Northeast Farms to Food

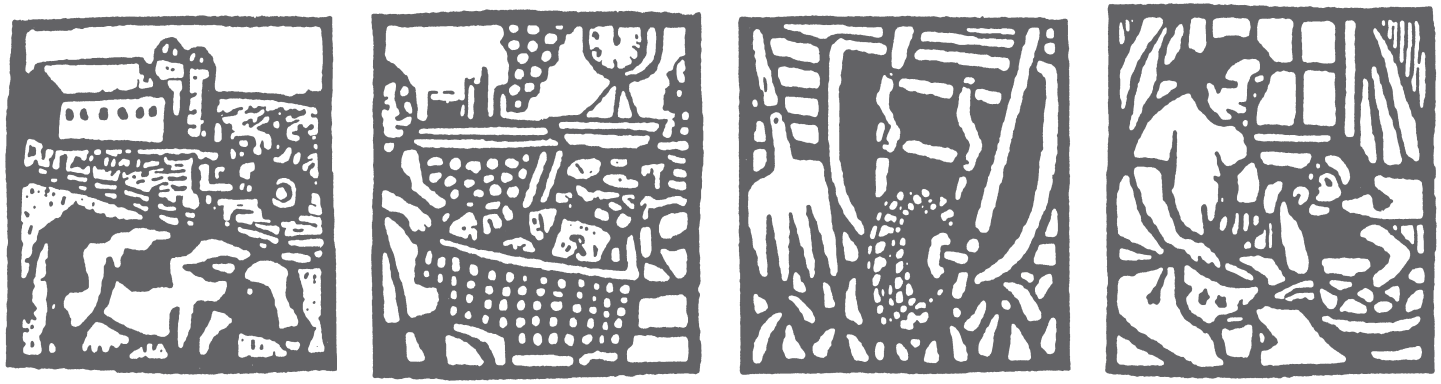
Understanding Our Region's Food System

UPDATE–OCTOBER 2004

Includes new data from the USDA 2002 Census of Agriculture

Northeast Sustainable Agriculture Working Group

University of New Hampshire Office of Sustainability Programs



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But… we should first learn the winds and the nature of the sky,
the customary cultivation and the ways of the place,
what each region bears and rejects.
Here corn shoots up, and there grapes do.
Elsewhere young trees grow strong and the wild grasses.

– Virgil, The Georgics, Book I. 29 B.C.

Introduction

In 2002, the Northeast Sustainable Agriculture Working Group (NESAWG) published *Northeast Farms to Food: Understanding Our Region's Food System*. Northeast Farms to Food (NEFTF) provides a comprehensive look at the Northeast food system from production through processing and distribution to consumption. It includes over 100 charts and graphs, "farm and food facts", explanatory text and a chapter on findings and recommendations. The data for *Northeast Farms to Food* was gathered over a period of several years from numerous sources. One of those sources was the census of agriculture.

Two years ago, the US Department of Agriculture conducted its 2002 census of agriculture. Such a census is conducted every five years. The full results were released in 2004.

NESAWG partnered with the Office of Sustainability Programs at the University of New Hampshire to produce this update. It contains information from the 2002 census, and compares with the previous (1997) census; it does not include any data from other sources. It also includes new GIS maps.

How to Use This Update

This update is organized to complement NEFTF. It focuses on the five sections of chapter one, which is where the Ag Census data is located. The figures in the supplement correspond to the same or similar figures in NEFTF, so you can use the data in both documents side-by-side. In some cases, however, the data was collected and/or is presented differently than in NEFTF, so direct comparisons are not as easy to make. The 2002 census also collected new data that was previously not available. Included are some of these interesting new data sets in additional figures.

This update is the next step in an ongoing process to profile and monitor the Northeast food system. NESAWG hopes you will use NEFTF and all its updates to increase our collective understanding of trends, issues and opportunities for advancing a vibrant, diverse and sustainable Northeast food system.

Overview:
About the US Census of Agriculture

The 2002 Census of Agriculture was conducted by the US Department of Agriculture (USDA). The Census obtains and reports agricultural statistics for each county or county equivalent, state, and the nation. Program and policy decisions about the Census created several changes to the data published for 2002. For example new information was collected about certified organically produced crops. Some of the changes affected data comparability for some items.

History

For 156 years (1840 - 1996), the U.S. Department of Commerce, Bureau of the Census was responsible for collecting census of agriculture data. In 1997 responsibility for the census of agriculture from the Bureau of the Census to the USDA, National Agricultural Statistics Service (NASS). The 2002 Census of Agriculture is the 26th Federal census of agriculture and the second conducted by NASS.

The first agriculture census was taken in 1840 as part of the sixth decennial census of population. The agriculture census continued to be taken as part of the decennial census through 1950. Separate mid-decade censuses of agriculture were conducted beginning in 1925. In 1976, Congress authorized the census of agriculture coincide with other economic censuses. This adjustment in timing established the agriculture census on a 5-year cycle collecting data for years ending in 2 and 7. Once the data is collected, it takes about two years to release the results. USDA has been increasingly diligent about trying to reach all farms and farmers.

Uses of Census Data

According to the published Census*, "the census of agriculture is the leading source of facts and statistics about the Nation's agricultural production. It provides a detailed picture of U.S. farms and ranches every five years and is the only source of uniform, comprehensive agricultural data for every State and county or county equivalent in the United States.

Agriculture census data are routinely used by farm organizations, businesses, State departments of agriculture, elected representatives and legislative bodies at all levels of government, public and private sector analysts, and colleges and universities.

Agriculture census data are used to:

- Evaluate, change, promote, and formulate farm and rural policies and programs that help agricultural producers;
- Study historical trends, assess current conditions, and plan for the future;
- Formulate market strategies, provide more efficient production and distribution systems, and locate facilities for agricultural communities;
- Make energy projections and forecast needs for agricultural producers and their communities;
- Develop new and improved methods to increase agricultural production and profitability;
- Allocate local and national funds for farm programs, e.g. extension service projects, agricultural research, soil conservation programs, and land-grant colleges and universities;
- Plan for operations during drought and emergency outbreaks of diseases or infestations of pests.

In addition agricultural news media and agricultural associations use census data as background material for stories and articles on U.S. agriculture and the foods we produce."

Farm Definition

The definition of a farm that USDA uses for the census is *"is any place from which $1,000 or more of agricultural products were produced and sold, or normally would have been sold, during the census year."* The definition has changed nine times since it was established in 1850. The current definition was first used for the 1974 Census of Agriculture and has been used in each subsequent agriculture census. This definition is consistent with the definition used for current USDA surveys.

Data Changes and Comparability

USDA implemented several changes to the 2002 census program. Report form content and wording were improved, several publication tables were redesigned, and tabulated data were adjusted for coverage. In some instances, comparability with previous censuses was affected.

Report form changes included eliminating items that were no longer relevant or duplicated data collected on surveys, USDA also added new items that addressed emerging agricultural products and practices such as organic agriculture and enrollment in conservation programs. Several production-related items were deleted, as was the section on farm-related injuries and deaths.

New economic data were collected to provide a more complete picture of farm income and expenses. Questions relating to net cash income of the operator and the operation, crop insurance, and landlord share of income and expenses were added. Information about production contracts, grain storage, and organic farming was also collected.

New data was collected to reflect the changing demographics of US agriculture. For the first time, information was collected for up to three operators on each farm. For those operators who would self-identify as being of multiple races, a "more than one race" category was added. Questions relating to computer use and Internet access on the farm were included. Principal operators were asked to report whether they worked as the hired manager on the operation.

The 2002 Census of Agriculture introduced new methodology to account for all farms in the US. All 2002 published census items were re-weighted for under-coverage. To provide comparable data, comparable 1997 data published in 2002 were also re-weighted for under-coverage. These adjustments result in a more accurate picture of the US agriculture sector, but also must be taken into account when making historical comparisons with other US agriculture census data. For the complete 2002 Census of Agriculture as well as more information about the Census, and previous census data, visit www.nass.usda.gov/census

** from www.nass.usda.gov/census/census02, text.*

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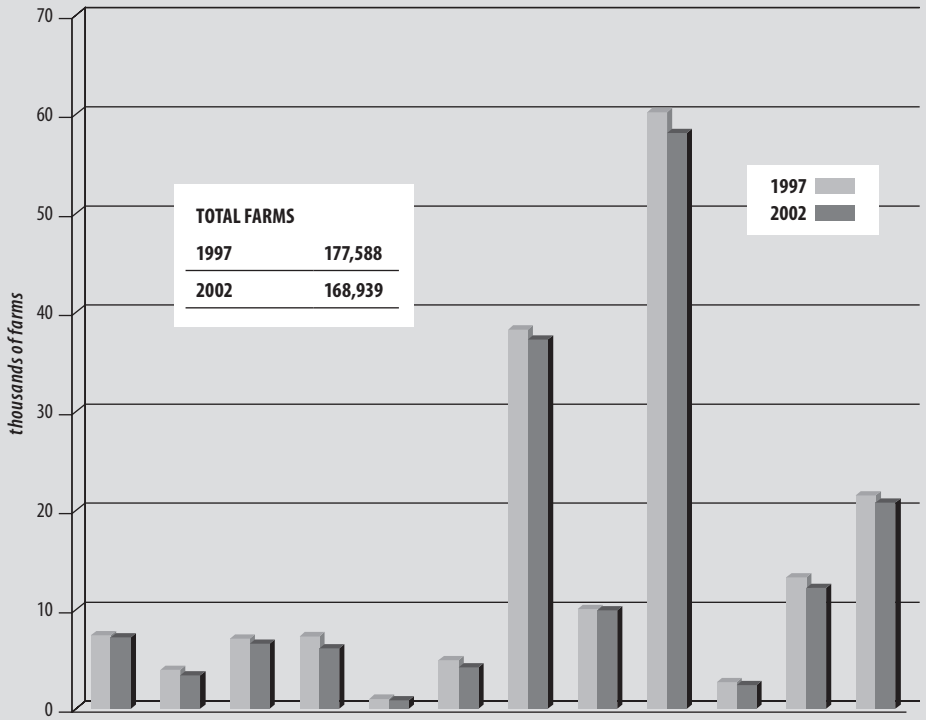
SECTION ONE
Northeast Farms and Land Resources

Please refer to page one of *Northeast Farms to Food: Understanding Our Region's Food System* for additional information.

