Maine Agricultural Statistics 1985-1986

Maine produces.

Prepared by the Maine Department of Agriculture, Food and Rural Resources

MAINE AGRICULTURAL STATISTICS 1985 - 1986

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1985 - 1986

MAINE DEPARTMENT OF AGRICULTURE,
FOOD AND RURAL RESOURCES

BERNARD W. SHAW, COMMISSIONER

in cooperation with

UNITED STATES DEPARTMENT OF AGRICULTURE

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Dear Reader,

For Maine agriculture to prosper, we need to build on what already exists. Each year Maine farmers sell about $400 million worth of agricultural products. At the Department of Agriculture, we are working to develop better marketing practices for Maine farmers, and to increase farm income. To accomplish this, we need accurate information on what is actually happening on Maine farms.

This edition of Agricultural Statistics includes complete information for 1985 and 1986, and some preliminary figures for 1987. These statistics should provide needed background as farmers and public officials work to assess opportunities for Maine farmers.

Much of this information is based on numbers provided by the New England office of the Agricultural Statistics Service. We are grateful for their help, and for their work in gathering this information from farmers.

If you note any information that you would like to see added in future editions, please let me know.

Sincerely,

Bernard W. Shaw
Commissioner of Agriculture

Maine produces.

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A NOTE ON METHODS

Most of these tables are compiled from regular reports issued by the New England Agricultural Statistics Service. In addition, a number of basic tables from the 1982 Census of Agriculture are included for background purposes. This year, for the first time, the Department has prepared some summary tables using statistics gathered from various sources. These tables are identified as Source: Maine Department of Agriculture, Food and Rural Resources.

ABBREVIATIONS AND SYMBOLS

(for use with 1982 Census of Agriculture tables)

The following abbreviations and symbols are used throughout the tables:

—	Represents zero
(D)	Withheld to avoid disclosing data for individual farms
(X)	Not applicable
(Z)	Less than half of the unit shown
(NA)	Not available
Cwt.	Hundredweight
Sq. ft.	Square feet

MAINE AGRICULTURE IN THE 1980's

A number of national reports in recent years have pointed to the changing situation in U.S. agriculture. Typically, commercial farms are growing in size, total farmland is decreasing, and there are more small farms being counted in the surveys. But the traditional mid-size, family farm operation with from $40,000 to $100,000 in sales is considered to be in economic trouble.

There have been substantial changes in the diet of American consumers. We have moved from a nation of eat-at-home households to a situation where half of all meals are consumed away from home. Maine and U.S. farmers have had to adapt to these changing consumer demands.

The world around us has been changing as well. The era of cheap energy and inexpensive fertilizers disappeared a decade ago, and has forced changes in production practices. Other states and countries have developed crops that compete with Maine production. The story of Maine agriculture in the past, present, and future is one of adaptation to the changing world.

Farming in Maine contributes about $400 million to the State's economy each year. Farm-level income peaked in 1981 at $476 million, and dropped to a low of $365 million in 1985, due largely to sharply lower potato prices that year. 1986 saw an increase of $8 million, to $373 million and first half of 1987 figures indicate a substantial jump (to over $400 million).

The "big four" of 1980 (eggs, potatoes, dairy, and broilers) have become a "big three" (dairy, potatoes, eggs) with the decline of Maine's broiler industry. However, there have been substantial income increases for beef, apples, and blueberries in recent years.

Maine has traditionally been the leading agricultural state in New England, but dropped to fourth in 1986. Relatively low potato prices coupled with a drop in dairy income lowered our farm receipts, while several other states saw improvements. We are New England's largest producer of potatoes, blueberries, chickens, and sheep. We rank second in production of eggs, milk, and apples.

The U.S. Department of Agriculture estimates 7800 active farms in the State. The Department estimates that there are approximately 2400 full-time farmers, with 800 in dairy, 600 in potatoes, 200 in eggs and poultry, and the remainder scattered among other commodities. Farmers own about 1,160,000 acres and actively farm (crop) about 600,000 acres each year. Leading crops in terms of

land use include hay, potatoes, small grains grown for rotation crops, blueberries, and silage corn.

Some of the crops with recent growth include broccoli (Maine is now the #2 fresh market broccoli producer), the nursery and greenhouse industry, and maple syrup.

Food processing in Maine contributes an additional $709 million to the State's economy. Of that sum, about $450 million is estimated to be based on the use of Maine agricultural products. Food processing ranked fifth among Maine industries in 1984, trailing only paper, shoes, lumber, and transportation equipment.

Because Maine has a small number of major crops, changes in Federal programs can have a major impact on the State's agriculture. The Dairy Herd Buyout Program, a part of the 1985 Farm Bill, resulted in 85 Maine dairy farmers selling their cows. Through mid-1987, 21,366 acres have been taken out of production under the Conservation Reserve Program, which provides payments for farmers in return for idling highly erodible land.

Maine farmers are working to produce for new markets, and adapting to changing consumer needs. Maine's position as a major regional supplier of a variety of commodities helps to ensure that farming will continue into the future.

MAINE: CASH RECEIPTS FROM FARM MARKETINGS: 1979 - 1986

	1979	1980	1981	1982	1983	1984	1985	1986
LIVESTOCK								
Cattle & Calves	17,907	14,381	9,207	21,857	18,056	21,992	19,078	22,879
Hogs	1,177	1,713	2,419	1,539	568	1,687	1,113	1,343
Sheep & Lambs	229	340	292	654	649	923	952	852
Dairy Products	82,130	91,553	102,366	105,821	106,798	99,535	91,143	85,709
Chickens	4,328	3,480	3,515	2,596	3,349	3,922	3,334	2,196
Eggs	110,012	104,624	108,471	93,177	94,500	103,730	79,374	81,154
Misc. Poultry	92,942	82,204	52,607	24,233	25,944	22,425	16,997	18,951
Misc. Livestock	370	360	7,315	8,563	9,432	9,383	9,481	9,644
TOTAL, LIVESTOCK	309,095	298,655	286,192	258,440	259,296	263,597	221,473	222,728
CROPS								
Hay	2,864	2,601	2,792	3,462	3,465	3,940	5,256	5,959
Oats	2,510	2,813	4,829	3,872	3,542	2,781	2,815	2,431
Potatoes	97,936	102,015	136,293	98,021	91,778	121,279	79,984	83,673
Misc. Vegetables	6,562	5,923	5,804	6,166	5,832	5,943	9,430	7,012
Apples	9,748	11,996	14,472	16,061	12,801	12,939	13,000	16,347
Blueberries	6,336	8,056	9,198	18,680	18,333	6,171	11,370	12,600
Other Berries	1,300	789	790	1,035	1,359	1,750	1,830	1,970
Misc. Fruits	98	46	56	170	173	154	157	165
Maple Syrup	143	79	235	225	156	232	247	178
Forest Products	4,743	4,067	6,250	6,583	7,000	7,550	7,730	8,770
Greenhouse/Nursery	6,555	6,555	6,567	7,500	7,770	8,350	8,850	9,400
Misc. Crops	323	323	2,755	2,980	3,245	3,000	3,100	2,400
TOTAL CROPS	139,118	145,263	190,041	164,505	155,454	174,089	143,729	150,905
ALL COMMODITIES	448,213	443,918	476,233	422,945	414,750	437,686	365,202	373,633

PROFILE OF MAINE FARMS 1959 - 1982

NUMBER OF COMMERCIAL FARMS 1

Year	Potato	Orchards	Total Poultry	Chicken Eggs	Broilers	Dairy	Total # Farms	Land in Farms (1,000 Acres)	% U.S. Farmland In Maine
1959	2,354	158	2,243	1,161	1,102	3,257	17,360	3,082	0.3
1964	1,908	126	1,656	699	886	2,069	12,875	2,590	0.2
1969	1,683	115	999	349	542	1,376	7,971	1,759	0.2
1974	1,283	127	663	203	370	1,217	6,436	1,524	0.1
1982 2/	920	139	331	226	88	1,077	7,003	1,469	0.2

Source: U.S. Census of Agriculture, Bureau of Census, U.S. Department of Commerce, various years.

1/ Farms with sales of $2,500 or more, with one commodity accounting for 50% or more of sales.
2/ Number of commercial farms by type which includes all farms and is not limited to those with $2,500 or more in sales as in previous years.

FARMS: NUMBER AND LAND, MAINE AND NEW ENGLAND, 1977 - 1986

	Maine			New England		
Year	Number of Farms[1]	Average Size	Land In Farms	Number Of Farms[1]	Average Size	Land In Farms
	Number	Acres	1,000 Acres	Number	Acres	1,000 Acres
1977	7,400	217	1,605	28,300	182	5,155
1978	7,700	210	1,615	28,700	180	5,165
1979	8,000	202	1,615	29,900	172	5,145
1980	8,300	195	1,615	30,360	169	5,145
1981	8,100	198	1,600	30,420	170	5,185
1982	7,900	197	1,580	28,950	173	5,000
1983	8,100	193	1,560	29,400	169	4,980
1984	8,000	195	1,560	29,950	169	5,063
1985	7,800	194	1,520	28,950	169	4,893
1986	7,800	194	1,520	28,550	169	4,843

1/ A farm is a place that sells or normally would sell $1,000 of agricultural products.

