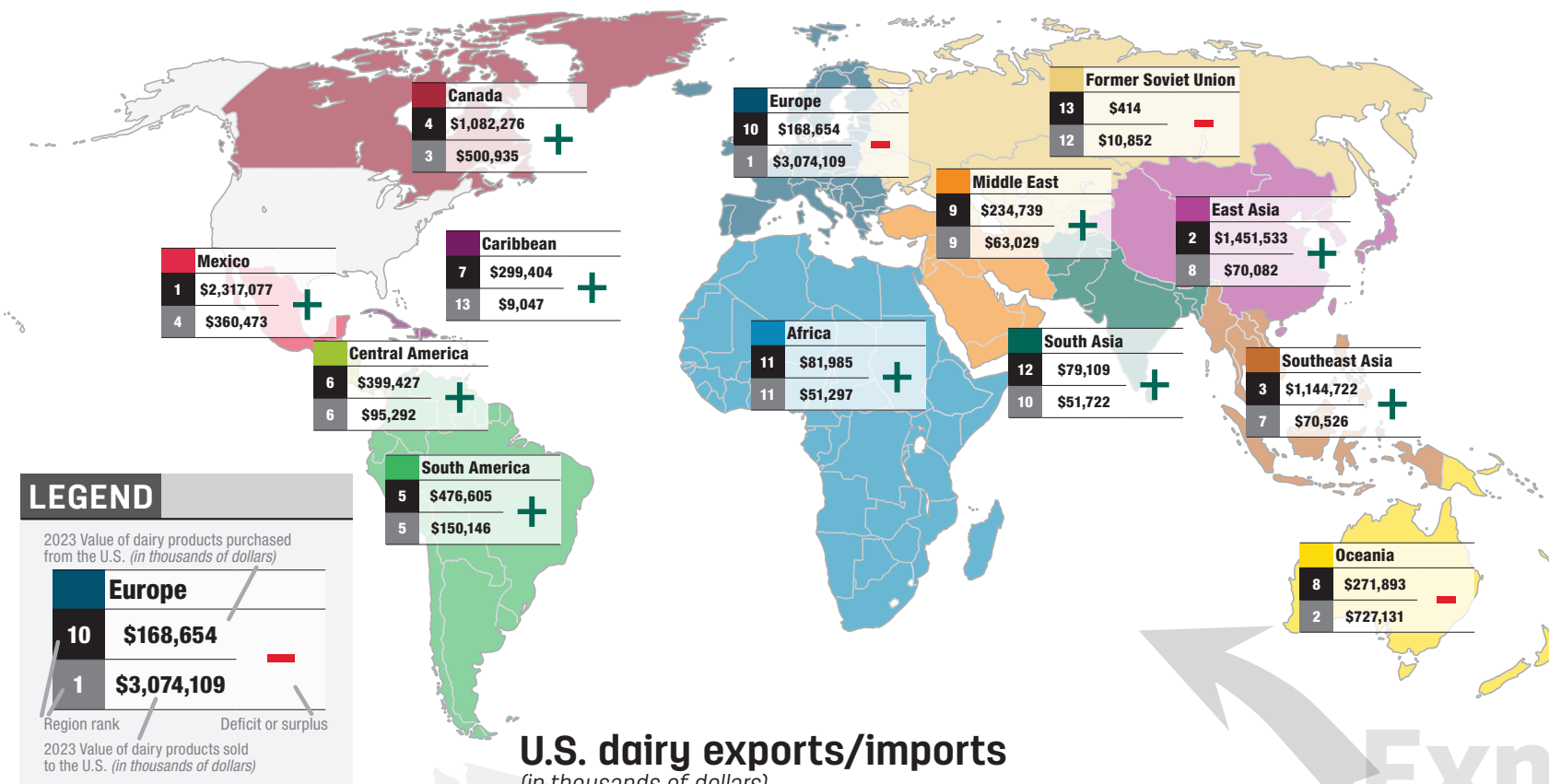


2023 U.S. dairy trade & processing

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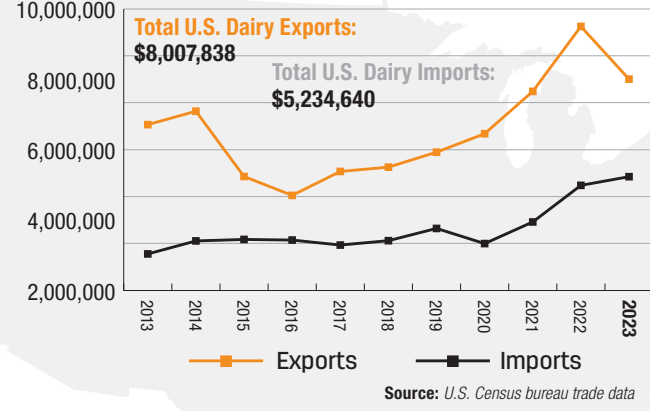
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Top 15 countries selling dairy products to the U.S.