Figure 1. NUMBER OF NE FARMS, 1997-2002
Total number of farms in the region decreased 4.9%



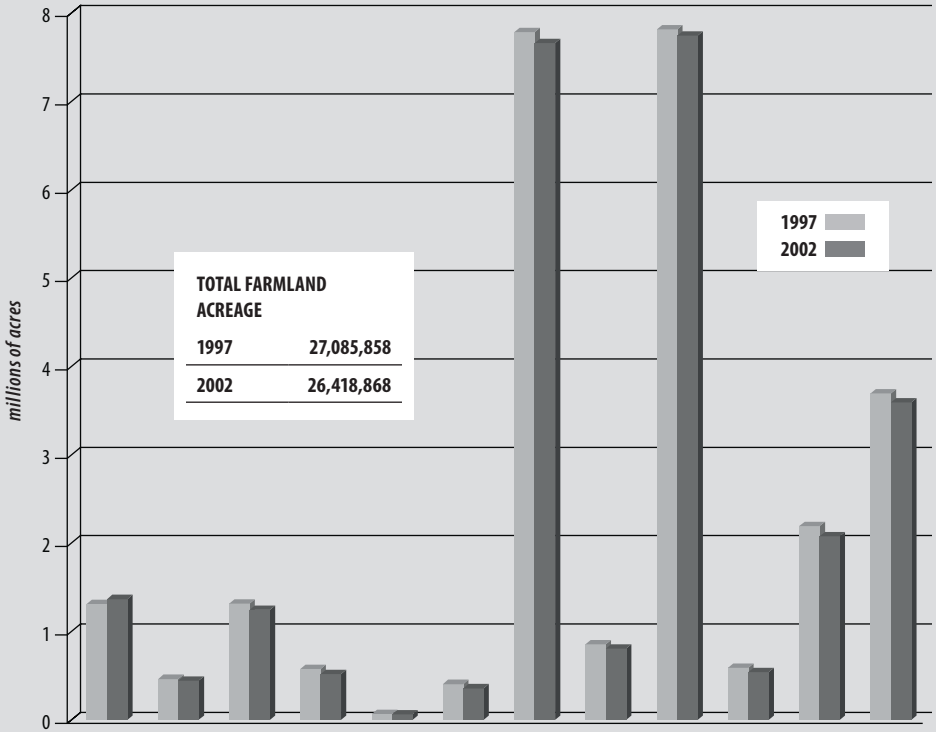
	ME	NH	VT	MA	RI	CT	NY	NJ	PA	DE	MD	WV
1997	7,404	3,928	7,063	7,307	994	4,905	38,264	10,045	60,222	2,671	13,254	21,531
2002	7,196	3,363	6,571	6,075	858	4,191	37,255	9,924	58,105	2,391	12,198	20,812

Source: US Department of Agriculture Census, 1997 and 2002

Farmland by Type

Additional information for the charts presented on this page may be found on page two of *Northeast Farms to Food: Understanding Our Region's Food System*.

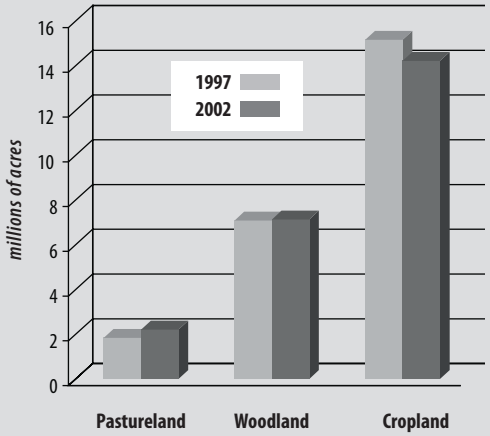
Figure 2. NE FARMLAND ACREAGE, 1997-2002



	ME	NH	VT	MA	RI	CT	NY	NJ	PA	DE	MD	WV
1997	1,313,066	463,383	1,315,315	577,637	65,083	406,222	7,788,241	856,909	7,819,648	589,107	2,193,063	3,698,204
2002	1,367,768	444,879	1,244,909	518,570	61,223	357,154	7,660,969	805,682	7,745,336	540,080	2,077,630	3,594,668

Source: US Department of Agriculture Census, 1997 and 2002

Figure 3. NE FARMLAND TYPES, 1997 & 2002



DEFINITIONS OF LAND USE

FARMLAND

Farmland acreage, described as "land in farms," consists primarily of agricultural land used for crops, pasture, or grazing. Also includes woodland and wasteland not actually under cultivation provided they were part of the total farm operation.

CROPLAND

This category includes land from which crops were harvested or hay was cut, land in orchards, vinyards, greenhouses, etc.

WOODLAND

This category includes natural or planted woodlots or timber tracts.

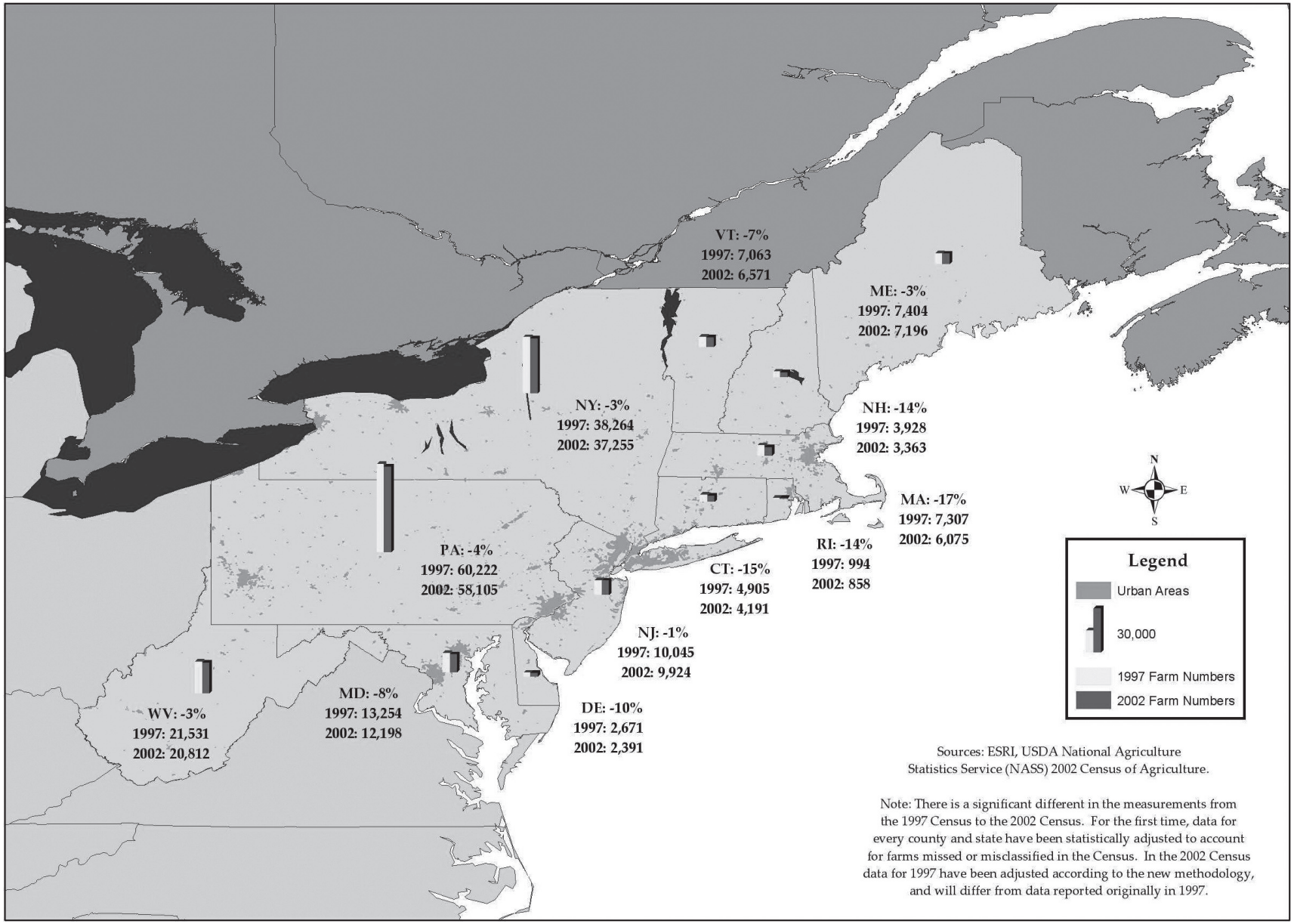
PASTURELAND

This category includes land used for pasture or grazing, some of which could have been used for crops without additional improvements. Includes some cropland and woodland used for pasture.