CROP AND LIVESTOCK PRODUCTION: RANK AMONG STATES, 1985

Item	Unit	Production 1,000	Rank	% U.S. Total
Crops:				
Potatoes	cwt.	21,360	4	6.0
Corn for Silage	tons	576	33	0.5
Hay	tons	421	42	.2
Oats	bushels	3,358	17	*
Apples	pounds	85,000	17	1.0
Wild Blueberries	pounds	43,750	1	98.0
Maple Syrup	gallons	67	N/A	5.0
Broccoli	pounds	17,000	N/A	1.6
Livestock & Poultry:				
Eggs	each	1,237	19	2.0
Honey 2/	pounds	224	36	*
Milk	pounds	741	40	*
Wool	pounds	117	40	*
Calves Sold	head	19	41	*
Cattle Sold	head	41	43	*
Hogs & Pigs Sold	head	12.2	45	*
Lambs Sold	head	10.5	41	*
Sheep Sold	head	4.0	39	*

* Less than .05 percent.

CASH RECEIPTS FOR NEW ENGLAND STATES, 1980 - 1986

Unit = 1,000 dollars

	1980	1981	1982	1983	1984	1985	1986
Maine	443,918	476,233	422,945	414,750	437,686	365,202	383,633
New Hampshire	95,116	105,168	108,135	109,660	110,496	107,146	114,344
Vermont	377,765	395,020	408,898	432,129	401,801	383,588	407,507
Massachusetts	305,933	352,609	351,892	369,108	389,243	389,146	425,195
Connecticut	284,631	301,755	323,078	323,363	345,727	315,815	374,412
Rhode Island	32,595	34,180	53,881	57,684	61,960	62,773	77,770

CROPS, LIVESTOCK & POULTRY: MARKET VALUE OF AGRICULTURAL PRODUCTS SOLD / DIRECT SALES COUNTY DISTRIBUTION, MAINE, 1982

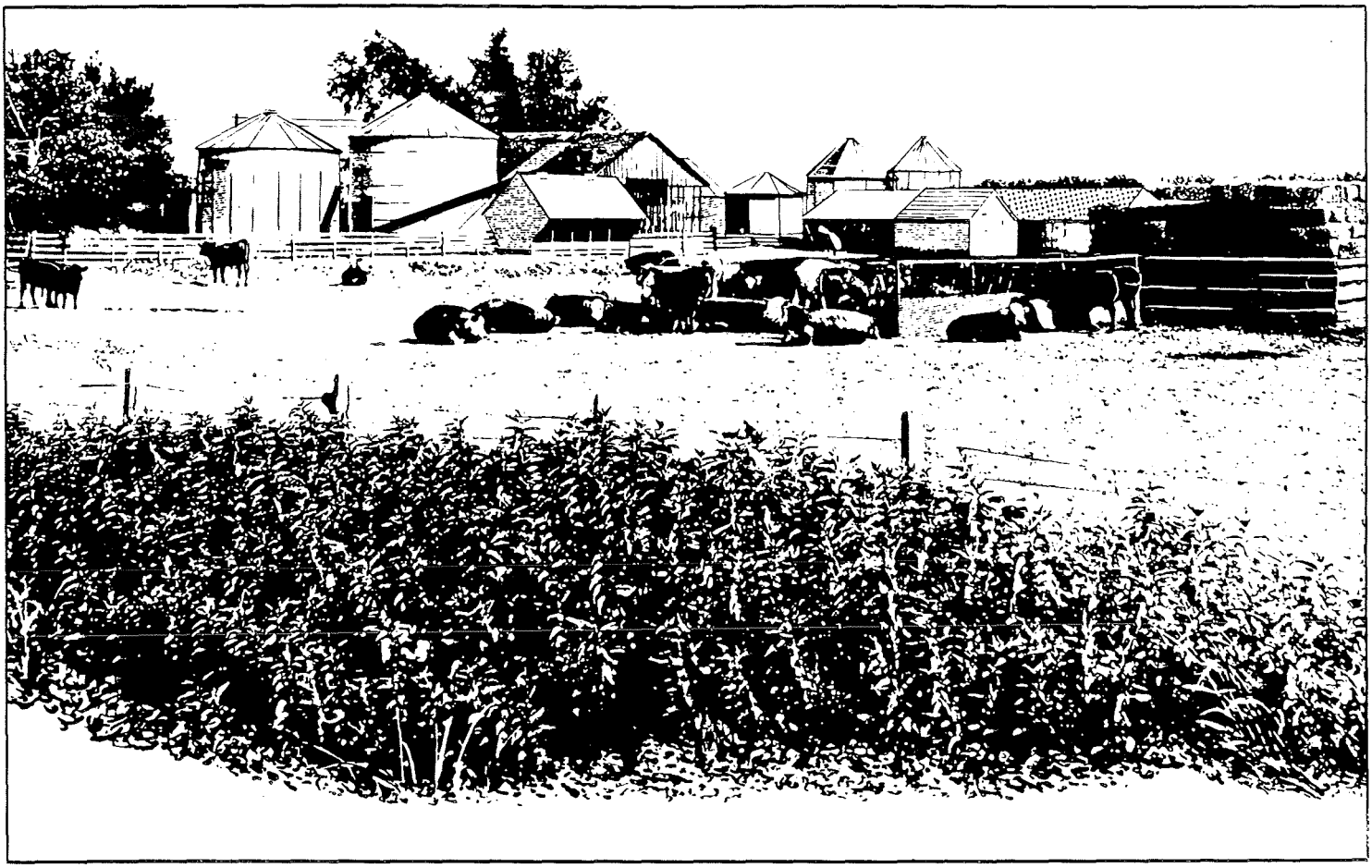
County	Market Value of Agricultural Products Sold				Value of Ag. Products Sold Directly to Individuals for Human Consumption	
	($1,000)	Ave./farm (dollars)	Crops, Including Nursery & Gr. House Products ($1,000)	Livestock & Poultry ($1,000)	Farms	$1,000
Androscoggin	79,955	225,226	6,814	73,141	88	367
Aroostook	87,563	69,883	82,361	5,202	161	386
Cumberland	14,879	29,347	4,638	10,241	134	721
Franklin	7,041	24,448	879	6,162	65	123
Hancock	12,260	42,866	(D)	(D)	76	122
Kennebec	34,166	59,608	5,141	29,014	129	655
Knox	8,934	42,340	1,401	7,533	61	173
Lincoln	4,504	18,766	781	3,723	70	241
Oxford	14,728	36,547	6,374	8,355	118	614
Penobscot	25,337	38,741	6,747	18,590	134	426
Piscataquis	4,223	26,729	(D)	(D)	29	48
Sagadahoc	4,995	41,621	508	4,486	36	76
Somerset	23,028	44,031	1,457	21,571	97	319
Waldo	36,531	78,561	1,850	34,681	86	151
Washington	16,539	43,408	12,736	3,803	59	140
York	24,991	42,648	5,766	19,225	161	843
Maine	399,663	57,070	142,996	256,666	1,504	5,405

Source: 1982 Census of Agriculture.

FARMS BY VALUE OF SALES
COUNTY DISTRIBUTION, MAINE, 1982

County	$250,000 or more	$100,000 to $249,999	$40,000 to $99,999	$20,000 to $39,999	$10,000 to $19,999	$5,000 to $9,999	Less Than $5,000
Androscoggin	24	45	45	22	19	43	157
Aroostook	56	203	374	159	89	73	299
Cumberland	12	31	47	26	38	55	298
Franklin	3	16	32	23	17	18	179
Hancock	2	5	11	14	25	48	181
Kennebec	34	69	72	38	34	51	275
Knox	12	11	25	9	20	17	117
Lincoln	5	7	14	7	18	19	170
Oxford	13	21	30	23	25	44	247
Penobscot	23	57	68	39	41	57	369
Piscataquis	2	9	20	11	8	9	99
Sagadahoc	2	10	8	8	5	15	70
Somerset	12	60	89	44	27	38	253
Waldo	42	58	71	28	24	42	200
Washington	12	7	24	24	50	71	193
York	13	34	50	29	39	65	356
Maine	269	643	980	504	479	665	3,463

Source: 1982 Census of Agriculture.



The farm income prospect for 1987 looks markedly better than in recent years. High prices for potatoes marketed in the spring helped push receipts through November to $398 million, 12 percent above the previous year.

Following are preliminary reports on various commodities for 1987:

POTATOES

The 1987 Maine potato crop is estimated at 23.9 million cwt., 9 percent above the 1986 output but 15 percent short of the 1985 production. Yields are expected to average 285 cwt. per acre. Weather conditions were excellent in northern and central Aroostook County with adequate heat and moisture promoting medium to large size tubers, heavy set and very good quality. Souther Aroostook County suffered a very dry season, missing the showers that hit northern areas. Tuber size ran mostly medium, the set was light to medium, however quality remained excellent. Harvest was slow and wet in the County but finished up slightly ahead of schedule by mid October.

HAY

Maine farmers harvested 225 thousand acres of hay in 1987. Production totaled 460 thousand tons with an average yield of 2.04 tons per acre. Both production and yield were the highest since 1978.

OATS

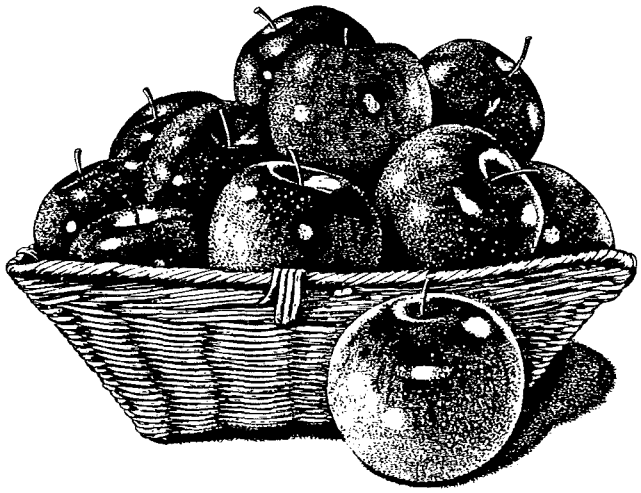
Oat production in Maine is expected to be 2.66 million bushels in 1987, 2 percent above the 1986 crop. Improved yields are expected to offset a 2,000 acre reduction in planted acres. Growers harvested 38 thousand acres for grain with an average yield of 70 bushels per acre. Adequate rains and warm temperatures promoted good to excellent stands in most areas.