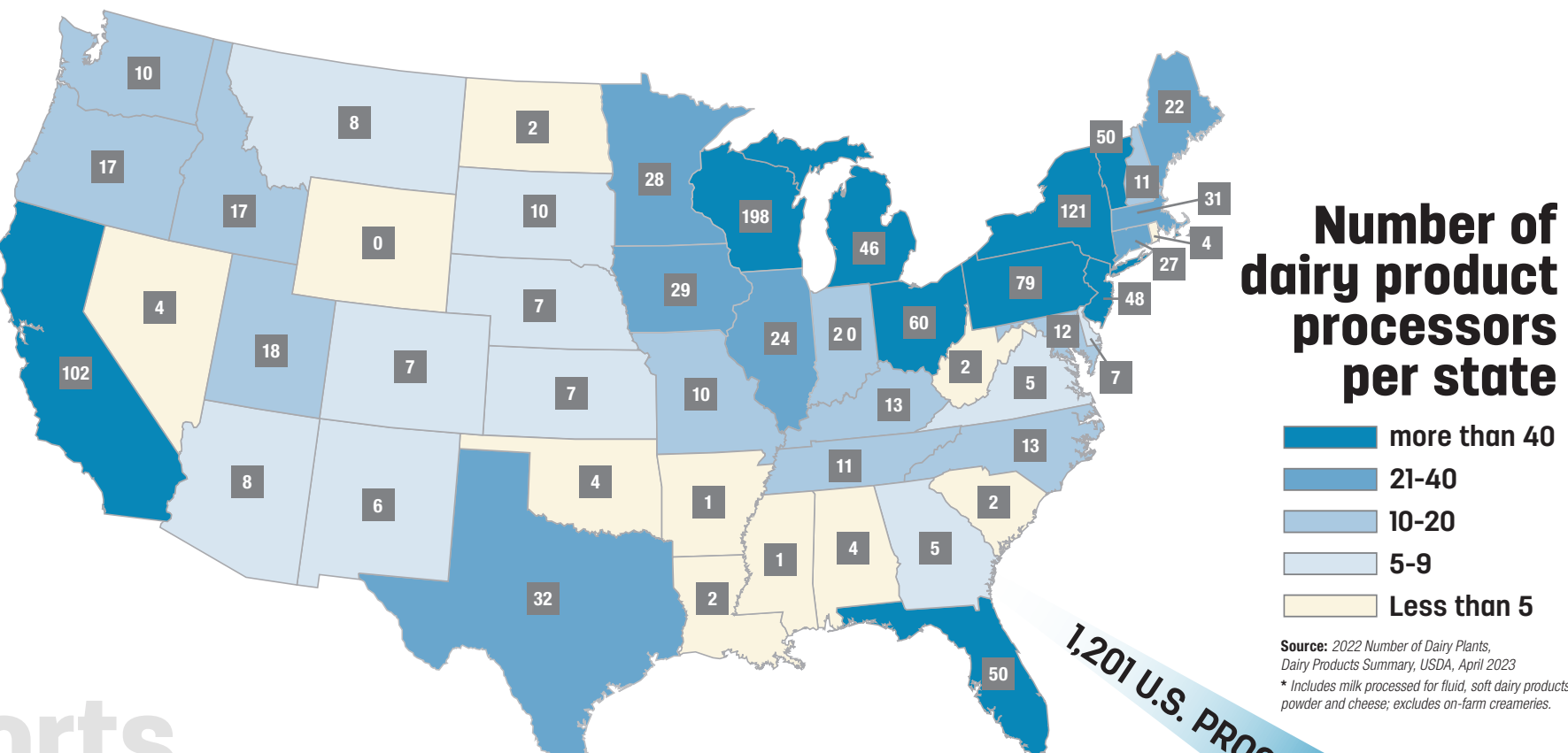
Rank	Country	2023 Imports (in thousands of dollars)
1	Ireland	702,355
2	New Zealand	696,258
3	Italy	593,507
4	Canada	500,935
5	France	367,873
6	Mexico	360,473
7	Netherlands	241,972
8	Denmark	198,645
9	Spain	189,055
10	United Kingdom	172,482
11	Germany	154,963
12	Switzerland	129,116
13	Poland	105,320
14	Nicaragua	81,273
15	Greece	72,403

U.S. dairy exports/imports (in thousands of dollars)