Source: USDA Census, 1997 and 2002

Farm Numbers in the Northeastern U.S.

U.S. Agriculture Census: 1997 & 2002



Sources: ESRI, USDA National Agriculture Statistics Service (NASS) 2002 Census of Agriculture.

Note: There is a significant different in the measurements from the 1997 Census to the 2002 Census. For the first time, data for every county and state have been statistically adjusted to account for farms missed or misclassified in the Census. In the 2002 Census data for 1997 have been adjusted according to the new methodology, and will differ from data reported originally in 1997.

Figure 4. FARM CROPLAND IN THE NE, 1997 & 2002

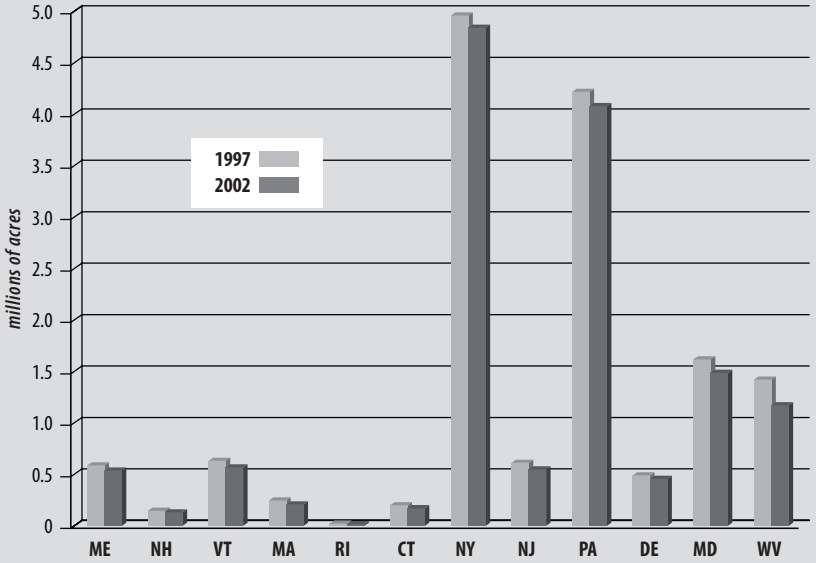


Figure 6. FARM PASTURELAND IN THE NE, 1997 & 2002

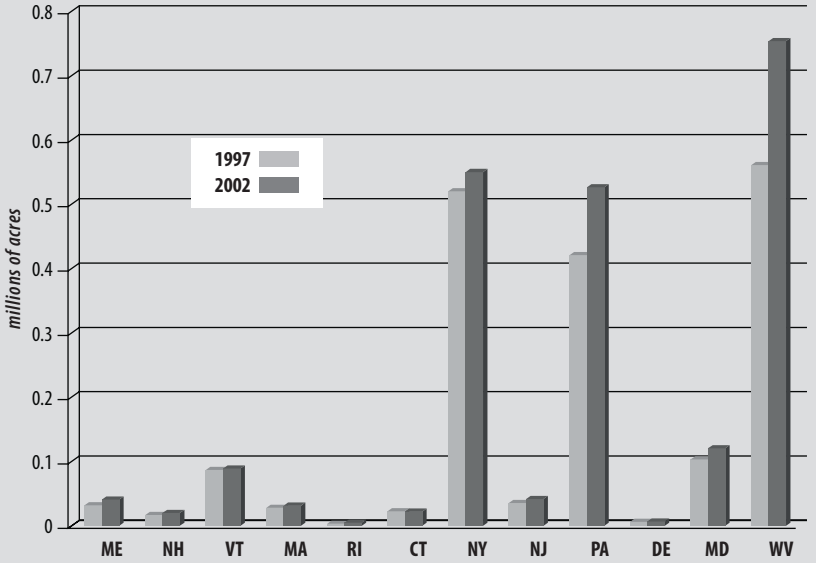
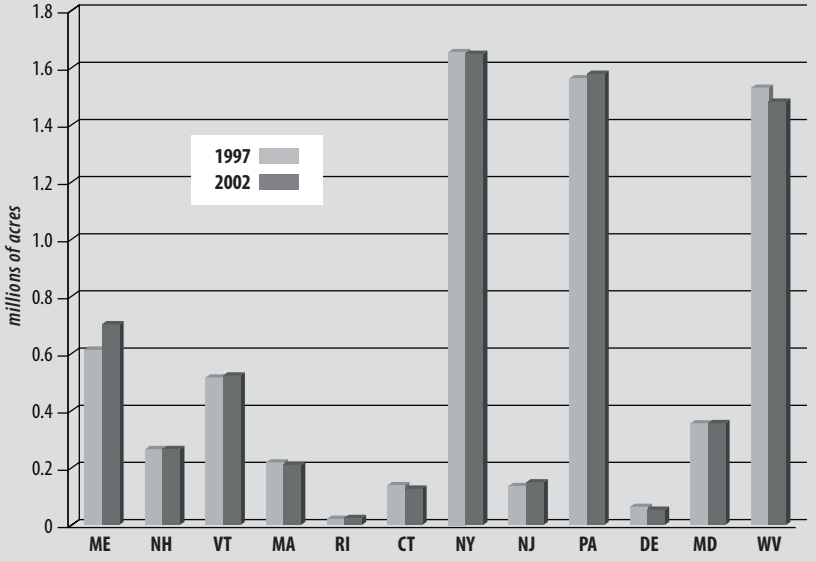


Figure 5. FARM WOODLAND IN THE NE, 1997 & 2002



Refer to page three of *Northeast Farms to Food: Understanding Our Region's Food System* for additional information regarding the figures presented on this page.

Source: US Department of Agriculture Census, 1997 and 2002

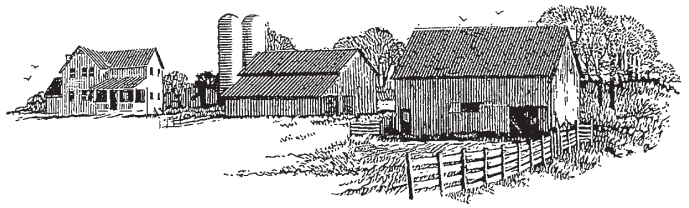


Figure 7. FARMS IN THE NE, 1997 & 2002
by size

	ME		VT		NH		MA		RI		CT	
	1997	2002	1997	2002	1997	2002	1997	2002	1997	2002	1997	2002
1-9 acres	773	918	520	477	656	507	1,791	1,429	258	208	1,065	984
10-49 acres	1,747	1,861	1,658	1,738	1,160	1,035	2,608	2,217	369	305	1,853	1,625
50-179 acres	2,802	2,506	2,433	2,216	1,351	1,138	2,124	1,673	286	271	1,447	1,077
180-499 acres	1,545	1,334	1,888	1,586	613	509	636	594	66	63	453	387
500-999 acres	393	393	449	406	116	134	118	129	13	6	75	91
100-1999 acres	113	135	100	123	25	22	26	30	1	4	26	23
2,000+ acres	31	49	15	25	7	18	4	3	1	1	4	4

	NY		NJ		PA		DE		MD		WV	
	1997	2002	1997	2002	1997	2002	1997	2002	1997	2002	1997	2002
1-9 acres	3,102	2,959	2,576	2,511	5,550	5,102	460	456	1,630	1,418	1,038	996
10-49 acres	7,723	8,359	4,307	4,481	16,283	16,862	880	794	4,500	4,412	4,296	4,676
50-179 acres	14,085	13,474	2,042	1,959	26,190	24,168	677	562	4,121	3,583	10,172	9,337
180-499 acres	9,897	8,977	766	629	9,847	9,560	359	316	2,022	1,836	4,734	4,492
500-999 acres	2,567	2,457	240	228	1,840	1,800	156	122	609	562	970	956
100-1999 acres	721	812	92	99	409	496	93	89	276	277	248	280
2,000+ acres	169	217	22	17	103	117	46	52	96	110	73	75