POULTRY & EGGS

Egg production during 1987, at 1,327 million dozen, was up 7 percent over the same period in 1986. Broiler production slowed at year-end as Penobscot Poultry announced plans to close its processing plant.

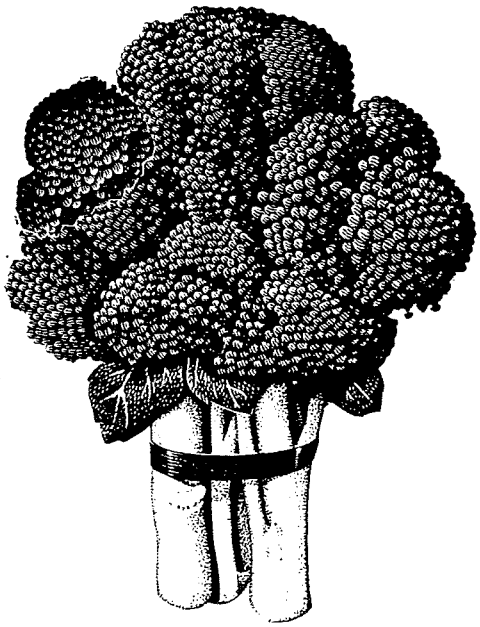
APPLES

The 1987 commercial apple crop in Maine is estimated at over 75 million pounds, a 15 percent drop in production over 1986. The reduced output was due largely to prolonged dry conditions during the summer months. Fruit size was generally medium to small, coloring good to fair, and fruit quality mostly good.



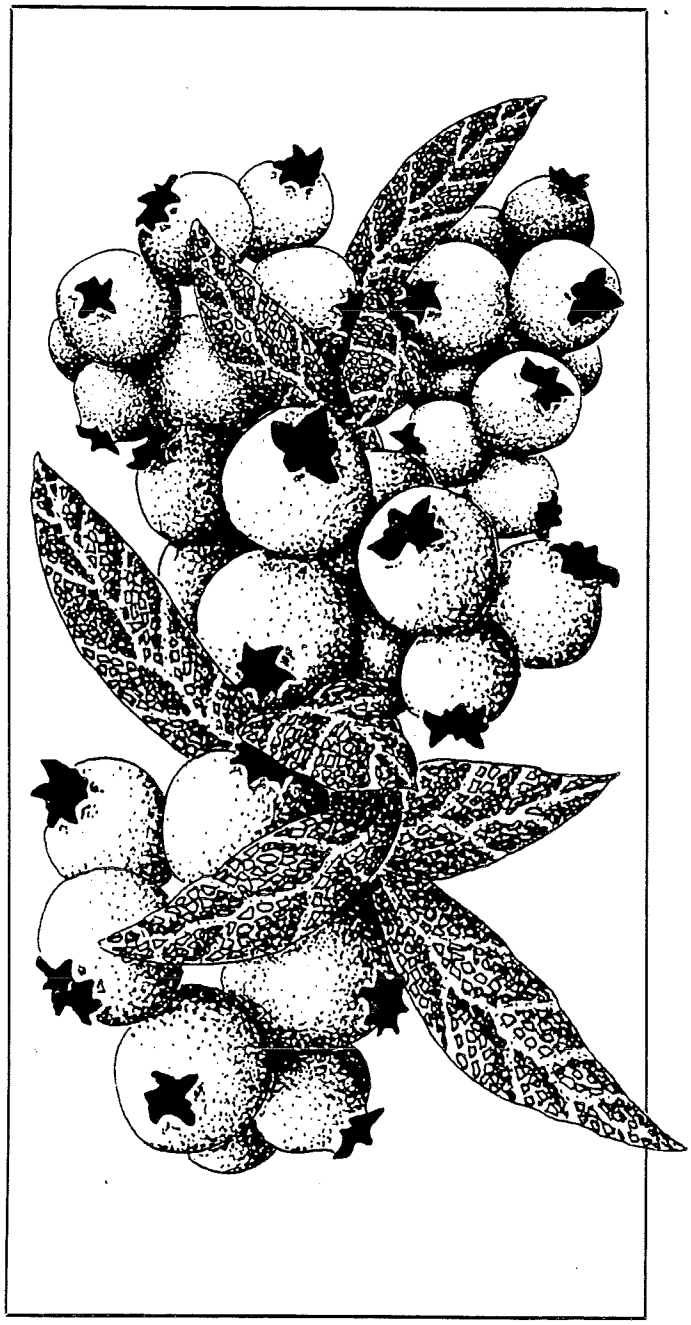
BROCCOLI

Maine growers planted about 3,000 acres of broccoli in 1987. Shipments began in late July, with USDA estimating 4.3 million pounds shipped to major markets through September. Prices remained close to the 1986 levels.



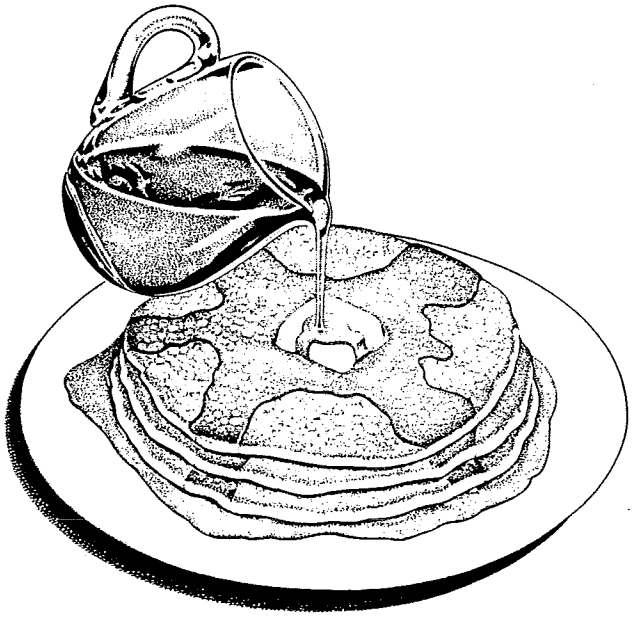
BLUEBERRIES

Maine's 1987 wild blueberry crop is estimated at 34 million pounds, 15 percent under 1986 production and 10 percent short of the previous five-year average. July prospects for a high yielding crop deteriorated with a hot dry August. Berry size was generally small to medium due to the prolonged lack of moisture. Raking finished by the first week in September. Maine farmers expect to receive an average of 45 cents per pound when final payments are received from 1987 crop sold for processing, 13 cents above 1986 price.



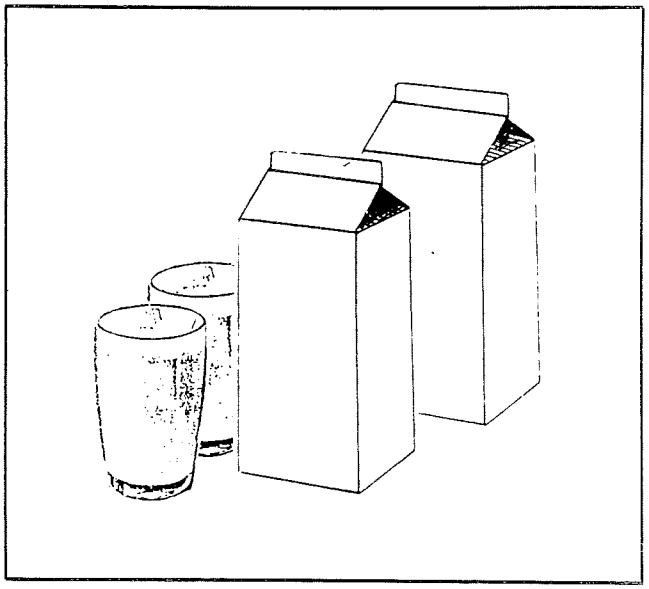
MAPLE SYRUP

Maine's total 1987 maple syrup production was down less than 2 percent from the year before. This was offset by record high prices averaging $36.00 per gallon, a 24 percent increase over 1986. The total value of production was over 2.4 million dollars.