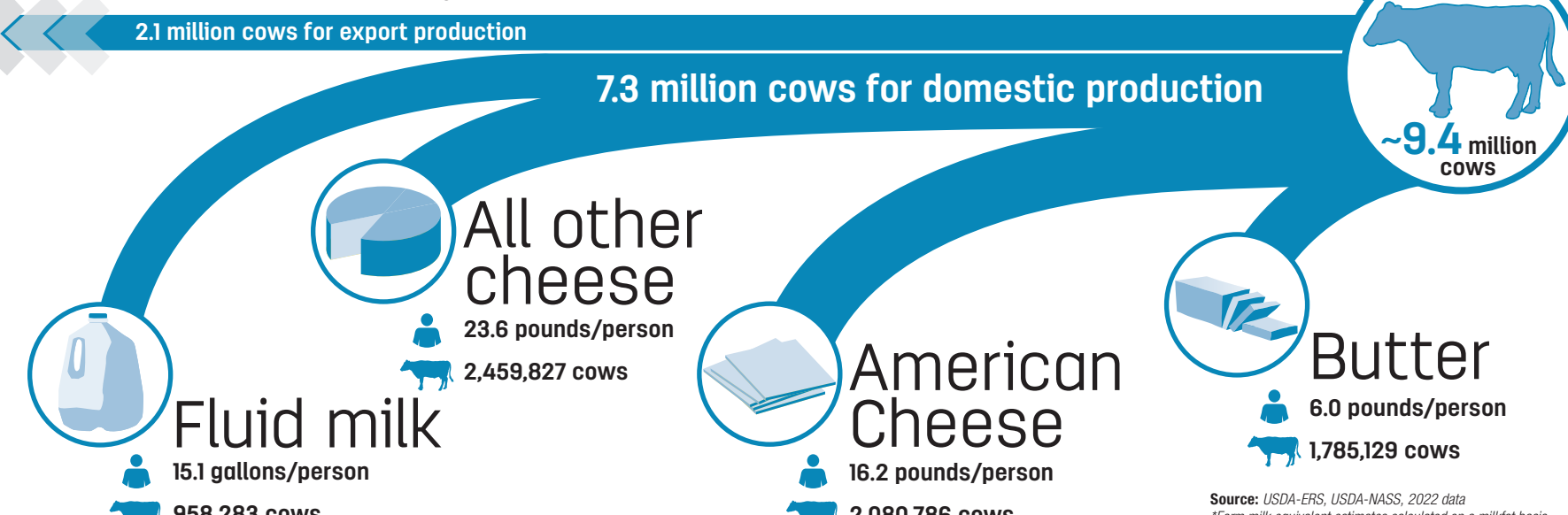


Top 15 countries buying U.S. dairy products

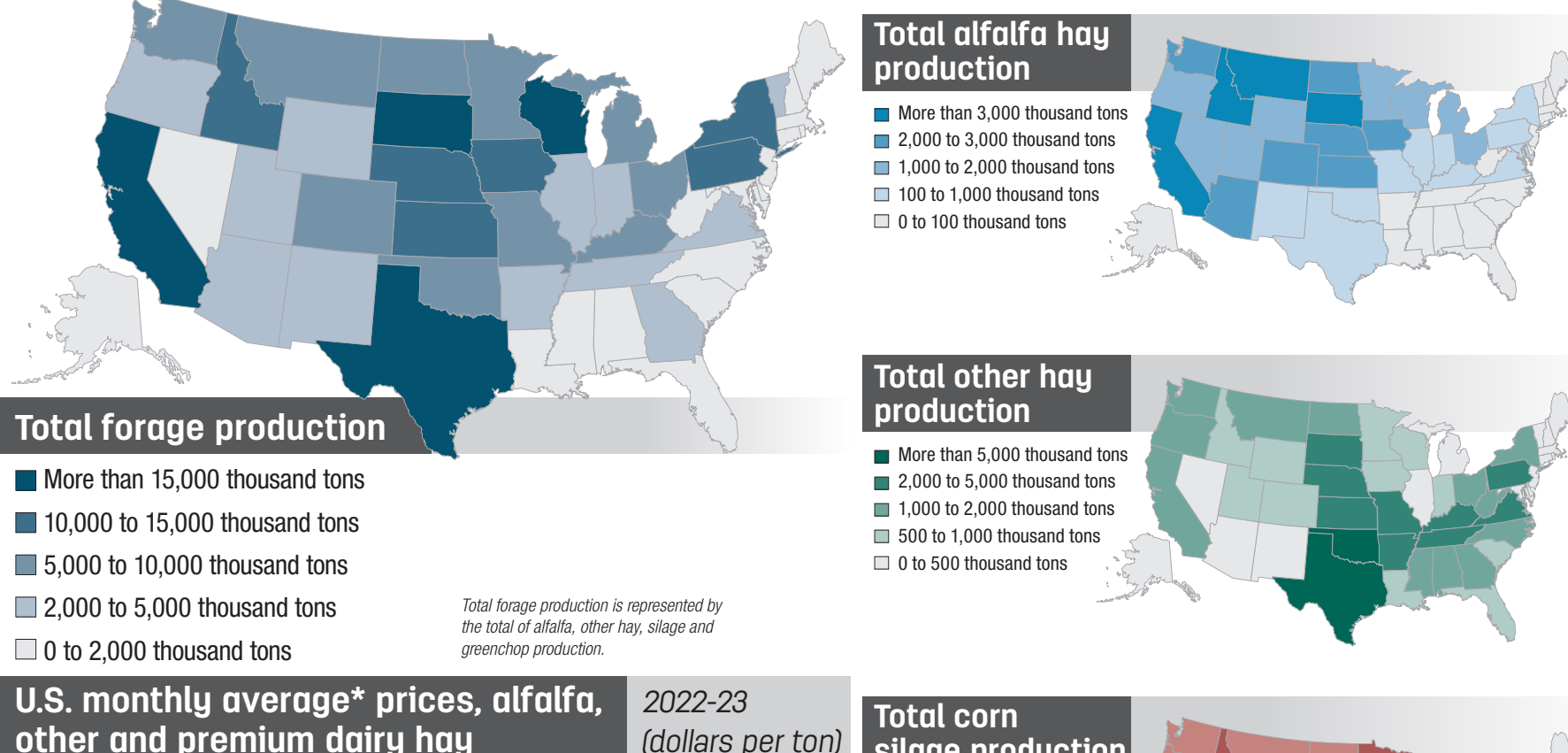
Rank	Country	2023 Exports (in thousands of dollars)
1	Mexico	2,317,077
2	Canada	1,082,276
3	China	607,679
4	Japan	389,441
5	Philippines	373,131
6	South Korea	320,982
7	Indonesia	310,950
8	Australia	182,822
9	Vietnam	146,124
10	Dominican Republic	133,084
11	Colombia	126,500
12	Malaysia	126,160
13	Peru	119,209
14	Taiwan	116,098
15	Guatemala	111,164