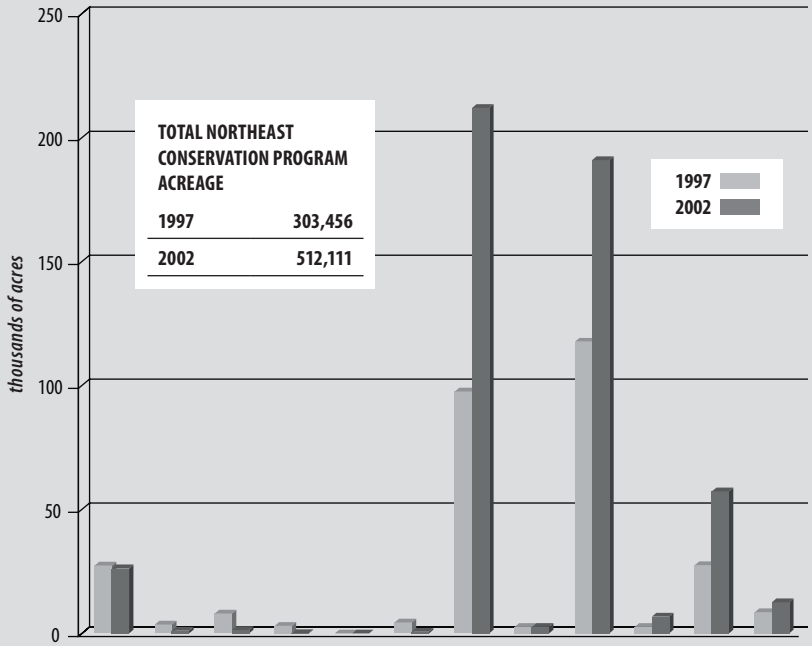
155,577 or 93.8% of all farms in the NE are 500 acres or less.

Source: US Department of Agriculture Census, 1997 and 2002

Farms by Size

Additional comparison data for the size of farms in the Northeast may be found on page four of *Northeast Farms to Food: Understanding Our Region's Food System*.

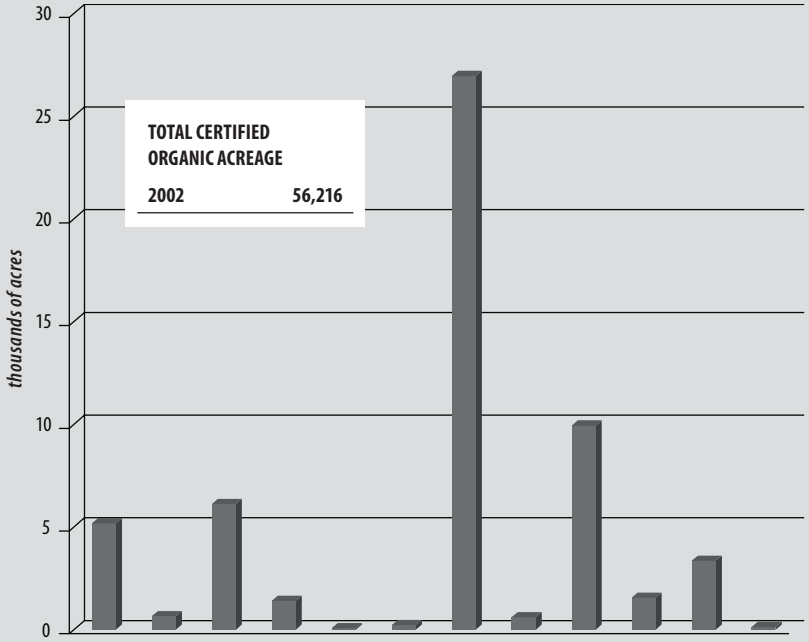
Figure 56. NE LAND IN CONSERVATION PROGRAMS, 1997 & 2002
(New data)



	ME	NH	VT	MA	RI	CT	NY	NJ	PA	DE	MD	WV
1997	27,418	3,645	8,024	3,114	D	4,506	97,617	2,671	117,712	2,605	27,529	8,615
2002	26,259	1,161	1,376	191	42	675	211,996	2,605	190,959	6,792	57,397	12,658

Source: US Department of Agriculture Census, 1997 and 2002

Figure 57. NE LAND CERTIFIED AS ORGANIC, 2002
(New data)



	ME	NH	VT	MA	RI	CT	NY	NJ	PA	DE	MD	WV
2002	5,182	658	6,123	1,406	75	228	26,955	608	9,935	1,560	3,353	133

Source: US Department of Agriculture Census, 2002

Northeast Land in Conservation Programs

This data was not included in the 2002 publication of NEFTF. It represents land enrolled in the Conservation Reserve Program and the Wetlands Reserve Program. 3.6% of the cropland and 1.9% of the total farmland in the NE is enrolled in conservation programs. In the U.S., 268, 788 farms have enrolled a total of 32,723,067 acres in these two federal conservation programs.

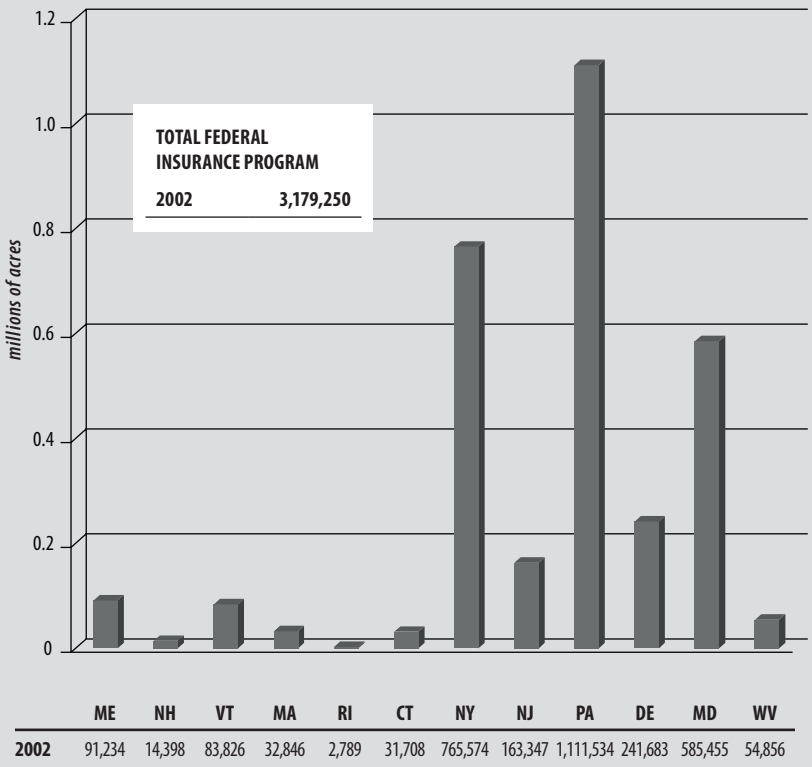
Land Used to Raise Certified Organically Produced Crops

This data was collected for the first time in 2002. Certified land in the Northeast accounts for 10% of all the certified land in the US. Four percent of the total cropland in the NE is certified organic (USDA).

Land Enrolled in Federal Crop Insurance Programs.

This data was collected for the first time in 2002. The Northeast states were designated as "underserved" regarding crop insurance, and starting in 2002, Congress appropriated funds targeted to improving crop insurance usage in our region. In 2002, insured acreage in the Northeast accounted for less than 1.5% of total insured acres in the US.

Figure 58. NE LAND ENROLLED IN FEDERAL CROP INSURANCE PROGRAMS, 2002
(New data)



	ME	NH	VT	MA	RI	CT	NY	NJ	PA	DE	MD	WV
2002	91,234	14,398	83,826	32,846	2,789	31,708	765,574	163,347	1,111,534	241,683	585,455	54,856

Source: US Department of Agriculture Census, 2002

SECTION TWO
Northeast Farmers

Please refer to page nine of *Northeast Farms to Food: Understanding Our Region's Food System* for additional information.

Figure 16. FARM OPERATORS, 1997 & 2002
by principal occupation

	Farming		Other	
	1997	2002	1997	2002
ME	3,324	3,409	4,080	3,787
NH	1,580	1,636	2,348	1,727
VT	3,615	3,486	3,448	3,085
MA	3,603	3,283	3,704	2,792
RI	467	442	527	416
CT	2,228	2,077	2,677	2,114
NY	20,607	22,664	17,657	14,591
NJ	4,204	5,193	5,841	4,731
PA	30,288	32,939	29,934	25,166
DE	1,601	1,659	1,070	732
MD	6,523	6,977	6,731	5,221
WV	8,123	10,507	13,408	10,305

Source: US Department of Agriculture Census, 1997 and 2002

Figure 17. FARM OPERATORS, 1997 & 2002
Average Age

	1997	2002
ME	53.8	53.7
NH	53.6	54.1
VT	52.7	53.9
MA	54.2	54.9
RI	54.0	54.3
CT	55.0	55.4
NY	52.9	54.1
NJ	55.2	55.1
PA	52.4	53.1
DE	53.4	54.8
MD	54.9	55.9
WV	56.2	56.3

