

**Dairy 2007
State Selection
5/3/2006**

Purpose of document:

To arrive at a general agreement on States to be included in the NAHMS Dairy 2007 study and to document the selection process.

Materials to review:

1. Attached spreadsheets on number of milk cows and operations by State, by:
 - a. State FIPS code
 - b. Number of milk cows—descending order
 - c. Weighted percent of the U.S. total—descending order
 - d. Number of herds/operations—descending order
2. Attached spreadsheet for number of cows and operations by State indicating percent change over the last 10-year period and over the last 5 years
3. Attached spreadsheet identifying preliminary study States
4. Attached spreadsheets repeating item 2 above for milk cows plus milk replacement heifers

I. Process (1+ milk cows):

1. Identify States with 2% or more of the U.S. total for both number of milk cows and number of herds/operations.

<u>State</u>	<u>Milk Cows</u>		<u>Herds/Operations</u>		<u>Wtd. %</u>
	<u>Number (000)</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	
CA	1,770	19.54	2,300	2.94	12.90
IA	187	2.06	2,500	3.19	2.52
MI	312	3.44	2,800	3.58	3.50
MN	445	4.91	5,800	7.41	5.91
NY	652	7.20	6,700	8.56	7.74
OH	273	3.01	4,400	5.62	4.06
PA	558	6.16	8,900	11.37	8.24
WI	1,240	13.69	15,300	19.54	16.03
8-State total	5,437	60.01	48,700	62.21	60.90

2. Identify remaining States with 2% or more of either number of milk cows or operations.

<u>State</u>	<u>Milk Cows</u>		<u>Herds/Operations</u>		<u>Wtd. %</u>
	<u>Number (000)</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	
ID	473	5.22	850	1.09	3.57
IN	158	1.74	2,200	2.81	2.17
KY	102	1.13	2,200	2.81	1.80
MO	114	1.26	2,700	3.45	2.13
NM	340	3.75	450	0.57	2.48
TX	325	3.59	1,500	1.92	2.92

WA	237	2.62	810	1.03	1.98
7-State total	1,749	19.31	10,710	13.68	17.05
15-State total	7,186	79.32	59,410	75.89	77.95

3. Identify remaining States roughly close to the 2% cutoff level.

State	Milk Cows		Herds/Operations		Wtd. %
	Number (000)	Percent	Number	Percent	
VA	103	1.14	1,400	1.79	1.40
VT	143	1.58	1,300	1.66	1.61
17-State total	7,432	82.04	62,110	79.34	80.96

4. Identify remaining States that could receive consideration. States in parentheses were in the Dairy 2002 study.

State	Milk Cows		Herds/Operations		Wtd. %
	Number (000)	Percent	Number	Percent	
AZ	165	1.82	210	0.27	1.20
(CO)	105	1.16	660	0.84	1.03
(FL)	134	1.48	480	0.61	1.13
(IL)	104	1.15	1,400	1.79	1.40
KS	110	1.21	900	1.15	1.19
OK	75	0.83	1,400	1.79	1.21
OR	121	1.34	790	1.01	1.21
(TN)	70	0.77	1,100	1.40	1.03
8-State total	884	9.76	6,940	8.86	9.4
25-State total	8,316	91.80	69,050	88.20	90.36

5. Identify States by region for reporting of results with consideration to regions used in the previous study.

1991 (28 States):

West CA, CO, ID, OR, WA
 Midwest IA, IL, IN, MI, MN, NE, OH, WI
 Northeast NY, PA, six New England States
 Southeast AL, FL, GA, MD, NC, TN, VA

1996 (20 States):

West CA, ID, OR, NM, TX, WA
 Midwest IA, IL, IN, MI, MN, MO, OH, WI
 Northeast NY, PA, VT

Southeast FL, KY, TN

2002 (21 States):

West	CA, CO, ID, NM, TX, WA	35.88
Midwest	IL, IN, IA, MI, MN, MO, OH, WI	31.26
Northeast	NY, PA, VT	14.94
Southeast	FL, KY, TN, VA	<u>4.52</u>

21-State % total cows based on 1/2006: 86.60

2007:

17 States:	<u>17 Sts %</u>	<u>Other 8 Sts.</u>	<u>8 Sts %</u>	<u>25 Sts %</u>
West CA, ID, NM, TX, WA	34.72	AZ, CO, OK, OR	5.15	39.87
Midwest IN, IA, MI, MN, MO, OH, WI	30.11	IL, KS	2.36	32.47
Northeast NY, PA, VT	14.94			14.94
Southeast KY, VA	<u>2.27</u>	FL, TN	<u>2.25</u>	<u>4.52</u>
17-State % total cows based on 1/2006:	82.04		10.90	91.80

6. For each State identified that could receive consideration for being in the study (item 4), the following pros and cons are provided:

AZ, CO	Steady, rather large percentage increases in 5-year increments. Now up to 140K head and 105K, respectively.
FL	Declining inventory but still 134K head and needed for SE regional estimates.
IL	Declining inventory to 104K; if IL field resources are short, suggest dropping, which will eliminate competition with swine study.
KS	Steady increases in inventory to 110K head. Could be added if needed.
OK	Decreasing inventory to 75K; do not included them.
OR	Increasing inventory, to 121K; in 1991 and 1996, but excluded from 2002 study but wanted in.
TN, VA	Decreasing inventories to 70K and 103K, respectively, but need for SE region.