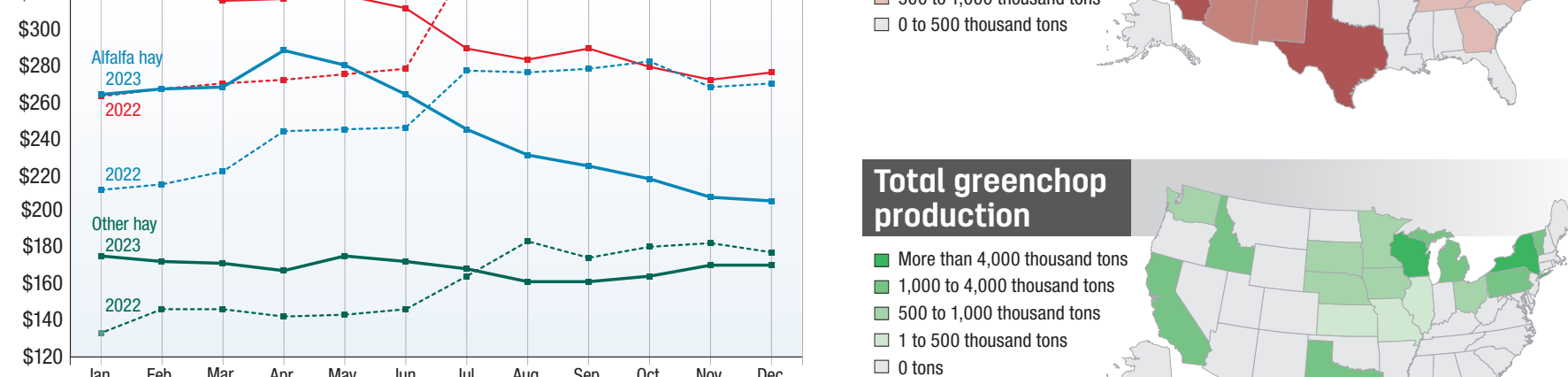
Per-capita consumption of select dairy products (in quantity per person and number of cows required for production)



2023 U.S. forage statistics



U.S. monthly average* prices, alfalfa, other and premium dairy hay (dollars per ton)



* Average prices paid in 27 major hay-producing states
** Weighted average price for Premium/Supreme alfalfa hay in the five largest milk-producing states: California, Idaho, New York, Texas and Wisconsin.

PROGRESSIVE DAIRY 2023 U.S. dairy statistics

2023 was a year of lower annual milk production

Progressive Dairy Editor Audrey Schmitz

Lower milk prices, dairy income margins that reached catastrophic levels, and shrinking heifer and cow numbers that restricted supplies and increased costs of replacement animals all contributed to an uncommon trend in 2023 – total annual milk production that was lower than the year before. Dairy herd attrition and consolidation continued.