Source: US Department of Agriculture Census, 1997 and 2002

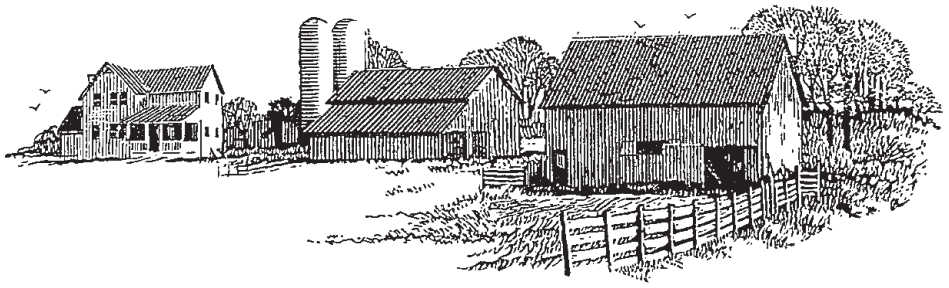


Figure 18. NE FARM OPERATORS, 2002
by race

	White			African-American			Asian		
	Farms	Operators	Acreage	Farms	Operators	Acreage	Farms	Operators	Acreage
ME	7,163	11,051	135,7281	1	1	(D)	16	19	982
NH	3,334	5,339	441,164	3	5	(D)	14	15	3,860
VT	6,543	10,376	124,0975	3	3	686	16	17	1,205
MA	6,016	9,402	516,536	25	36	645	24	33	464
RI	857	1,263	60,873	1	1	(D)	no data	no data	no data
CT	4,178	6,425	354,618	6	6	2,092	6	6	278
NY	37,026	55,896	7,637,736	87	111	10,917	82	89	8,577
NJ	9,781	14,715	796,328	82	107	4,237	70	100	4,281
PA	57,992	84,577	7,727,960	93	104	7,552	54	55	4,030
DE	2,345	3,537	535,686	25	34	1,333	27	29	809
MD	11,893	17,740	2,058,069	247	296	16,691	39	49	1,505
WV	20,750	28,946	3,574,692	41	46	4,473	15	18	(D)

	Native Hawaiian/Pacific Islander			American Indian or Al Nat			Hispanic, Spanish, Latino		
	Farms	Operators	Acreage	Farms	Operators	Acreage	Farms	Operators	Acreage
ME	3	3	(D)	36	41	12,121	162	198	27,788
NH	no data	no data	no data	18	29	2,235	65	77	8,598
VT	7	7	556	49	50	5,065	171	187	29,062
MA	1	1	(D)	22	26	1,781	159	189	16,376
RI	no data	no data	no data	3	3	(D)	29	29	3,210
CT	1	1	(D)	18	18	(D)	79	92	7,891
NY	5	7	418	126	155	14,441	537	604	79,257
NJ	2	2	(D)	30	33	1,074	210	239	9,721
PA	10	10	412	112	125	10,305	494	550	64,699
DE	no data	no data	no data	10	10	3,025	46	46	3,281
MD	6	6	712	66	71	5,882	148	164	15,664
WV	1	1	(D)	72	73	9,846	218	255	29,037

Note: Data were collected for a maximum of 3 operators per farm. As a result, some farms may have more than one operator.
Source: US Department of Agriculture Census, 2002

Figure 19. FARM OPERATORS, 2002
by gender

	Total Operators	Male	% Male	Female	% Female
ME	7,196	5,637	78.30%	1,559	21.70%
NH	3,363	2,525	75.10%	838	24.90%
VT	6,571	5,604	85.30%	967	14.70%
MA	6,075	4,770	78.50%	1,305	21.50%
RI	858	716	83.40%	142	16.60%
CT	4,191	3,323	79.30%	868	20.70%
NY	37,255	31,583	84.80%	5,672	15.20%
NJ	9,924	8,002	80.60%	1,922	19.70%
PA	58,105	52,026	89.50%	6,079	10.50%
DE	2,391	2,062	86.20%	329	13.80%
MD	12,198	10,281	84.30%	1,917	15.70%
WV	20,812	18,490	88.80%	2,322	11.60%

Source: Source: NASS 2002 Census of Agriculture State Profiles

Northeast Farm Operators by Race and Gender

Please refer to page ten of *Northeast Farms to Food: Understanding Our Region's Food System* for additional information.

Figure 20. HIRED FARM LABOR IN THE NE, 2002

	Hired Farm Labor			Number of Workers				
	Farms	Workers	$ 1,000 Payroll	1 worker	2 workers	3 or 4 workers	5 to 9 workers	10+ workers
ME	2,045	16,846	78,420	576	600	926	2,742	12,002
NH	793	4225	32,013	292	284	418	930	2,301
VT	1,913	7,631	62,720	659	700	1,358	2,038	2,876
MA	1,770	13,545	99,292	358	642	1,026	2,525	8,994
PA	13,512	67,672	443,050	5,270	5,588	8,052	10,897	37,865
CT	1,106	12,791	127,084	371	360	416	1,460	10,184
NY	10,494	67,886	448,924	3,121	3,898	7,229	11,266	42,372
NJ	2,374	22,718	186,913	715	784	1,079	2,598	17,542
RI	277	1,330	13,508	88	108	192	294	648
DE	891	3,546	31,579	425	282	470	708	1,661
MD	3,321	17,316	127,779	1,157	1,400	2,328	2,888	9,543
WV	3,539	10,274	31,843	2,691	1,832	2,048	1,592	3,193
NE	**42,035**	**2,457,80**	**1,683,125**	**157,23**	**16,478**	**25,542**	**39,938**	**149,181**

Note: No data exists for years prior to 2002 in the current census.

Source: US Department of Agriculture Census, 2002

Hired Farm Labor in the Northeast

Refer to page eleven of *Northeast Farms to Food: Understanding Our Region's Food System* for additional data on hired farm labor in the Northeast.

Figure 23. FARM OWNERSHIP IN NE, 1997 & 2002

	1997				2002			
	Ind. Prop.	Partnership	Corporation	Other	Ind. Prop.	Partnership	Corporation	Other
ME	6,557	347	456	44	6,377	321	422	76
NH	3,445	219	204	60	2,917	206	157	83
VT	6,061	575	359	68	5,716	483	281	91
MA	6,023	521	669	96	5,020	376	559	120
RI	789	66	127	12	699	52	90	17
CT	4,040	435	386	44	3,436	341	338	76
NY	32,813	3,456	1,771	215	32,654	2,846	1,581	174
NJ	8,454	678	826	87	8,578	576	701	69
PA	54,039	4,509	1,435	239	53,201	3,428	1,249	227
DE	2,176	216	254	25	2,015	136	212	28
MD	11,308	1,039	812	95	10,577	763	726	132
WV	20,086	1,037	317	109	19,862	639	220	91
NE	**155,791**	**13,098**	**7,616**	**1,094**	**151,052**	**10,167**	**6,536**	**1,184**

Other: Cooperative, estate, trust, institutional farm, etc.

Source: US Department of Agriculture Census, 1997 and 2002

Farm Ownership in the Northeast

Page thirteen of *Northeast Farms to Food: Understanding Our Region's Food System* contains additional information regarding farm ownership in the Northeast.

Farm Tenure

Please see page fourteen of *Northeast Farms to Food: Understanding Our Region's Food System* for additional data on farm tenure in the Northeast.

Figure 26. FARM TENURE IN NE, 2002

	Full Owner				Part Owner				Tenant			
	# Farms	% of Total	Acreage	Avg Size	# Farms	% of Total	Acreage	Avg Size	# Farms	% of Total	Acreage	Avg Size
ME	5,242	72.8	715,764	137	1,604	22.3	596,358	372	350	4.9	57,646	165
NH	2,474	73.6	256,630	104	767	22.8	D	D	122	3.6	D	D
VT	4,011	61	538,160	134	2,162	32.9	645,263	298	398	6.1	61,486	154
MA	4,355	71.7	283,922	65	1,221	20.1	210,371	172	499	8.2	24,277	49
RI	610	71.1	38,991	64	170	19.8	D	D	78	9.1	D	D
CT	2,886	68.9	166,173	58	955	22.8	163,086	171	350	8.4	27,895	80
NY	24,722	66.4	3,164,333	128	11,040	29.6	4,239,548	384	1,493	4.0	257,088	172
NJ	7,990	80.5	372,321	47	1,345	13.6	350,350	260	589	5.9	83,011	141
PA	39,742	68.4	3,642,502	92	13,976	24.1	3,600,669	258	4,387	7.6	502,165	114
DE	1,597	66.8	108,717	68	618	25.8	365,802	592	176	7.4	65,561	373
MD	8,479	69.5	758,901	90	2,704	22.2	1,067,489	395	1,015	8.3	1,118,960	157
WV	15,534	74.6	1,975,005	127	4,637	22.3	1,493,503	322	641	3.1	116,160	181
NE	117,642		12,021,419		41,199		12,732,439		10,098		2,314,249	

69.6% of all farm operators in the NE are full owners.

Source: US Department of Agriculture Census, 2002

Farm Operators Working off of the Farm

The Census breaks down the "any days off the farm" category into 1- 49 days, 50 - 99 days, 100 -199 days, and 200 or more days. In the Northeast, approximately 37 percent of farmers work more than 200 days off the farm, compared to about 40 percent nationally.