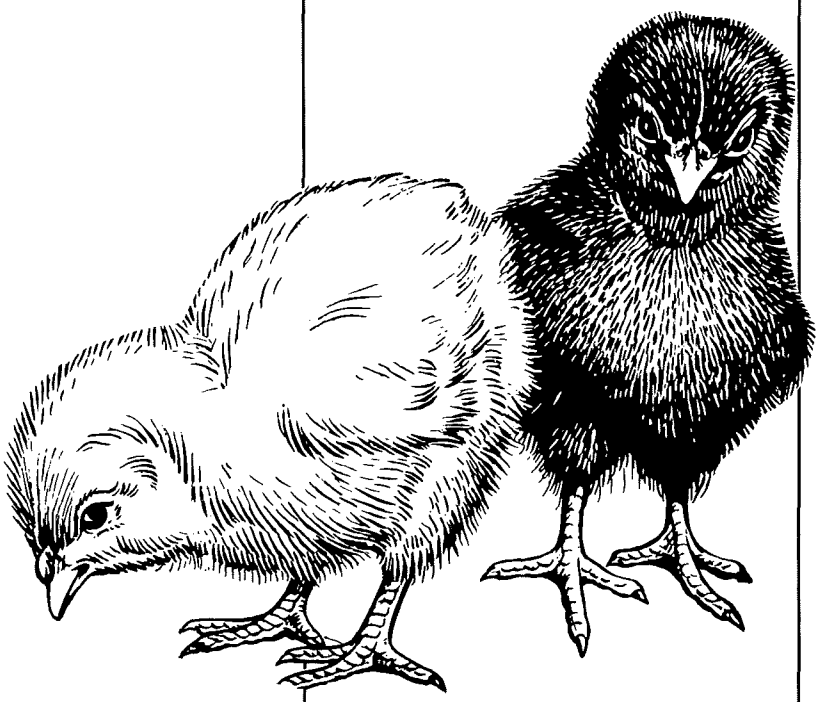


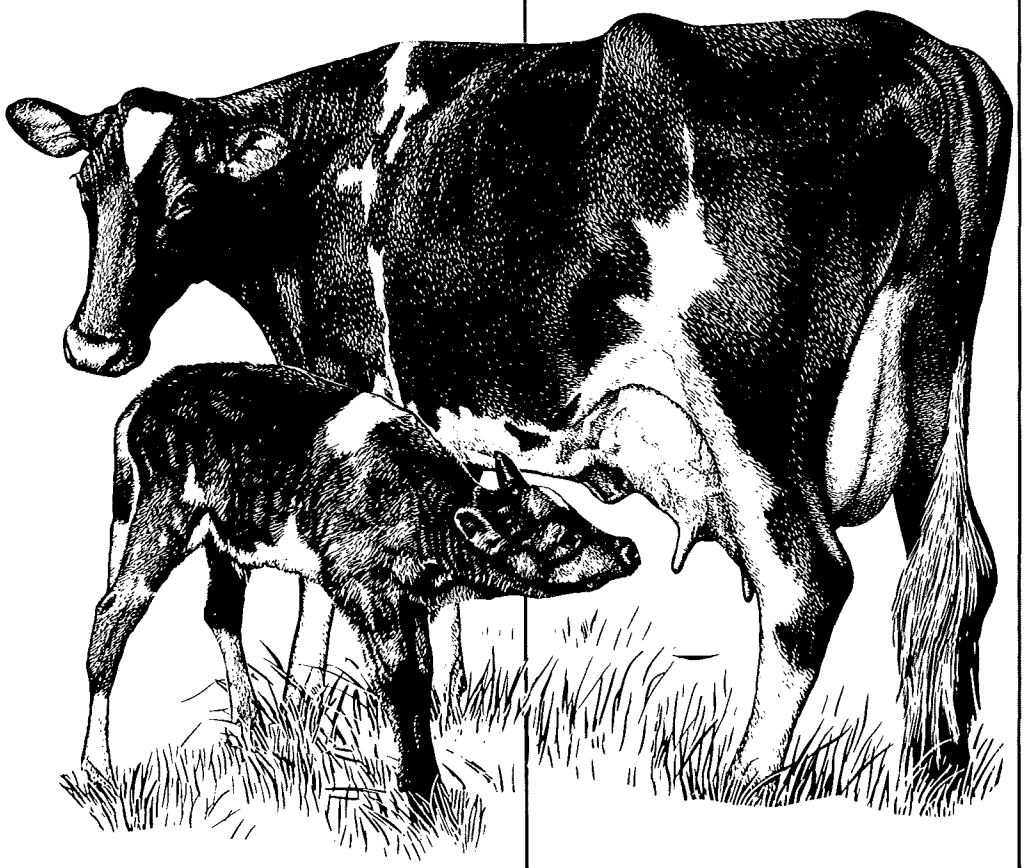
DAIRY

Milk production for 1987 totaled 657 million pounds compared to the previous year's output of 651 million pounds in 1986.



LIVESTOCK AND POULTRY





DAIRY PRODUCTS

Dairy farming in Maine used to be distributed widely across the state but today it is concentrated in the central counties: Androscoggin, Kennebec, Penobscot, Somerset and Waldo. Currently, there are about 900 dairy farms operating in the state. Although Maine does not rank high among the states for milk production, this state has the highest per capita fluid milk consumption in the country.

Due to the Dairy Diversion Program and the Whole Herd Buyout, both the number of milk cows and total milk production in Maine dropped from 1984 to 1986. There were 55,000 milk cows in 1985 (down 5.2 percent from 1984) and 51,000 in 1986 (down another 7.3 percent). However, since per cow productivity continued to increase slightly over these years, production did not drop as much as cow numbers. Production dropped only 3.0 percent in 1985 to 673 million pounds and then dropped another 4.5 percent of 643 million pounds in 1986. Average annual milk production per cow rose 3.7 percent to 12,405 pounds in 1985 and then rose an additional 2.4 percent to 12,705 pounds per cow in 1986.

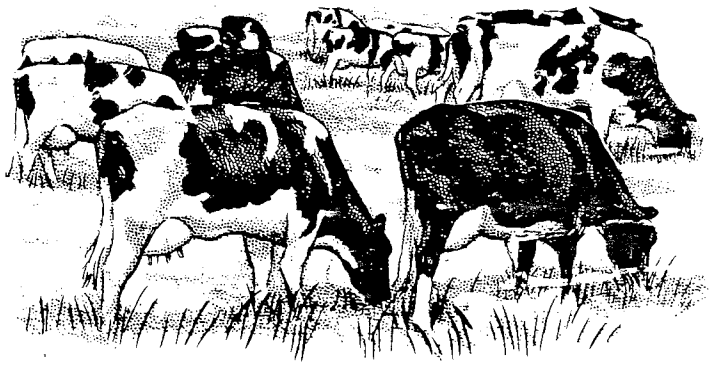
Average milk prices were lower in 1985 and 1986, dropping 5.2 percent in 1985 to $13.83/cwt., and then an additional 1.4 percent in 1986 to $13.63/cwt. Combined with lower production, the total farm value of milk fell from $109 million in 1984 to $93 million in 1985 and $88 million in 1986.

Dairy trends from the mid Seventies to 1983 generally involved the concentration of dairy operations both nationally and at the state level. During these years the number of farms dropped but the number of cattle per farm, per cow productivity and capitalization generally increased. The number of fluid milk handlers buying milk from farms has dropped also; currently there are less than half the number of handlers there were in 1980.

The number of dairy manufacturing plants had been decreasing until recently; the number started to increase as more ice cream manufacturing plants were established. In 1985-86 there were 19 ice cream manufacturers licensed in Maine and a total of 63 ice cream manufacturers licensed nation wide to sell in Maine.

Despite fewer cows, total milk production increased through the late Seventies until 1983 because of increased productivity. Total production peaked in 1983 at 741 million pounds. Per cow productivity peaked in 1983, also, reaching 13,000 pounds — 22 percent over the 1976 level. Total production and the number of milk cows both declined after 1983 with 12 percent fewer cows and 13 percent less production by 1986. Milk prices increased from 1976 to 1981 in actual dollars; in 1982, the trend reversed and prices continued to decline through 1986. However, in terms of constant dollars milk prices have been declining since 1976.

The Dairy Diversion Program, which ran from October 1, 1983 to March 31, 1985 was designed to reduce milk production. It was an optional program where dairy farmers could pledge to reduce their production by 5 - 30 percent below a base figure. In return, the Federal government paid participating farmers $10.00/cwt. for milk that was not produced. All dairy farmers were assessed $.50/cwt. during this period to cover the costs of the program. A total of 111 Maine dairy farmers participated, receiving $2,973,999 in government payments and accounting for 297,400 cwt. of foregone milk production.



Included in the Food Security Act of 1985 was the Dairy Termination Program, more commonly known as the Whole Herd Buyout Program. The program was intended to take 12 billion pounds of production out of the milk market nationwide (about 9 percent of the current total production). Producers wanting to participate in the program were required to submit bids for government payments per cwt. of production (calculated on a base period). The payments are subsidized by a $.52/cwt. levy on remaining farmers. Farmers who were accepted into the program are required to either slaughter or export their entire herds, stay out of dairying for five years and not allow their facilities to be used for dairying during that time period. All bids less than $22.50/cwt. were accepted. Of 178 Maine farmers bidding, 86 were accepted for a total of 726,158 cwt. of production (11 percent of the state total) and 9,833 head of cattle. Eighty percent of Maine's dairy farmers did not submit bids. The average of all Maine bids submitted was $28.50/cwt. and the average accepted bid was $13.43/cwt.