7. For each of the previous study States, excluding those discussed in the previous item, identify any States that could/should be dropped.

MO Declining inventory to 114K; could be dropped along with IL.

8. Other comments:

MD For a small geographic area they have 70K head of milk cows; would their contribution to NE or SE if included?

High plains States (KS, NE, ND, SD, MT, and WY) are eliminated.

No changes made to tables below

II. Process (30+ milk cows):

1. Identify States with 2% or more of the U.S. total for both number of milk cows and number of herds/operations.

<u>State</u>	<u>Milk Cows</u>		<u>Herds/Operations</u>		<u>Wtd. %</u>
	<u>Number (000)</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	
CA	1,768	19.92	1,980	3.55	13.37
IA	181	2.04	1,970	3.53	2.64
MI	304	3.43	1,930	3.46	3.44
MN	432	4.86	5,180	9.28	6.63
NY	639	7.20	5,300	9.50	8.12
OH	251	2.83	2,500	4.48	3.49
PA	544	6.13	7,100	12.72	8.77
WI	1,203	13.55	13,100	23.47	17.52
8-State total	5,322	59.96	39,060	69.99	63.98

2. Identify remaining States with 2% or more of either number of milk cows or operations.

<u>State</u>	<u>Milk Cows</u>		<u>Herds/Operations</u>		<u>Wtd. %</u>
	<u>Number (000)</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	
ID	472	5.31	655	1.17	3.66
IN	147	1.66	1,200	2.15	1.85
KY	94	1.06	1,220	2.19	1.51
MO	108	1.22	1,450	2.60	1.77
NM	339	3.82	180	0.32	2.42
TX	322	3.63	740	1.33	2.71
WA	236	2.66	560	1.00	2.00
7-State total	1,718	19.36	6,005	10.76	15.92
15-State total	7,040	79.32	45,065	80.75	79.90

3. Identify remaining States roughly close to the 2% cutoff level.

<u>State</u>	<u>Milk Cows</u>		<u>Herds/Operations</u>		<u>Wtd. %</u>
	<u>Number (000)</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	
VT	140	1.58	1,110	1.99	1.74
16-State total	7,180	80.90	46,175	82.74	81.64

4. Identify remaining States that could receive consideration. States in parentheses were in the Dairy 2002 study.

<u>State</u>	<u>Milk Cows</u>		<u>Herds/Operations</u>		<u>Wtd. %</u>
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	

	(000)				
AZ	165	1.86	110	0.20	1.19
(FL)	133	1.50	180	0.32	1.03
(IL)	101	1.14	1,050	1.88	1.44
KS	108	1.22	425	0.76	1.04
OR	120	1.35	400	0.72	1.10
(VA)	100	1.13	900	1.61	1.32
6-State total	727	8.20	3,065	5.49	7.12
22-State total	7,907	89.10	49,240	88.23	88.76

5. Identify States by region for reporting of results with consideration to regions used in the previous study.

1991 (28 States):

West CA, CO, ID, OR, WA
 Midwest IA, IL, IN, MI, MN, NE, OH, WI
 Northeast NY, PA, six New England States
 Southeast AL, FL, GA, MD, NC, TN, VA

1996 (20 States):

West CA, ID, OR, NM, TX, WA
 Midwest IA, IL, IN, MI, MN, MO, OH, WI
 Northeast NY, PA, VT
 Southeast FL, KY, TN

2002 (21 States):

West CA, CO, ID, NM, TX, WA 35.88
 Midwest IL, IN, IA, MI, MN, MO, OH, WI 31.26
 Northeast NY, PA, VT 14.94
 Southeast FL, KY, TN, VA 4.52

21-State % total cows based on 1/2006: 86.60

2007:

16 States:	16 Sts %	Other 6 Sts.	6 Sts %	22 Sts %
West CA, ID, NM, TX, WA	24.16	AZ, OR	2.29	26.45
Midwest IN, IA, MI, MN, MO, OH, WI	37.34	IL, KS	2.48	39.82
Northeast NY, PA, VT	18.63			18.63
Southeast KY	<u>1.51</u>	FL, VA	<u>2.35</u>	<u>3.86</u>
16-State % total cows based on 1/2006:	81.64		7.12	88.76

6. For each State identified that could receive consideration for being in the study (item 4), the following pros and cons are provided:

AZ Steady, rather large percentage increases in 5-year increments. Now up to 140K head.
 FL Declining inventory but still 134K head and needed for SE regional estimates.
 IL Declining inventory to 104K; if IL field resources are short, suggest dropping, which will eliminate competition with swine study.
 KS Steady increases in inventory to 110K head. Could be added if needed.