Figure 59. NE FARM OPERATORS
by days working off the farm (New data)

	None		Any		200 +	
	1997	2002	1997	2002	1997	2002
ME	2,624	2,839	4,404	4,357	2,747	2,948
NH	1,283	1,380	2,515	1,983	1,657	1,299
VT	2,937	3,029	3,754	3,542	2,334	2,374
MA	2,787	2,841	4,128	3,234	2,639	2,159
RI	416	392	547	466	382	324
CT	1,936	1,919	2,756	2,272	1,884	1,619
NY	16,736	18,492	19,779	18,763	13,117	12,748
NJ	3,766	4,364	5,842	5,560	3,931	3,862
PA	23,235	26,797	32,972	31,308	22,087	21,761
DE	1,235	1,296	1,209	1,095	821	690
MD	5,160	5,861	7,217	6,337	4,962	4,334
WV	7,491	8,910	12,966	11,902	9,482	9,107
NE	69,606	78,120	98,089	90,819	66,043	63,225

Source: US Department of Agriculture Census, 2002

SECTION THREE
Northeast Production

Please refer to pages fifteen and sixteen of *Northeast Farms to Food: Understanding Our Region's Food System* for additional information.

Figures 27&28. Number and Acreages of NE Farms
by commodity NAICS categories (some farms are in more than one category)

	Oilseed			Vegetable			Fruit			Greenhouse			Tobacco			Hay		
	Farms	Acreage	$ Sold	Farms	Acreage	$ Sold	Farms	Acreage	$ Sold	Farms	Acreage	$ Sold	Farms	Acreage	$ Sold	Farms	Acreage	$ Sold
ME	161	30,294	1,187	640	263,883	132,115	786	207,795	33,201	813	52,663	39,268	NA	NA	NA	1,171	223,064	9,156
NH	64	14,029	386	141	14,082	6,861	187	22,207	8,954	394	37,003	55,198	NA	NA	NA	639	113,584	5,145
VT	123	17,910	1,256	196	15,370	9,868	220	22,372	8,219	502	38,053	24,862	NA	NA	NA	1,001	165,324	8,770
MA	81	13,780	751	469	34,737	36,433	811	72,240	55,277	958	35,853	155,051	37	3,497	14,992	962	121,099	8,261
RI	14	2,041	177	92	5,526	5,887	56	4,320	2,001	246	15,273	38,179	NA	NA	NA	88	8,941	645
CT	61	8,940	794	304	22,096	17,160	223	12,217	14,251	889	44,244	248,600	70	8,948	36,726	679	79,053	5,361
NY	2,302	747,708	107,560	1,764	406,151	345,949	2,224	232,389	172,660	3,034	227,096	352,659	1	D	D	7,134	1,265,445	D
NJ	658	175,147	24,973	937	114,989	170,859	605	78,959	90,821	2,285	101,109	356,122	NA	NA	NA	1,443	113,498	9,968
PA	6,279	1,204,676	130,411	1,814	205,907	114,239	1,813	153,456	105,407	4,056	278,836	762,867	160	7,893	4,439	9,115	1,131,829	77,479
DE	583	271,304	52,599	126	58,732	45,837	28	D	487	149	D	21,443	NA	NA	NA	104	D	1,226
MD	2,223	865,067	133,110	545	89,033	58,086	321	28,666	13,044	840	49,147	190,285	106	8,112	2,485	1,200	116,693	9,198
WV	448	91,753	6,686	226	19,237	4,188	326	38,647	11,342	503	40,462	27,928	396	52,656	D	4,180	576,005	D
NE	**12,997**	**3,442,649**	**459,890**	**7,254**	**1,249,743**	**947,482**	**7,600**	**873,268**	**515,664**	**14,669**	**919,739**	**2,272,462**	**770**	**81,106**	**58,642**	**27,716**	**3,914,535**	**135,209**

	Beef Cattle (incl. feedlots)			Dairy Cattle			Hogs and Pigs			Sheep and Goat			Poultry and Eggs			Aquaculture		
	Farms	Acreage	$ Sold	Farms	Acreage	$ Sold	Farms	Acreage	$ Sold	Farms	Acreage	$ Sold	Farms	Acreage	$ Sold	Farms	Acreage	$ Sold
ME	695	137,350	10,828	406	190,286	94,414	62	5,082	423	189	16,106	667	215	15,065	78,715	62	1,997	31,931
NH	281	38,803	1,863	191	83,365	49,765	64	3,708	230	174	13,415	740	100	5,314	6,157	12	822	3,335
VT	739	139,012	18,138	1,367	612,600	375,617	45	3,575	300	248	26,898	1,630	102	12,228	5,500	10	569	1,303
MA	424	37,722	5,449	279	92,040	55,333	72	4,960	1,782	211	10,223	658	163	5,094	11,980	124	1,728	9,179
RI	90	8,518	477	30	5,014	4,106	20	751	190	30	2,122	50	26	1,770	1,727	15	350	863
CT	432	35,884	2,367	231	84,220	61,544	47	1,358	363	120	3,691	430	128	4,656	62,295	34	3,838	12,833
NY	5,012	880,574	134,674	6,531	2,992,793	1,706,265	363	37,230	14,682	1,115	95,855	8,487	423	44,113	109,046	105	6,892	15,247
NJ	871	56,803	3,999	129	54,285	32,657	133	5,358	1,524	503	14,231	794	283	13,984	26,131	29	628	2,196
PA	10,874	1,372,854	312,102	8,678	2,143,346	1,531,488	1,366	148,506	272,848	1,524	82,398	5,707	1,655	178,904	785,665	230	5,426	15,473
DE	117	9,588	1,440	78	36,588	24,914	14	1,256	1,731	38	1,161	25	809	109,060	449,776	11	201	D
MD	2,075	233,242	33,675	698	245,095	192,017	94	6,526	5,713	370	15,316	844	964	202,814	608,834	34	2,207	1,415
WV	10,257	2,202,083	111,598	278	101,985	37,022	217	15,190	1,616	631	59,277	1,027	520	121,739	255,603	34	2,847	2,675
NE	**31,867**	**5,152,433**	**636,610**	**18,896**	**6,641,617**	**4,165,142**	**2,497**	**233,500**	**301,402**	**5,153**	**340,693**	**21,059**	**5,388**	**714,741**	**2,401,429**	**700**	**27,505**	**96,450**

Source: US Department of Agriculture Census, 2002

Figure 29. SALE OF AGRICULTURAL PRODUCTS, 1997 & 2002
($1,000)

	Total		US Rank	Crop Sales		Livestock Sales		Average per Farm		
	1997	2002	2002	1997	2002	1997	2002	1997	2002	Trend
ME	450,278	463,603	45	219,600	222,356	230,678	241,247	60,815	64,425	6%
NH	155,698	144,835	48	78,033	83,149	77,665	61,686	39,638	43,067	9%
VT	478,781	473,065	43	63,775	71,583	415,007	401,482	67,787	71,993	6%
MA	483,529	384,314	47	384,933	277,069	98,596	107,244	66,173	63,262	-4%
RI	51,133	55,546	49	41,472	47,138	9,661	8,408	51,442	64,740	26%
CT	434,970	470,637	44	274,048	327,527	160,922	143,110	88,679	112,297	27%
NY	2,930,569	3,117,834	26	1,066,347	1,135,129	1,864,222	1,982,706	76,588	83,689	9%
NJ	707,161	749,872	39	600,547	657,494	106,613	92,378	70,399	75,561	7%
PA	4,247,568	4,256,959	19	1,452,843	1,320,914	2,794,725	2,936,045	70,532	73,263	4%
DE	767,254	618,853	40	176,356	150,404	590,898	468,449	287,253	258,826	-10%
MD	1,371,374	1,293,303	36	456,523	450,202	914,851	843,101	103,469	106,026	2%
WV	459,387	482,814	42	68,964	69,693	390,423	413,121	21,336	23,199	9%
NE	**12,537,702**	**12,511,635**		**4,883,441**	**4,812,658**	**7,654,261**	**7,698,977**	**1,004,111**	**1,040,348**	

Source: US Department of Agriculture Census, 1997 and 2002

Sale of Agricultural Products

Please refer to page seventeen of *Northeast Farms to Food: Understanding Our Region's Food System* for additional information.