MILK: FARM PRODUCTION & VALUE OF MILK & MILK PRODUCTS SOLD, MAINE, 1977 - 1986

Year	Number of Milk Cows On Farms	Production Per Milk Cow Milk	Production Per Milk Cow Milkfat	Percentage of Fat in All Milk Produced	Total Milk	Total Milkfat	Farm Value of Milk Produced
	Thousands	Pounds		Percent	Million Pounds		1,000 Dollars
1977	58	11,000	403	3.66	638	23	69,606
1978	58	11,052	405	3.66	641	23	74,933
1979	56	11,446	415	3.63	641	23	83,971
1980	56	11,875	430	3.62	665	24	93,233
1981	57	12,263	448	3.65	699	26	104,151
1982	59	12,390	455	3.67	731	27	108,115
1983	57	13,000	481	3.70	741	27	109,594
1984	58	11,966	464	3.73	694	27	108,869
1985	55	12,236	455	3.72	673	25	93,079
1986	51	12,608	474	3.76	643	24	87,617

MILK COWS: AVERAGE NUMBER ON FARMS, BY QUARTERS & ANNUAL, MAINE 1977 - 1986

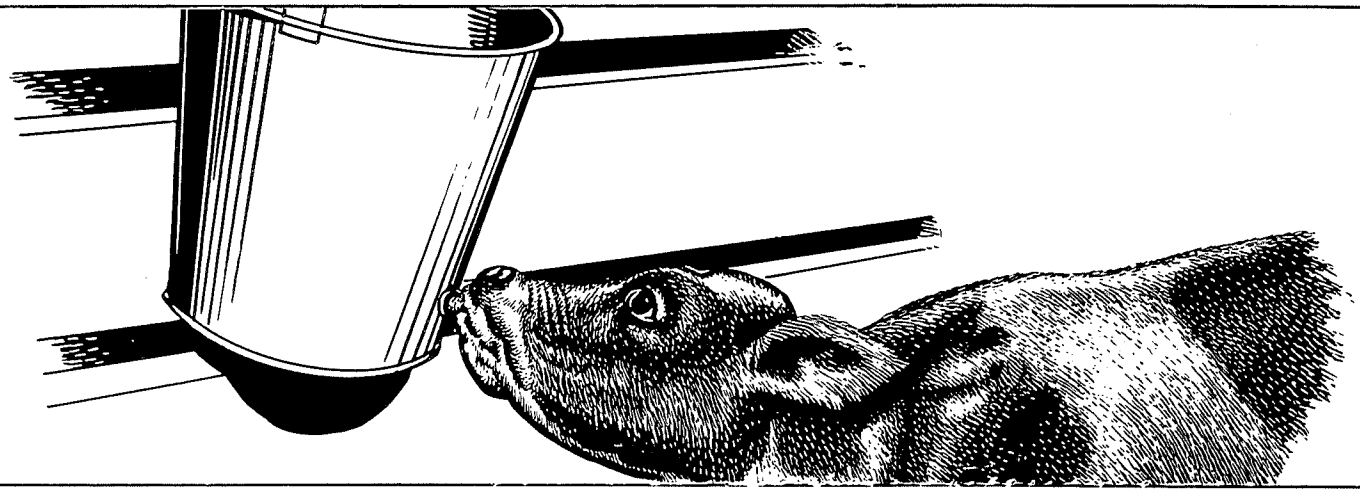
Year	Jan-Mar	Apr-Jun	Jul-Sept	Oct-Dec	Annual
			1,000 Head		
1977	58	58	58	58	58
1978	58	58	57	57	58
1979	56	55	55	56	56
1980	57	57	56	55	56
1981	56	57	57	58	57
1982	59	59	58	58	58
1983	57	56	57	58	57
1984	59	59	57	56	58
1985	56	54	54	54	55
1986	52	51	50	49	51

MILK PRODUCTION: AVERAGE PER COW, BY QUARTERS & ANNUAL, MAINE 1977 - 1986

Year	Jan-Mar	Apr-Jun	Jul-Sept	Oct-Dec	Annual
			Pounds		
1977	2,520	2,965	2,880	2,640	11,000
1978	2,540	2,970	2,945	2,700	11,052
1979	2,750	3,040	3,000	2,770	11,446
1980	2,755	3,050	3,090	2,930	11,875
1981	2,890	3,190	3,190	2,980	12,263
1982	2,920	3,230	3,340	3,120	12,534
1983	3,050	3,310	3,395	3,240	13,000
1984	3,020	3,030	2,990	2,990	11,966
1985	3,018	3,145	3,185	3,057	12,405
1986	3,074	3,308	3,240	3,082	12,705

MILK PRODUCTION, BY QUARTERS & ANNUAL, MAINE, 1977 - 1986

Year	Jan-Mar	Apr-Jun	Jul-Sept	Oct-Dec	Annual
			Million Pounds		
1977	146	172	167	153	638
1978	147	172	168	154	641
1979	154	167	165	155	641
1980	157	174	173	161	665
1981	162	182	182	173	699
1982	172	187	190	178	727
1983	174	185	194	188	741
1984	183	187	185	179	734
1985	166	173	172	162	673
1986	166	172	162	151	651
1987	150	174			



MILK: QUANTITY MARKETED, PRICE & CASH RECEIPTS, MAINE, 1977 - 1986

	Sold to Plants			Sold Directly to Consumers			Combined Marketings		
Year	Quantity	Price Per Cwt.	Cash Receipts	Quantity	Price Per Quart	Cash Receipts	Quantity	Price Per Cwt.	Cash Receipts
	Million Pounds	Dollars	1,000 Dollars	Million Quarts	Cents	1,000 Dollars	Million Pounds	Dollars	1,000 Dollars
1977	615	10.80	66,420	3.7	42	1,563	623	10.91	67,983
1978	620	11.60	71,920	3.3	43	1,400	627	11.69	73,320
1979	620	13.00	80,600	3.3	47	1,530	627	13.10	82,130
1980	645	13.90	89,655	3.7	51	1,898	653	14.02	91,553
1981	680	14.80	100,640	3.3	53	1,726	687	14.90	102,366
1982	710	14.70	104,370	3.3	52	1,693	717	14.79	106,063
1983	720	14.70	105,840	3.3	52	1,693	727	14.79	107,533
1984	675	14.50	103,675	3.3	51	1,660	682	14.59	99,535
1985	650	13.70	89,050	4.2	50	2,093	659	13.83	91,143
1986	620	13.50	83,700	4.1	48	2,009	629	13.63	85,709

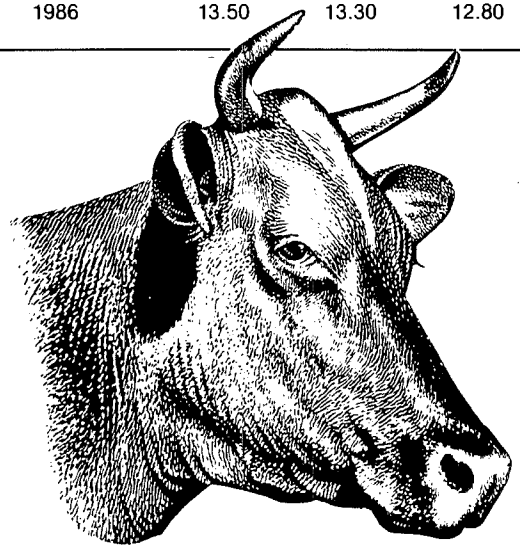
MILK: QUANTITIES USED & MARKETED BY FARMERS, MAINE, 1977 1986

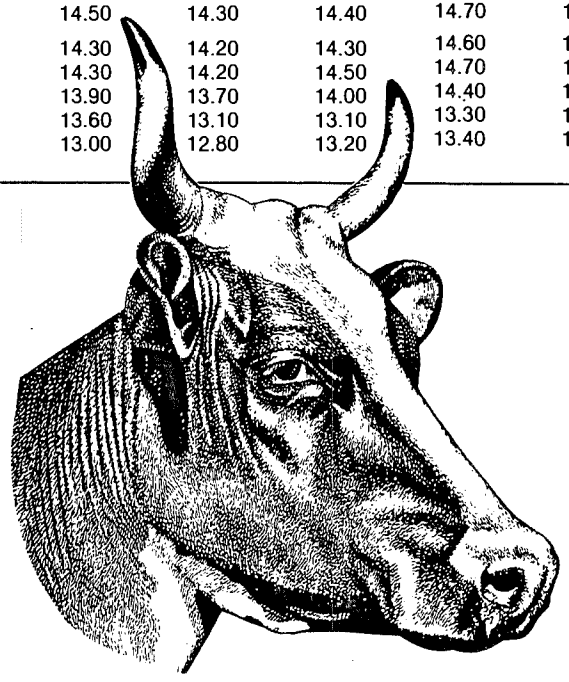
(In Million Pounds)

Year	Milk, Used on Farms Where Produced				Milk Marketed by Farmers		
	Total Produced	Used For Milk, Cream and Butter	Fed to Calves	Total	Sold to Plants and Dealers	Sold Directly to Consumers	Total
1977	638	7	8	15	615	8	623
1978	641	6	8	14	620	7	627
1979	641	6	8	14	620	7	627
1980	665	4	8	12	645	8	653
1981	699	4	8	12	680	7	687
1982	731	4	10	14	710	7	717
1983	741	4	10	14	720	7	727
1984	734	3	9	12	715	7	722
1985	663	4	10	14	650	9	659
1986	643	4	10	14	620	9	629

MILK: SOLD TO PLANTS, MONTHLY & ANNUAL AVERAGE PRICE PER 100 POUNDS RECEIVED BY FARMERS, MAINE, 1977 - 1986

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Average
							Dollars						
1977	10.70	10.70	10.50	10.40	10.30	10.40	10.60	10.90	11.20	11.40	11.50	11.40	10.80
1978	11.30	11.30	11.20	11.00	11.10	11.00	11.30	11.60	12.10	12.60	12.80	12.70	11.60
1979	12.90	12.90	12.80	12.50	12.40	12.30	12.60	13.10	13.30	13.80	14.00	13.60	13.00
1980	13.70	13.70	13.60	13.50	13.50	13.10	13.50	13.80	14.20	14.70	14.90	15.10	13.90
1981	15.10	15.00	14.80	14.60	14.50	14.30	14.40	14.70	15.00	15.30	15.20	15.10	14.80
1982	14.20	14.90	14.70	14.70	14.30	14.20	14.30	14.60	14.90	15.10	15.20	15.10	14.70
1983	15.00	14.90	14.80	14.70	14.30	14.20	14.50	14.70	15.00	15.10	15.20	15.00	14.78
1984	14.80	14.40	14.30	14.10	13.90	13.70	14.00	14.40	14.80	15.10	15.30	14.10	14.41
1985	15.10	14.70	14.50	14.10	13.60	13.10	13.10	13.30	13.40	13.70	13.70	13.50	13.81
1986	13.50	13.30	12.80	12.90	13.00	12.80	13.20	13.40	13.90	14.30	14.60	14.40	13.51