- OR Increasing inventory, to 121K; in 1991 and 1996, but excluded from 2002 study but wanted in.
- VA Decreasing inventory to 103K, but need for SE region.

III. Process (50+ milk cows):

1. Identify States with 2% or more of the U.S. total for both number of milk cows and number of herds/operations.

<u>State</u>	<u>Milk Cows</u>		<u>Herds/Operations</u>		<u>Wtd. %</u>
	<u>Number (000)</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	
CA	1,766	21.27	1,910	4.67	14.63
MI	289	3.48	1,510	3.69	3.56
MN	356	4.29	3,280	8.02	5.78
NY	590	7.11	4,000	9.78	8.17
OH	218	2.63	1,650	4.03	3.19
PA	438	5.27	4,400	10.75	7.47
WI	1,048	12.62	9,200	22.48	16.56
7-State total	4,705	56.67	25,950	63.42	59.36

2. Identify remaining States with 2% or more of either number of milk cows or operations.

<u>State</u>	<u>Milk Cows</u>		<u>Herds/Operations</u>		<u>Wtd. %</u>
	<u>Number (000)</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	
ID	469	5.65	595	1.45	3.97
IA	163	1.96	1,420	3.47	2.56
MO	96	1.15	1,100	2.69	1.77
NM	339	4.08	180	0.44	2.63
TX	319	3.85	680	1.66	2.97
VT	132	1.58	890	2.17	1.82
WA	236	2.84	540	1.32	2.23
7-State total	1,754	21.11	5,405	13.20	17.95
14-State total	6,459	77.78	31,355	76.62	77.31

3. Identify remaining States roughly close to the 2% cutoff level.

<u>State</u>	<u>Milk Cows</u>		<u>Herds/Operations</u>		<u>Wtd. %</u>
	<u>Number (000)</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	

IN	130	1.56	740	1.81	1.66
15-State total	6,589	79.34	32,095	78.43	78.97

4. Identify remaining States that could receive consideration. States in parentheses were in the Dairy 2002 study.

State	Milk Cows		Herds/Operations		Wtd. %
	Number (000)	Percent	Number	Percent	
AZ	165	1.98	110	0.27	1.30
(FL)	133	1.60	175	0.43	1.13
(IL)	93	1.11	800	1.96	1.45
KS	105	1.26	335	0.82	1.09
KY	80	0.96	810	1.98	1.37
OR	119	1.43	370	0.90	1.22
SD	74	0.89	480	1.17	1.00
(VA)	96	1.15	770	1.88	1.44
8-State total	865	10.38	3,850	9.41	10.00
23-State total	7,454	89.72	35,945	87.84	88.97

5. Identify States by region for reporting of results with consideration to regions used in the previous study.

1991 (28 States):

West CA, CO, ID, OR, WA
 Midwest IA, IL, IN, MI, MN, NE, OH, WI
 Northeast NY, PA, six New England States
 Southeast AL, FL, GA, MD, NC, TN, VA

1996 (20 States):

West CA, ID, OR, NM, TX, WA
 Midwest IA, IL, IN, MI, MN, MO, OH, WI
 Northeast NY, PA, VT
 Southeast FL, KY, TN

2002 (21 States):

West CA, CO, ID, NM, TX, WA 35.88
 Midwest IL, IN, IA, MI, MN, MO, OH, WI 31.26
 Northeast NY, PA, VT 14.94
 Southeast FL, KY, TN, VA 4.52

21-State % total cows based on 1/2006: 86.60

2007:

15 States:	15 Sts %	Other 8 Sts.	8 Sts %	23 Sts %
West CA, ID, NM, TX, WA	26.43	AZ, OR	2.52	29.98
Midwest IN, IA, MI, MN, MO, OH, WI	35.08	IL, KS, SD	3.54	37.62

Northeast NY, PA, VT	17.46			17.46
Southeast	<u>0.00</u>	FL, KY, VA	<u>3.94</u>	<u>3.94</u>
15-State % total cows based on 1/2006:	78.97		10.00	88.97

6. For each State identified that could receive consideration for being in the study (item 4), the following pros and cons are provided:

- AZ Steady, rather large percentage increases in 5-year increments. Now up to 140K head and 105K, respectively.
- FL Declining inventory but still 134K head and needed for SE regional estimates.
- IL Declining inventory to 104K; if IL field resources are short, suggest dropping, which will eliminate competition with swine study.
- KS Steady increases in inventory to 110K head. Could be added if needed.
- KY
- OR Increasing inventory, to 121K; in 1991 and 1996, but excluded from 2002 study but wanted in.
- SD
- VA Decreasing inventory to 103K, but need for SE region.