Figure 30. TOP COMMODITIES IN NE, 2002
Value of sales by commodity group ($1,000)

MAINE		
1	Vegetables	126,049
2	Milk and dairy	87,544
3	Poultry and eggs	78,848
4	Nursery, greenhouse	37,334
5	Fruits, tree nuts	33,970
	Total	**363,745**

NEW HAMPSHIRE		
1	Nursery, greenhouse	53,691
2	Fruits	9,321
3	Vegetables	8,465
4	Other crops and hay	8,398
5	Poultry and eggs	6,251
	Total	**86,126**

VERMONT		
1	Milk and dairy	342,440
2	Cattle and calves	45
3	Other crops and hay	24,231
4	Nursery, greenhouse	22,803
5	Vegetables	10,140
	Total	**399,659**

MASSACHUSETTS		
1	Nursery, greenhouse	153,540
2	Fruits, tree nuts	55,508
3	Vegetables	38,289
4	Other animals	19,589
5	Tobacco	15,355
	Total	**282,281**

RHODE ISLAND		
1	Nursery, greenhouse	37,593
2	Vegetables	5,527
3	Milk and dairy	3,859
4	Fruit, tree nuts	2,358
5	Poultry and eggs	1,766
	Total	**51,103**

CONNECTICUT		
1	Nursery, greenhouse	245,773
2	Poultry and eggs	62,411
3	Milk and dairy	56,523
4	Tobacco	36,233
5	Vegetables	19,120
	Total	**420,060**

NEW YORK		
1	Milk and dairy	1,560,895
2	Nursery, greenhouse	344,320
3	Vegetables	322,577
4	Cattle and calves	251,121
5	Fruits, tree nuts	180,540
	Total	**2,659,453**

NEW JERSEY		
1	Nursery, greenhouse	356,863
2	Vegetables	167,956
3	Fruits, tree nuts	87,148
4	Milk and dairy	29,154
5	Poultry and eggs	26,041
	Total	**667,162**

PENNSYLVANIA		
1	Milk and dairy	1,393,992
2	Poultry and eggs	745,624
3	Nursery, greenhouse	732,709
4	Cattle and calves	441,671
5	Hogs and pigs	269,318
	Total	**3,583,314**

DELAWARE		
1	Poultry and eggs	440,774
2	Grains, oilseed	72,393
3	Vegetables	50,773
4	Nursery, greenhouse	22,420
5	Milk and other dairy	20,651
	Total	**607,011**

MARYLAND		
1	Poultry and eggs	583,343
2	Nursery, greenhouse	188,484
3	Milk and dairy	169,458
4	Grains, oilseed	167,555
5	Vegetables	60,488
	Total	**1,169,328**

WEST VIRGINIA		
1	Poultry and eggs	250,922
2	Cattle and calves	117,967
3	Milk and dairy	32,202
4	Nursery, greenhouse	26,849
5	Fruits, treenuts	11,443
	Total	**439,383**

Source: US Department of Agriculture Census, 2002

Northeast Top Commodities

Please refer to pages eighteen of *Northeast Farms to Food: Understanding Our Region's Food System* for additional information.

Organic and Direct Sales

The Census collected data on the "value of certified organic commodities" for the first time in 2002. Nationally, such sales accounted for $392.8 million from nearly 12,000 farms. In terms of direct sales, the Census figures describe sales of "products sold directly to individuals for human consumption". In the U.S. in 2002, 116,733 farmers sold $812.2 million direct to consumers. The Northeast is a leader in direct sales, with several NE counties having the highest direct sales in the nation. See the USDA Census of Agriculture County Level Data.

Figure 60. ORGANIC AND DIRECT SALES, 1997 &2002
Market value of agricultural products sold, including landlord's share, direct, and organic (New data)

	Direct Marketing Sales ($1,000)		
	1997	2002	% of 2002 total
CT	11,370	17,108	3.6%
DE	1,885	2,856	0.5%
ME	8,641	11,237	2.4%
MD	8,789	12,551	1.0%
MA	20446	31,315	8.1%
VT	6,790	9,567	2.0%
NJ	18,403	19,126	2.6%
RI	2,415	3,697	6.7%
NY	42,727	59,724	1.9%
WV	2,934	4,588	1%
NH	8,976	10,420	7.20%
PA	52,901	53,760	1.30%

	Organically Produced Commodities ($1,000)		
	1997	2002	% of 2002 total
CT	N/A	2,822	0.6%
DE	N/A	8	Z
ME	N/A	4,113	0.9%
MD	N/A	3,614	0.3%
MA	N/A	7,837	2.0%
VT	N/A	8,136	1.7%
NJ	N/A	222	Z
RI	N/A	270	0.5%
NY	N/A	12,920	0.4%
WV	N/A	176	Z
NH	N/A	1,154	0.8%
PA	N/A	8,808	0.2%

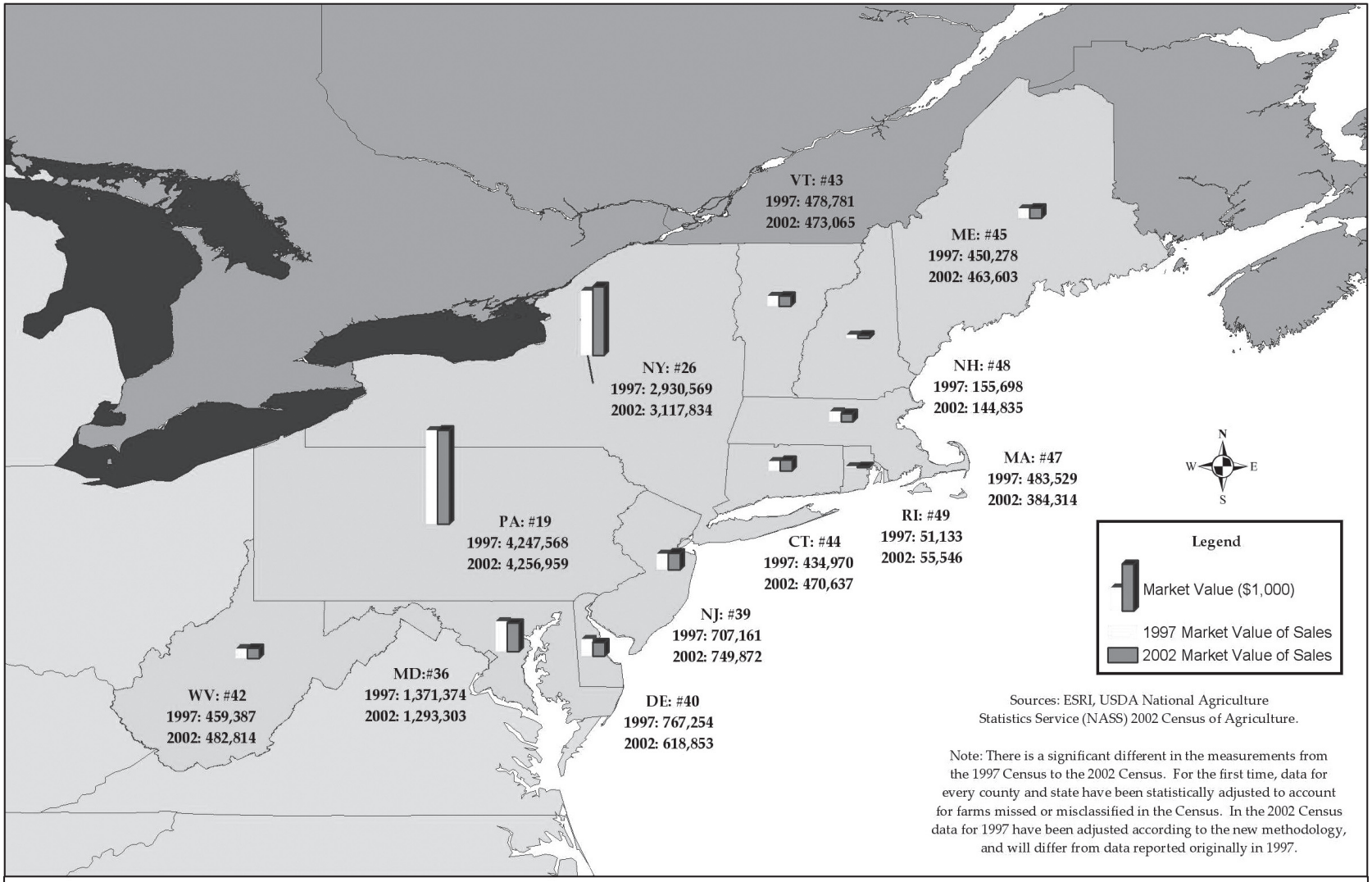
	Direct Marketing Farms		
	1997	2002	% of 2002 total
CT	920	853	20.4%
DE	170	149	6.2%
ME	1,417	1,454	20.2%
MD	1,229	1,168	9.6%
MA	1,480	1,259	20.7%
VT	1,190	1,163	17.7%
NJ	1,820	1,769	17.8%
RI	164	180	21.0%
NY	4,719	4,651	12.50%
WV	1,303	1,434	6.90%
NH	837	748	22.20%
PA	7,059	6,082	10.50%

	Organically Produced Commodities (Farms)		
	1997	2002	% of 2002 total
CT	N/A	73	1.7%
DE	N/A	8	0.3%
ME	N/A	223	3.1%
MD	N/A	106	0.9%
MA	N/A	129	2.1%
VT	N/A	179	2.7%
NJ	N/A	53	0.5%
RI	N/A	12	1.4%
NY	N/A	428	1.1%
WV	N/A	25	0.1%
NH	N/A	57	1.7%
PA	N/A	318	0.5%

Source: US Department of Agriculture Census, 1997 and 2002

Market Values of Agricultural Products Sold ($1000)

U.S. Agriculture Census: 1997 & 2002 Annual Sales and National Ranking



Sources: ESRI, USDA National Agriculture Statistics Service (NASS) 2002 Census of Agriculture.

Note: There is a significant different in the measurements from the 1997 Census to the 2002 Census. For the first time, data for every county and state have been statistically adjusted to account for farms missed or misclassified in the Census. In the 2002 Census data for 1997 have been adjusted according to the new methodology, and will differ from data reported originally in 1997.