DAIRY: FARMS, NUMBERS, INVENTORY
COUNTY DISTRIBUTION, MAINE, 1982

	Milk Cows		Farms by Inventory									
			1 to 9		10 to 29		30 to 49		50 to 99		100 or more	
County	Farms	Number	Farms	Number	Farms	Number	Farms	Number	Farms	Number	Farms	Number
Androscoggin	129	5,844	29	85	20	413	30	1,141	36	2,348	14	1,857
Aroostook	136	2,594	78	182	19	398	22	824	15	(D)	2	(D)
Cumberland	99	3,108	43	115	15	308	15	561	20	1,377	6	747
Franklin	105	3,047	39	99	19	352	29	1,139	14	920	4	537
Hancock	30	161	25	(D)	3	46	2	(D)	—	—	—	—
Kennebec	223	8,840	81	181	26	523	55	2,122	42	2,707	19	3,307
Knox	43	982	18	(D)	8	(D)	12	445	5	333	—	—
Lincoln	60	1,128	38	94	8	147	7	252	5	(D)	2	(D)
Oxford	114	2,963	58	105	14	272	23	859	15	992	4	735
Penobscot	212	8,260	70	175	30	632	48	1,786	46	3,067	18	2,600
Piscataquis	51	1,757	20	44	12	261	7	255	10	(D)	2	(D)
Sagadahoc	28	911	10	(D)	5	(D)	5	198	8	584	—	—
Somerset	237	8,987	57	110	59	1,141	55	2,135	56	3,649	10	1,952
Waldo	150	4,945	39	109	38	798	38	1,397	28	1,732	7	909
Washington	41	469	35	66	—	—	1	(D)	5	(D)	—	—
York	127	3,212	61	139	15	308	27	1,052	22	(D)	2	(D)
Maine	1,784	57,208	701	1,612	291	5,869	376	14,284	327	21,500	0;	13,943

Source: 1982 Census of Agriculture.

DAIRY HERD BUYOUT PROGRAM — MAINE, STATE WIDE SUMMARY

Average Bid:	$13.43/CWT. (of farmers participating)
	$28.50/CWT. (of all farmers bidding)
Number of Cows:	5,612
Number of Heifers:	2,491
Number of Calves:	1,730
Total Number of Cattle:	9,833
Highest Bid:	$130/CWT.
Lowest Bid:	$4.90/CWT.

80% of Maine's farmers did not submit bids.

The Buyout Program accounted for 11.08% of Maine's total production.

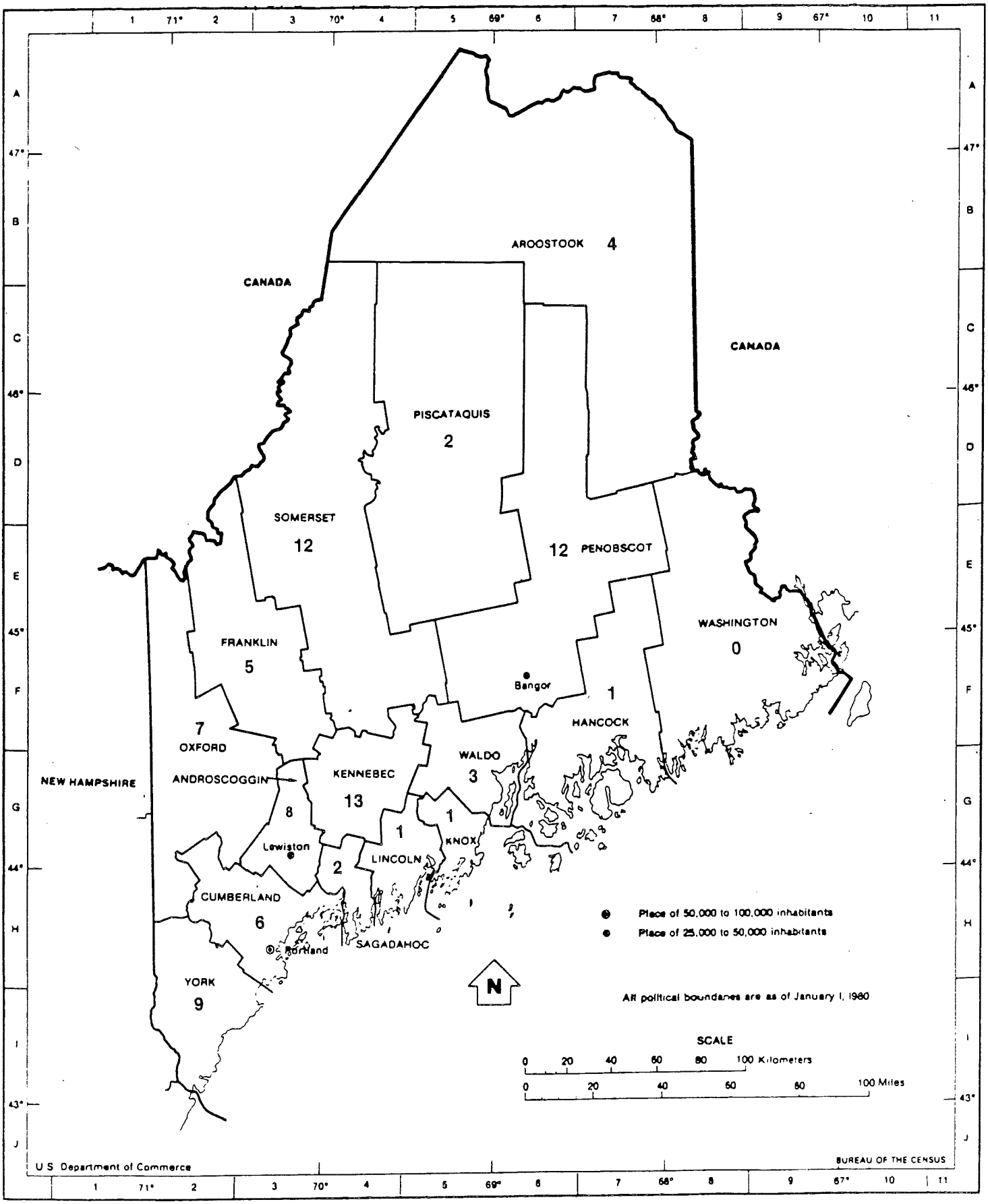
Source: Maine Department of Agriculture, Food and Rural Resources.

DAIRY HERD BUYOUT PROGRAM SUMMARY FOR MAINE, BY COUNTY

County	Number of Farms	1985 Marketing (cwt.)	Milking Cows
Androscoggin	8	51,319.23	411
Aroostook	4	22,203.83	172
Cumberland	6	41,915.94	308
Franklin	5	37,993.78	320
Hancock	1	2,222.90	35
Kennebec	13	84,172.97	735
Knox	1	4,230.81	27
Lincoln	1	2,233.50	19
Oxford	7	94,230.65	622
Penobscot	12	128,353.12	960
Piscataquis	2	8,124.51	63
Sagadahoc	2	15,655.39	99
Somerset	12	155,708,32	1,267
Waldo	3	16,480.85	134
Washington	N/A	N/A	N/A
York	9	61,312.46	440
Total	86	726,158.24	5,612

Source: Maine Department of Agriculture, Food and Rural Resources.

NUMBER OF DAIRY FARMS PARTICIPATING IN THE DAIRY HERD BUYOUT PROGRAM BY COUNTY



Source: Maine Department of Agriculture, Food and Rural Resources.

The poultry industry in Maine consists of both egg and broiler production. Since 1978, the broiler sector has declined in sales to about $20 million annually while eggs have produced about $80 million in sales. There is also some farm level production of chickens, turkeys and other fowl, worth about $4 million each year. The total farm value of the poultry industry of $100 million makes it about equal to the dairy and beef industries, combined, in economic value to Maine agriculture.

Egg production and price dropped in 1985. Egg production was down 9 percent in 1985 to 1,237 million eggs, with prices dropping 16 percent to $.77/doz. in 1985. Production remained stable in 1986 at 1,239 million eggs but prices rose slightly to $.79/doz. The average number of layers and total chicken inventory followed a trend similar to egg production and price. The average number of layers decreased 7 percent in 1985 to 4,888,000 birds. The number of layers was fairly stable through 1986 at 4,893,000 birds. Total chicken inventory dropped from 7,044,000 in 1984 to 6,639,000 in 1985 (down 6 percent). Inventories dropped slightly to 6,508,000 in 1986.