U.S. milk production
U.S. milk production fell to 226.36 billion pounds in 2023, down 52 million pounds from 2022. Annual milk production had exceeded year-earlier totals for most of the past quarter century, down only in 2001 and 2009.

Fifteen states registered annual milk production increases during 2023, led by South Dakota and Indiana. Offsetting those gains, 31 states yielded production declines compared with 2022, led by Arkansas and Mississippi.

State ranking
Based on annual milk production, there were several minor changes in major dairy state rankings compared to 2022. Kentucky and North Carolina moved ahead to 26 and 27, respectively, while Missouri fell two positions to 28. New Jersey moved ahead of Mississippi to 42.

Licensed herds
In another year of attrition and consolidation, the annual average number of dairy farms commercially licensed to sell milk fell to 26,290, a decline of 1,642 (about 6%) from the year before and down about 20,685 (44%) since 2013.

On a percentage basis, year-over-year declines were fairly steady across the U.S., but 90% of the decline in herd numbers occurred in the Midwest and East. Wisconsin remains the nation's leader in the number of herds, at 5,920, but it declined by 430 in 2023. Herd numbers were down a combined 350 in Minnesota and New York, and down 160 in Michigan.

Cow numbers
The U.S. cow herd averaged 9,386 million cows in 2023, down 14,000 head from 2022's average. The year featured some growth in cow numbers during the first quarter, a trend that reversed as milk prices and income margins slipped to catastrophic levels. By November, cow numbers fell to about 9.345 million head, down 56,000 head from January 2023.

Nine states increased cow numbers in 2023, but almost two-thirds of the total increase came in just two states, South Dakota and Idaho.

Twenty-eight states had fewer cows than the year before, with 11 others unchanged. Largest declines were in New Mexico (-17,000), California (-5,000) and Missouri (-5,000).

California remains the national leader in cow numbers with 1.714 million head, followed by Wisconsin with 1.27 million head.

U.S. dairy industry 15-year overview

Year	Total milk production (in millions of lbs)	Number of cows (in thousands)	Milk per cow (lbs per year)	Licensed dairy herds	Average herd size
2009	189,334	9,203	20,573	54,942	168
2010	192,848	9,119	21,148	53,132	172
2011	196,164	9,194	21,336	51,291	179
2012	200,537	9,233	21,720	49,281	187
2013	201,231	9,224	21,816	46,975	196
2014	206,054	9,257	22,259	44,809	207
2015	208,597	9,314	22,396	43,534	214
2016	212,405	9,325	22,778	41,819	223
2017	215,466	9,392	22,941	40,219	234
2018	217,568	9,398	23,150	37,468	251
2019	218,441	9,337	23,395	34,207	273
2020	223,220	9,388	23,777	31,657	297
2021	226,293	9,449	23,949	29,842	317
2022	226,462	9,402	24,087	27,932	337
2023	226,364	9,386	24,117	26,290	357

Dairy receipts as a % of state's total farm receipts

Top 10 (lbs of milk)	Top 10 (number of licensed herds)	Top 10 (as a % of state's total farm receipts)
Michigan 27,564	Wisconsin 5,920	Vermont 65%
Wyoming 26,226	Pennsylvania 4,940	New York 54%
Colorado 25,930	New York 3,040	Wisconsin 47%
Texas 25,802	Minnesota 1,855	New Mexico 45%
New York 25,522	Ohio 1,465	Idaho 38%
Wisconsin 25,294	California 1,070	Pennsylvania 27%
Idaho 25,228	Michigan 850	Michigan 24%
Nebraska 24,815	Iowa 750	Arizona 23%
Iowa 24,679	Indiana 700	New Hampshire 22%
New Mexico 24,587	Vermont 500	Nevada 21%

which averaged 2,710 cows, a 92-cow increase from 2022.

Dairy herds averaged more than 2,000 head in four states (New Mexico, Arizona, Texas and Wyoming) and more than 1,000 head in seven others. The size of Midwest herds grew by an average of 9.8%, reaching 277 cows per herd.

Milk per cow
Influenced by high feed costs and base-excess programs, national average annual milk production per cow increased just 0.1%, up just 30 pounds in 2023 to 24,117 pounds.