Key Figures from the Northeast Farms to Food Update

Direct Marketing to Consumers
National increase of 37% to $812.2 million in 2002.
Regional increase of 21.1% from $186 million in 1997 to $235 million in 2002.

In 1997 77.9% (138,480 out of 177,588) farms had annual sales of less than $50,000.
In 2002 79.7% (134,701 out or 168,939) farms had annual sales of less than $50,000.

SECTION FOUR
Production Systems

Figure 37-38. FERTILIZER AND CHEMICAL USE ON NE FARMS, 1997 & 2002

	Any Fert/Chem/Manure Used (Number of Farms)		Manure Applied (Acres)		Insecticide (Acres)		Herbicide (Acres)		Nematodes (Acres)		Disease Control (Acres)	
	2002	1997	2002	1997	2002	1997	2002	1997	2002	1997	2002	1997
ME	4,225	4,033	95,447	N/A	132,866	118,274	164,738	157,661	7,754	5,015	80,999	89,817
NH	1,872	1,828	36,826	N/A	8,301	9,124	17,911	22,691	869	741	4,042	4,015
VT	3,344	3,272	237,859	N/A	25,951	22,390	91,261	92,523	2,108	2,694	6,112	8,823
MA	3,853	4,610	29,537	N/A	42,128	42,056	45,942	50,679	4,664	4,616	22,396	26,777
RI	586	672	2,920	N/A	6,246	6,240	7,108	8,775	601	D	2,494	2,416
CT	2,705	3,045	42,632	N/A	28,080	26,360	45,128	48,214	2,076	3,166	15,221	12,734
NY	22,277	22,930	1,196,388	N/A	579,898	694,591	1,233,452	1,502,168	49,162	61,880	154,506	240,194
NJ	6,419	5,971	42,626	N/A	127,982	132,369	263,337	276,276	12,767	11,151	58,916	68,259
PA	39,541	41,030	1,333,504	N/A	791,004	914,293	1,530,696	1,777,409	55,013	90,818	99,619	149,917
DE	1,777	1,722	84,903	N/A	149,622	141,622	333,103	351,075	D	18,168	20,608	29,227
MD	8,497	9,042	251,097	N/A	297,784	319,580	726,366	905,098	21,509	30,560	43,099	50,990
WV	11,179	11,260	130,068	N/A	37,398	43,396	98,296	95,779	3,264	3,751	13,602	12,295
NE	**106,275**	**109,415**	**3,483,807**	**N/A**	**2,227,260**	**2,470,295**	**4,557,338**	**5,288,348**	**159,787**	**232,560**	**521,614**	**695,464**

Source: US Department of Agriculture Census, 1997 and 2002

Please refer to pages 22 and 23 of *Northeast Farms to Food: Understanding Our Region's Food System* for additional information.

Figure 40. INPUT EXPENSES, 1997 & 2002
contains additional data

	Total $1,000		Gasoline, fuels, oils $1,000		Fertilizer, lime $1,000		Chemicals $1,000		Feed $1,000		Livestock and poultry $1,000	
	2002	1997	2002	1997	2002	1997	2002	1997	2002	1997	2002	1997
ME	399,767	373,488	16,300	16,200	18,170	17,522	17,397	18,237	73,459	83,550	16,895	13,435
NH	145,342	136,126	5,663	5,729	2,797	3,039	2,043	1,729	20,933	22,974	1,638	3,393
VT	427,717	390,196	14,895	13,803	10,879	10,197	4,944	4,426	108,693	122,944	23,993	25,068
MA	364,833	343,252	14,927	16,937	11,852	11,146	9,166	8,847	26,253	33,164	6,482	7,673
RI	48,029	38,759	1,823	1,820	1,853	1,613	1,047	857	3,121	3,275	730	975
CT	397,687	348,883	13,064	11,684	14,211	13,196	6,681	5,142	42,832	59,853	8,644	9,317
NY	2,796,920	2,434,019	115,975	109,629	103,849	104,751	80,700	88,674	537,185	506,730	122,666	127,396
NJ	647,202	535,420	25,155	27,282	28,203	29,647	22,541	21,285	31,277	39,314	8,265	10,665
PA	3,614,072	3,414,402	126,126	128,375	135,921	119,871	77,774	86,060	937,355	1,034,466	333,396	313,794
DE	471,674	686,028	21,131	12,974	23,780	20,606	15,174	16,447	207,528	415,739	55,182	70,407
MD	1,127,590	1,192,138	43,006	34,819	55,169	58,488	33,887	38,516	318,290	481,092	96,056	137,064
WV	408,650	404,647	20,134	17,806	12,976	12,283	5,591	5,239	130,696	162,078	63,817	66,403
NE	**10,849,483**	**10,297,358**	**418,199**	**397,058**	**419,660**	**402,359**	**276,945**	**295,459**	**2,437,622**	**2,965,179**	**737,764**	**785,590**

Source: US Department of Agriculture Census, 1997 and 2002

Input Expenses

Please refer to page 25 of *Northeast Farms to Food: Understanding Our Region's Food System* for additional information.

SECTION FIVE
Northeast Farm Economics

Please refer to page 30 of *Northeast Farms to Food: Understanding Our Region's Food System* for additional information.

Figure 46. NE FARMS, BY SALES CLASS, 1997 & 2002
number of farms

	Maine		New Hampshire		Vermont		Massachusetts	
	1997	2002	1997	2002	1997	2002	1997	2002
Less than $2,500	2,978	3,634	1,789	1,757	2,326	2,673	2,613	2,592
$2,500-$4,999	978	777	613	382	878	699	876	647
$5,000-$9,999	864	682	447	344	807	610	851	623
$10,000-$24,999	914	727	420	303	798	633	901	715
$25,000-$49,999	485	387	218	194	381	396	609	422
$50,000-$99,999	400	310	156	130	564	393	531	385
$100,000-$499,999	642	513	240	205	1,166	985	749	556
$500,000 +	143	166	45	48	143	182	177	135

	Rhode Island		Connecticut		New York		New Jersey	
	1997	2002	1997	2002	1997	2002	1997	2002
Less than $2,500	363	287	1,910	1,900	11,542	14,243	4,003	5,233
$2,500-$4,999	123	110	741	523	4,096	3,364	1,204	991
$5,000-$9,999	111	98	623	398	4,119	3,223	1,156	820
$10,000-$24,999	135	130	590	502	4,997	4,176	1,274	951
$25,000-$49,999	82	65	298	241	2,941	2,725	718	489
$50,000-$99,999	76	56	246	188	3,496	3,073	510	381
$100,000-$499,999	85	84	380	309	6,077	5,369	891	719
$500,000 +	19	28	117	130	996	1,082	289	340

	Pennsylvania		Delaware		Maryland		West Virginia	
	1997	2002	1997	2002	1997	2002	1997	2002
Less than $2,500	19,353	24,394	459	607	3,933	5,116	10,439	12,054
$2,500-$4,999	6,796	5,881	195	141	1,517	1,199	4,174	2,712
$5,000-$9,999	6,815	5,134	208	133	1,645	1,067	3,148	2,398
$10,000-$24,999	7,530	5,984	278	159	1,776	1,319	1,995	1,875
$25,000-$49,999	4,642	3,292	198	147	908	728	699	695
$50,000-$99,999	4,892	3,823	178	180	829	670	431	383
$100,000-$499,999	8,839	8,172	634	694	1,931	1,444	450	469
$500,000 +	1,355	1,425	521	330	715	655	195	226

In 1997 77.9% (138,480 out of 177,588) farms had annual sales of less than $50,000.
In 2002 79.7% (134,701 out or 168,939) farms had annual sales of less than $50,000.
Source: US Department of Agriculture Census, 1997 and 2002

Figure 46. DISTRIBUTION OF GOVERNMENT PAYMENTS AMONG FARMS 1997 & 2002
(contains new data)

	Government Payments			**Average Payment per Farm** (of farms receiving payments)		
	1997	**2002**	**Trend**	**1997**	**2002**	**Trend**
DE	$3,845,000	$8,643,000	125%	$5,333	$14,009	163%
CT	$1,519,000	$3,681,000	142%	$3,231	$14,492	349%
ME	$3,383,000	$8,664,000	156%	$3,145	$6,965	121%
MD	$14,470,000	$33,131,000	129%	$5,281	$9,825	86%
RI	$123,000	$528,000	329%	$2,462	$10,145	312%
NY	$32,789,000	$110,234,000	236%	$3,799	$11,139	193%
VT	$2,972,000	$24,377,000	720%	$3,128	$18,809	501%
NJ	$3,001,000	$4,441,000	48%	$4,631	$7,630	65%
PA	$32,382,000	$85,794,000	165%	$2,823	$7,155	153%
NH	$897,000	$3,823,000	326%	$2,645	$10,648	303%
WV	$3,983,000	$5,180,000	30%	$1,925	$3,093	61%
MA	$1,330,000	$4,268,000	221%	$2,969	$10,284	246%

Source: US Department of Agriculture Census, 1997 and 2002

Government Payments

Please refer to page 35 of *Northeast Farms to Food: Understanding Our Region's Food System* for additional information.