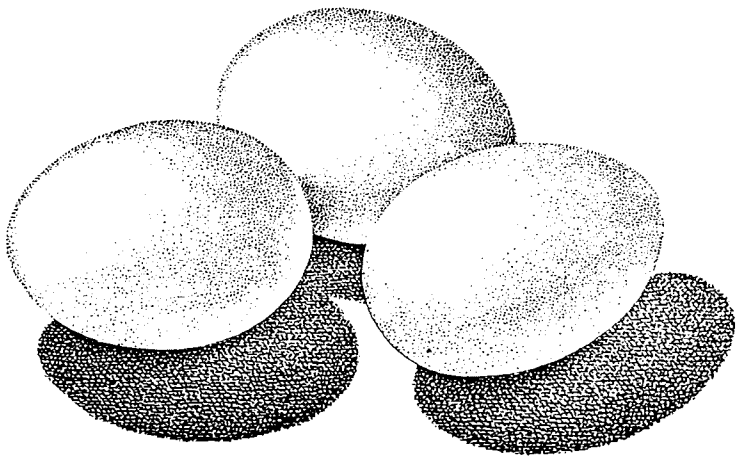
The egg industry in Maine has followed a general decline from the late Seventies to 1986. Egg production, after increasing through the Seventies to a peak of 1,913 million by 1979, declined steadily to 1,239 million by 1986. The average number of layers peaked in 1978 at 7.6 million then declined steadily to 4.9 million in 1986, the lowest level since before 1972. The total inventory for all chickens has generally declined from 1978, also. The total inventory was 6.5 million birds in 1986 compared to 12.1 million in 1978, a drop of nearly fifty percent over eight years. Egg prices followed a generally upward trend from 1978 to 1984, peaking at $.92/doz. Prices dropped substantially after 1984 to $.79/doz. by 1986.

Cash receipts from eggs declined 23 percent in 1985 from 1984, to $79.4 million. Cash receipts increased 2 percent the following year to $81.1 million in 1986.

Maine's broiler industry, once supporting 5 major producers and approximately 350 growers, is now dominated by a single processing company in Waldo County with fewer than 100 growers. Cash receipts from broilers has declined in the past two years from the 1984 level. Cash receipts in 1985 were down to $14.5 million. Broilers brought in 14 percent more cash receipts in 1986, accounting for $16.5 million, which was still below the 1984 level.

In recent years, two poultry diseases have been of special concern to the poultry and egg industry in Maine: avian influenza and salmonella. Avian influenza is a serious health problem for poultry since it is capable of producing a great loss of egg production and high mortality rates in infected flocks. A major outbreak of the disease occured in the mid-Atlantic states starting in Pennsylvania in late 1983. Federal and state agencies worked together to eradicate the disease by quarantining and destroying infected flocks and disinfecting contaminated areas. On May 29, 1985, the USDA officially declared lethal avian influenza eradicated from the U.S.

As a result of the outbreak, the Department of Agriculture has drawn up a contingency plan with emergency procedures to prevent and control avian influenza in Maine. A Poultry Disease Control Fund has been set up by the State for reimbursement of poultry farmers who suffer losses due to disease.



Maine has also entered into a regional program with other New England states for surveillance and prevention of avian influenza. This program requires testing of all show birds, testing at live poultry markets and monitoring of dealers, haulers and auctions.

Salmonella has been a cause for concern in the poultry industry, also. Unlike avian influenza, it is not a health problem for poultry but it can cause food poisoning in consumers of meat or eggs from infected birds. Although salmonella infection can be prevented by proper food handling and preparation, the poultry industry is concerned that consumers' fears of salmonella may affect sales of poultry and eggs. The Department has funded a research project on salmonella in Maine eggs in which over three thousand eggs were tested and no salmonella was found. Maine is also included in a New England survey of flocks of salmonella.

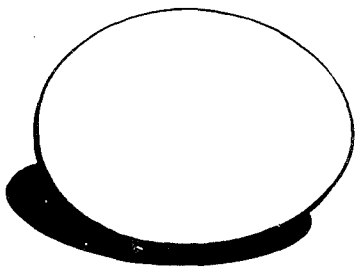
EGGS: PRODUCTION, PRICE & VALUE, MAINE, 1977 - 1986

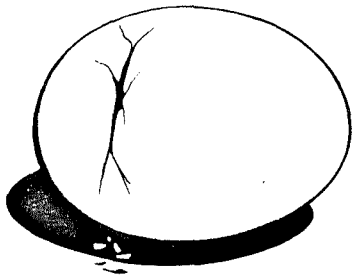
Year	Eggs Produced	Price Per Dozen	Value of Production
	Millions		1,000 Dollars
1977	1,849	66.0	101,640
1978	1,912	62.3	99,161
1979	1,913	68.7	109,405
1980	1,793	70.1	104,624
1981	1,607	81.1	108,471
1982	1,430	78.3	93,177
1983	1,402	81.0	94,500
1984	1,355	92.0	103,730
1985	1,237	77.0	79,374
1986	1,239	78.6	81,155

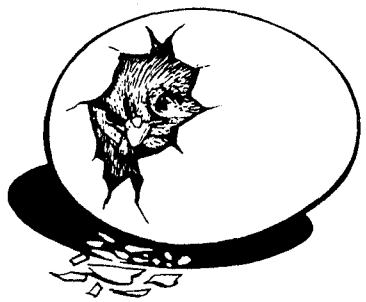
EGGS: TOTAL PRODUCTION BY MONTHS & ANNUAL, MAINE, 1977 - 1986

Month	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
		Million								
December 1/	161	154	166	159	149		123	114	106	107
January	158	160	167	160	149	388	122	118	108	115
February	143	147	152	147	129		112	111	93	95
March	163	163	165	152	136		126	120	106	96
April	158	158	161	147	129	351	120	117	102	94
May	161	163	167	148	129		120	115	102	102
June	152	159	160	142	125		115	112	100	104
July	153	167	164	150	135	341	117	119	103	107
August	153	165	161	150	137		117	116	106	107
September	148	158	148	146	129		113	105	104	103
October	152	161	150	149	133	305	112	105	107	106
November	147	157	152	143	127		105	103	100	103
Annual	1,849	1,912	1,913	1,793	1,607	1,430	1,395	1,355	1,237	1,239

1/ Previous year.
2/ 1982 is reported by quarters.





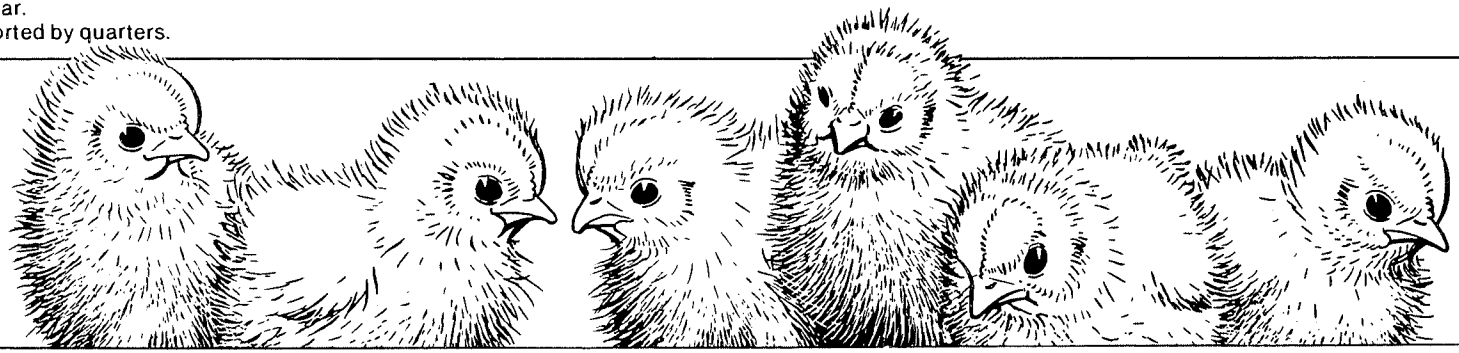


POULTRY: AVERAGE NUMBER OF LAYERS BY MONTH & ANNUAL, MAINE, 1977 - 1986

Thousands

Month	1977	1978	1979	1980	1981	1982 2/	1983	1984	1985	1986
December 1/	7,543	7,198	7,555	7,315	6,919		5,589	5,063	5,140	4,968
January	7,440	7,523	7,625	7,311	6,972	6,069	5,596	5,284	5,175	4,987
February	7,373	7,653	7,733	7,097	6,720		5,481	5,356	5,140	4,932
March	7,420	7,628	7,618	6,806	6,396		5,417	5,408	4,962	4,866
April	7,431	7,650	7,540	6,737	6,226	5,512	5,275	5,266	4,874	4,880
May	7,292	7,586	7,520	6,562	6,175		5,203	5,098	4,832	4,867
June	7,116	7,551	7,528	6,529	6,156		5,181	5,197	4,738	4,871
July	7,111	7,650	7,505	6,711	6,366	5,369	5,129	5,258	4,636	4,862
August	7,130	7,685	7,423	6,910	6,402		5,116	5,207	4,734	4,835
September	7,125	7,685	7,140	7,106	6,177		4,985	5,175	4,809	4,858
October	7,125	7,595	7,000	7,076	6,039	5,495	4,970	5,282	4,779	4,903
November	7,080	7,595	7,218	6,893	5,918		4,893	5,301	4,859	4,889
Annual	7,266	7,583	7,450	6,922	6,372	5,611	5,235	5,241	4,888	4,893

1/ Previous year.
2/ 1982 is reported by quarters.



EGGS: DAILY RATE OF LAY BY MONTHS & ANNUAL, MAINE, 1977 - 1986

Percent

Month	1977	1978	1979	1980	1981	1982 2/	1983	1984	1985	1986
December 1/	68.8	69.0	70.7	70.1	69.5		72.6	68.9	66.5	69.5
January	68.5	68.8	70.6	70.6	68.9	71.0	70.3	72.0	67.3	74.4
February	69.5	68.8	70.0	71.4	68.6		73.0	69.3	64.6	68.9
March	70.8	68.8	69.9	72.0			75.0	71.6	68.9	63.7
April	70.9	68.9	71.2	72.7	69.1	69.2	75.8	74.1	69.8	64.2
May	71.1	69.3	71.7	72.7	67.4		74.4	72.8	68.1	67.6
June	71.1	70.2	70.8	72.5	67.7		74.0	65.8	70.4	71.2
July	69.6	70.4	70.5	72.1	68.4	69.0	73.6	66.6	71.7	71.0
August	69.1	69.4	70.1	70.0	69.0		73.4	71.9	72.2	71.4
September	69.3	68.7	69.3	68.5	69.6		73.6	67.6	72.1	70.7
October	68.9	68.2	69.1	67.9	71.0	70.0	72.5	64.1	72.2	69.7
November	69.1	68.8	70.3	69.2	71.5		71.4	64.8	78.6	70.2
Annual	69.7	69.1	70.4	70.8	69.1	69.8	73.1	70.8	69.3	69.4

1/ Previous year.
2/ 1982 is reported by quarters.