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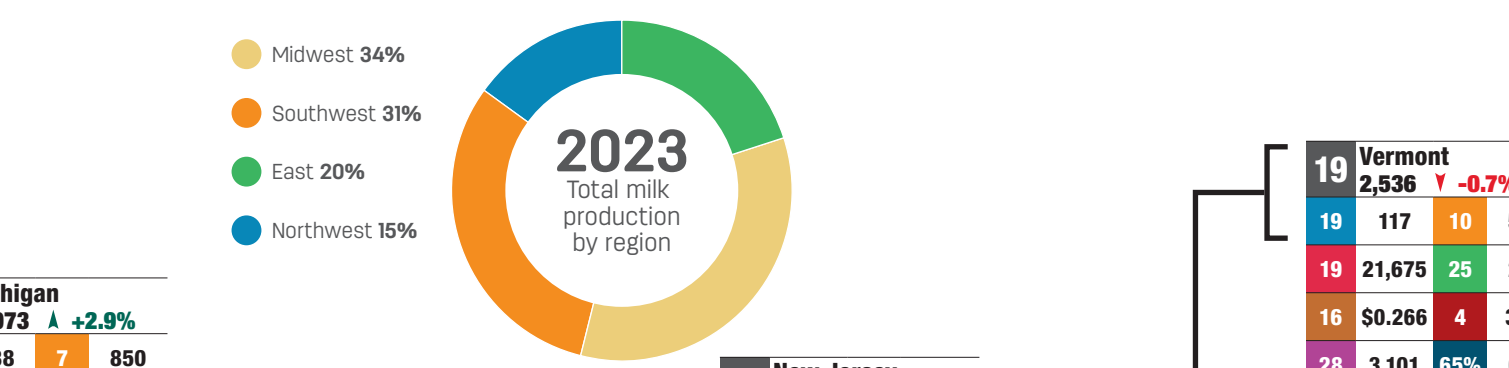
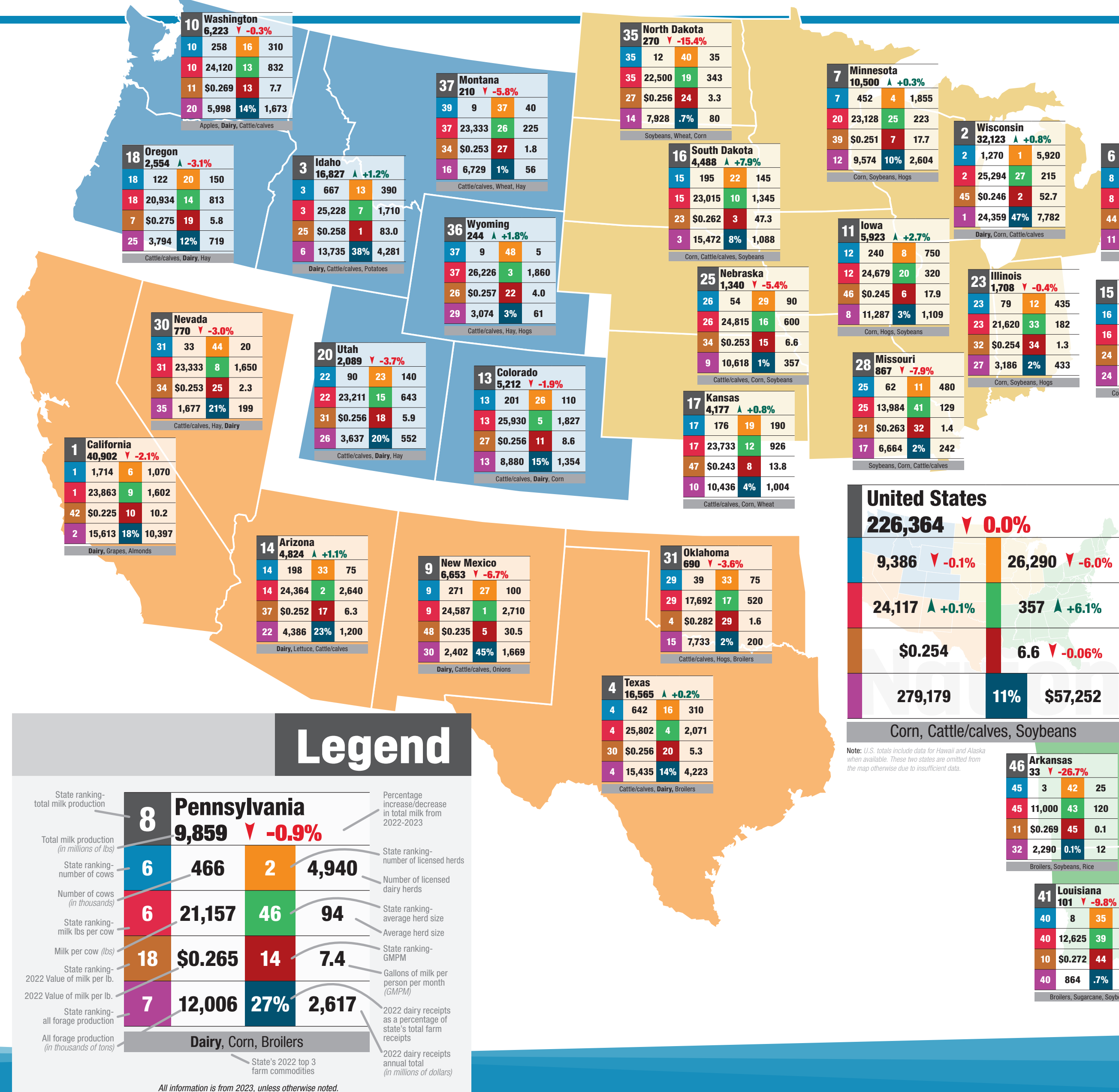
2023 U.S. dairy statistics



10-year changes by state													
State rank- total milk production	State	Total milk production (in millions of lbs)	Total milk production (in millions of lbs)	Change in total milk from 2013-2023	Number of cows (1,000 head)	Number of cows (1,000 head)	Change in number of cows 2013-2023	Milk per cow (lbs. per year)	Milk per cow (lbs. per year)	Change in milk per cow 2013-2023	Number of licensed dairy herds	Number of licensed dairy herds	Change in number of licensed dairy herds 2013-2023
2013	2023	2013	2023	2013	2023	2013	2023	2013	2023	2013	2023	2013	2023
1	California	41,256	40,102	-354	1,780	1,714	-66	23,178	23,863	+685	1,535	1,070	-465
2	Wisconsin	27,572	32,123	+4,551	1,271	1,270	-1	21,693	25,294	+3,601	10,860	5,920	-4,940
3	Idaho	13,431	16,827	+3,396	573	667	+94	23,440	25,228	+1,788	550	390	-160
4	Texas	9,610	16,565	+6,955	437	642	+205	21,991	25,802	+3,811	460	310	-150
5	New York	13,463	16,079	+2,616	610	630	+20	22,070	25,522	+3,452	5,040	3,040	-2,000
6	Michigan	9,164	12,073	+2,909	380	438	+58	24,116	27,564	+3,448	2,030	850	-1,180
7	Minnesota	9,138	10,500	+1,362	464	452	-12	19,694	23,230	+3,536	3,865	1,855	-2,010
8	Pennsylvania	10,552	9,859	-693	533	466	-67	19,797	21,157	+1,360	7,200	4,940	-2,260
9	New Mexico	8,057	6,653	-1,394	323	271	-52	24,944	24,587	-357	140	100	-40
10	Washington	6,336	6,223	-113	266	258	-8	23,820	24,120	+300	480	310	-170
11	Iowa	4,607	5,923	+1,316	208	240	+32	22,149	24,679	+2,530	1,425	750	-675
12	Ohio	5,448	5,658	+210	270	253	-17	20,178	22,364	+2,186	2,930	1,465	-1,465
13	Colorado	3,328	5,212	+1,884	137	201	+64	24,292	25,930	+1,638	130	110	-20
14	Arizona	4,489	4,824	+335	190	198	+8	23,626	24,364	+738	110	75	-35
15	Indiana	3,830	4,513	+683	176	190	+14	21,761	23,753	+1,992	1,315	700	-615
16	South Dakota	2,023	4,488	+2,465	94	195	+101	21,521	23,015	+1,494	275	145	-130
17	Kansas	2,932	4,177	+1,245	134	176	+42	21,881	23,733	+1,852	325	190	-135
18	Oregon	2,514	2,554	+40	123	122	-1	20,439	20,934	+495	260	150	-110
19	Vermont	2,606	2,536	-70	134	117	-17	19,448	21,675	+2,227	930	500	-430
20	Utah	2,131	2,089	-42	95	90	-5	22,432	23,211	+779	220	140	-80
21	Georgia	1,568	2,027	+459	80	91	+11	19,600	22,275	+2,675	240	90	-150
22	Florida	2,383	1,950	-433	123	96	-27	19,374	20,313	+939	130	55	-75
23	Illinois	1,830	1,708	-122	96	79	-17	19,063	21,620	+2,557	745	435	-310
24	Virginia	1,742	1,420	-322	95	68	-27	18,337	20,882	+2,545	640	365	-275
25	Nebraska	1,165	1,340	+175	54	54	NC	21,574	24,815	+3,241	200	90	-110
26	Kentucky	1,070	915	-155	71	45	-26	15,070	20,333	+5,263	780	360	-420
27	North Carolina	935	894	-41	46	38	-8	20,326	23,526	+3,200	250	120	-130
28	Missouri	1,349	867	-482	92	62	-30	14,663	13,984	-679	1,290	480	-810
29	Maryland	972	846	-126	50	40	-10	19,440	21,150	+1,710	470	300	-170
30	Nevada	639	770	+131	29	33	+4	22,034	23,333	+1,299	20	20	NC
31	Oklahoma	779	690	-89	45	39	-6	17,311	17,692	+381	180	75	-105
32	Maine	606	543	-63	31	25	-6	19,548	21,720	+2,172	300	150	-150
33	Tennessee	765	467	-298	48	25	-23	15,938	18,680	+2,742	390	130	-260
34	Connecticut	370	427	+57	18	18	NC	20,556	23,722	+3,166	130	85	-45
35	North Dakota	341	270	-71	18	12	-6	18,944	22,500	+3,556	110	35	-75
36	Wyoming	128	244	+116	6	9	+3	21,367	26,226	+4,859	20	4	-16
37	Montana	298	210	-88	14	9	-5	21,286	23,333	+2,047	70	40	-30
38	New Hampshire	272	208	-64	13	10	-3	20,923	20,800	-123	120	90	-30
39	Massachusetts	230	179	-51	13	9	-4	17,692	19,889	+2,197	155	100	-55
40	South Carolina	264	148	-116	16	8	-8	16,500	18,500	+2,000	80	25	-55
41	Louisiana	206	101	-105	16	8	-8	12,875	12,625	-250	130	60	-70
42	New Jersey	127	86	-41	7	4	-3	18,143	21,500	+3,357	75	40	-35
43	Mississippi	186	74	-112	14	6	-8	13,286	12,333	-953	100	40	-60
44	West Virginia	152	66	-86	10	5	-5	15,200	13,200	-2,000	80	30	-50
45	Delaware	94	48	-46	4.9	3	-2	19,521	17,815	-1,706	40	15	-25
46	Arkansas	105	33	-72	9	3	-6	11,667	11,000	-667	85	25	-60
47	Alabama	117	28	-89	9	2	-7	13,000	14,000	+1,000	45	10	-35
48	Rhode Island	17	10	-7	0.9	0.5	0	19,000	19,400	+400	15	9	-6
U.S. total		201,231	226,364	+25,133	9,224	9,386	+162	21,816	24,117	+2,301	46,975	26,290	-20,685

Source: February 2023 Milk Production Report, USDA
Statistical ties are represented by the same numerical ranking.

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Top 100 dairy counties (based on May 2023's milk production)

Rank	State	County	Rank	State	County
1	CA	Tulare	51	WI	Outagamie
2	CA	Merced	52	PA	Franklin
3	CA	Kings	53	NY	St. Lawrence
4	CA	Kern	54	ID	Canyon
5	CA	Stanislaus	55	MI	Sanilac
6	ID	Cassia	56	NM	Lea
7	ID	Gooding	57	WI	Calumet
8	CO	Weld	58	CA	Riverside
9	CA	Fresno	59	ID	Lincoln
10	TX	Hartley	60	WA	Grant
11	WA	Yakima	61	WA	Whitcom
12	AZ	Maricopa	62	VT	Franklin
13	ID	Jerome	63	OH	Wayne
14	CA	San Joaquin	64	TX	Dallam
15	PA	Lancaster	65	VT	Addison
16	AZ	Pinal	66	NY	Ontario
17	ID	Twin Falls	67	ID	Elmore
18	NM	Curry	68	KS	Gray
19	CA	Madera	69	MI	Missaukee
20	WI	Fond du Lac	70	NY	Jefferson
21	TX	Moore	71	WI	Oconto
22	TX	Palmer	72	WA	Franklin
23	WI	Manitowoc	73	CA	San Bernardino
24	NM	Chaves	74	WI	Green
25	TX	Castro	75	TX	Bailey
26	WI	Clark	76	WI	Sheboygan
27	NY	Cayuga	77	WI	Lafayette
28	WI	Marathon	78	GA	Macon
29	WI	Dane	79	MI	Ionia
30	MN	Stearns	80	NY	Livingston
31	NM	Roosevelt	81	NY	Onondaga
32	WI	Brown	82	TX	Comanche
33	WI	Kewaunee	83	SD	Grant
34	TX	Deaf Smith	84	ID	Owyhee
35	TX	Ertch	85	SD	Minnehaha
36	NY	Wyoming	86	SD	Brookings
37	WI	Shawano	87	PA	Lebanon
38	MI	Huron	88	WI	Dunn
39	TX	Lamb	89	WI	Waupaca
40	CO	Morgan	90	VA	Rockingham
41	MI	Clinton	91	TX	Hale
42	MI	Gratiot	92	WI	Chippewa
43	IA	Sioux	93	NY	Lewis
44	OR	Morrow	94	IA	O'Brien
45	MN	Stevens	95	MI	Lenawee
46	IN	Jasper	96	OR	Tillamook
47	WI	Grant	97	MI	Vinona
48	KS	Hamilton	98	SD	Turner
49	NY	Genesee	99	NY	Morrison
50	WI	Dodge	100	WI	Marquette

Source: May 2023 Federal Milk Marketing Data, USDA
Note: This data represents only one month of federally marketed milk production. It may not accurately reflect a county's annual milk production and does not account for milk disposed due to price. Estimated May 2023 milk production for dairy counties.