CHICKENS, INVENTORY, VALUE & CLASSES ON FARMS, DECEMBER 1, MAINE, 1977 - 1986

Year	Hens and Pullets of Laying Age		Pullets Not of Laying Age				Value	
	Hens	Pullets	3 Months and Older	Under 3 Months	Other	All Chickens	Per Head	Total
			1,000 Head				Dollars	1,000 Dollars
1977								
1977	1,700	5,300	1,416	1,525	144	10,085	2.20	22,187
1978	3,860	3,810	2,360	1,995	85	12,110	2.10	25,431
1979	2,209	5,155	2,138	1,575	113	11,190	2.05	22,940
1980	1,567	5,246	1,116	1,199	92	9,220	2.25	20,745
1981	2,200	3,700	1,530	750	40	8,220	2.35	19,317
1982	2,382	3,138	894	1,280	16	7,710	2.30	17,733
1983	1,585	3,344	964	782	13	6,688	2.55	17,054
1984	2,282	2,952	578	1,218	14	7,044	2.25	15,849
1985	2,267	2,700	631	1,026	15	6,639	2.15	14,274
1986	2,148	2,714	579	1,054	13	6,508	2.35	15,294

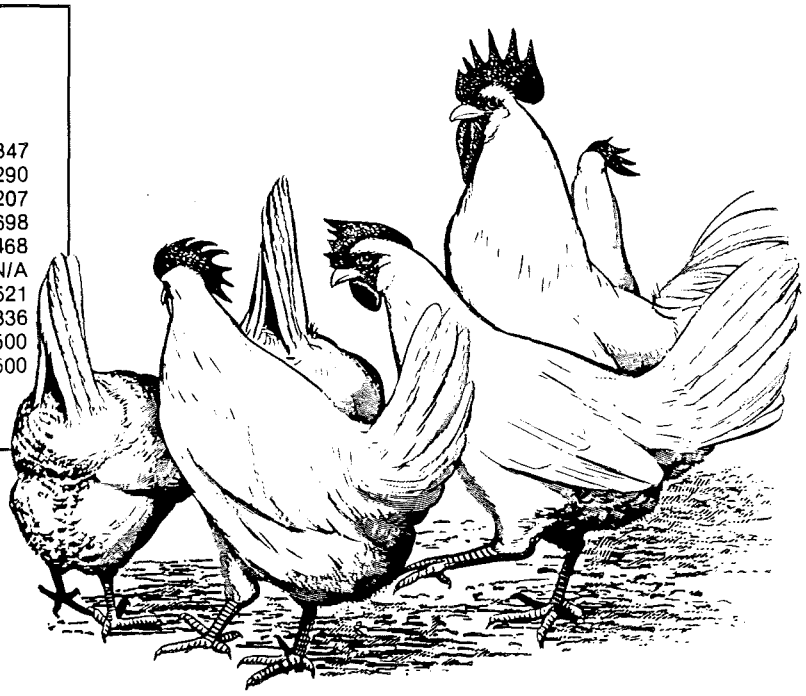
1/ Excludes commercial broilers.

COMMERCIAL BROILERS: FARM INCOME ESTIMATES, 1977 - 1986

(in 1,000 Dollars)

1977	84,347
1978	92,290
1979	92,207
1980	81,698
1981	52,468
1982	N/A
1983	23,521
1984	20,336
1985	14,500
1986	16,500

Sources: 1977 - 1981, USDA
1983 - 1986, Dept. estimates based on USDA statistics.



CHICKENS: PRODUCTION, DISPOSITION & GROSS INCOME, MAINE, 1977 - 1986

Year	Number of Birds	Liveweight		
	Sold	Sold	Price Per Pound	Gross Income
	1,000 Head	1,000 Pounds	Cents	1,000 Dollars
1977	6,532	41,152	11.3	4,658
1978	6,000	37,800	12.3	4,657
1979	7,000	44,100	13.2	5,830
1980	6,655	41,927	8.3	3,486
1981	6,200	39,060	9.0	3,521
1982	5,150	32,445	8.0	2,602
1983	5,063	31,897	10.5	3,356
1984	3,773	23,770	16.5	3,933
1985	5,052	27,786	12.0	3,334
1986	4,604	24,401	9.0	2,196

CATTLE AND CALVES

Maine's cattle industry is composed of sales of dairy cattle and beef cattle, with sales of dairy cattle, including cull dairy cows, the major component. Maine's beef industry has two principal segments: cattle raised primarily for beef and cull dairy cows. Direct sales to consumers continues to be the major market for cattle raised for beef.

The number of cattle and calves marketed in 1985 was up 25 percent from 1984 to 79,000 head. However, the number of pounds marketed dropped slightly, to 47.5 million pounds, as a higher ratio of calves to cattle were marketed. The number of cattle and calves marketed remained stable in 1986 at 79,000 head, but total weight increased 14 percent since more cattle were marketed relative to calves.

Cash farm receipts from the sale of cattle and calves dipped 21 percent from 1984 to $17 million in 1985. Cash farm receipts rose again in 1986 to $23 million, the highest level in the past ten years. The increase in 1986 was due primarily to the larger size of the cattle being marketed. A number of dairy cows were slaughtered under the Dairy Herd Buy-out Program.

Total cattle inventories remained fairly stable between 131,000 and 133,000 head from 1977 to 1981. Cattle inventories started to increase after 1981 to a peak of 148,000 in 1984. Inventories dropped sharply after 1984. The 1985 total cattle inventory was 145,000 head, which dropped 7 percent to 135,000 in 1986. The 120,000 head counted in 1987 was the lowest inventory of the past fifteen years.

Value per head followed a trend similar to that of the cattle inventory. Prices rose from $285 in 1976 to a peak of $750 in 1981. Prices declined after 1981 to $505 in 1986 and $515 in 1987, the lowest value since 1979.

Production, in pounds, followed a generally downward trend from 35.1 million pounds in 1976 to 25.6 million pounds in 1980. The trend reversed sharply in the next two years to peak in 1982 at 39.1 million pounds. Since 1982, production has decreased steadily to 32.0 million pounds in 1986.

The mid-coastal and central southwestern regions have the largest number of beef farms in Maine. Currently, there are about 24,000 beef animals in Maine, with an average herd size of 18 brood cows.

Recent developments in Maine's beef industry include an annual feeder calf sale. The annual fall feeder calf sale was initiated in 1985 by the New England Beef Council and is available to Maine producers.

A major development in the national beef industry occured in 1986 when the Beef Promotion and Research Act was passed. This act is commonly referred to as the beef check-off program. The program is intended to improve the marketing for the U.S. beef industry. The check-off requires the assessment of $1 per head on all cattle sold in the U.S. or a per-pound equivalent for imported beef products. More than $17 million was collected nationally in the first three months of the program. A total of $27,207 was collected from Maine between October 1, 1986 and May 31, 1987.

The Maine Beef Producers Association conducted marketing surveys of the beef industry in 1986-87. The freezer trade market was the major market for respondents, with sale of breeding stock and auctions the secondary markets. Almost all depend on word-of-mouth as their main marketing strategy. Slightly over half said that their beef business was increasing, while 41 percent reported that their businesses were declining. Word-of-mouth and growing reputation was the most important factor cited for business growth, with packaging of smaller units and population increases in rural areas also important. Decreased demand for freezer meat was the primary cause cited for declining business. Changing consumer trends away from red meat towards fish and poultry were also responsible for decreased sales. Most respondents reported having herds of 60 or less cattle with most herds in the range of 10 - 30 head.

CATTLE AND CALVES: PRODUCTION & INCOME, MAINE, 1977 - 1986

Year	Production	Marketings	Price Per 100 Pounds		Value of Home Consumption	Gross Income
			Cattle	Calves		
	1,000 Pounds		Dollars			
1977	30,840	30,804	25.80	36.30	1,243	9,484
1978	32,100	33,510	43.50	52.00	2,245	17,045
1979	29,920	32,930	53.00	71.00	1,823	19,730
1980	25,620	25,140	56.00	68.00	3,371	17,752
1981	31,780	19,230	50.00	58.00	3,010	12,765
1982	39,110	43,420	47.00	52.00	2,130	22,653
1983	36,700	43,690	42.00	45.00	1,948	20,348
1984	37,510	49,800	43.00	48.00	2,055	23,544
1985	32,810	47,530	40.00	42.00	1,948	19,078
1986	32,050	54,040	42.00	49.00	2,045	24,924

CATTLE AND CALVES: INVENTORY, SUPPLY & DISPOSITION, MAINE, 1977 - 1986

Year	All Cattle on Hand Jan. 1	Calf Crop	Inshipments	Marketings		Farm Slaughter Cattle and Calves	Deaths	
				Cattle	Calves		Cattle	Calves
	1,000 Head							
1977	133	58	4	30	24	2	2	5
1978	132	58	9	33	23	2	2	6
1979	133	55	5	31	22	1	2	6
1980	131	55	6	26	22	2	4	7
1981	131	56	7	21	15	2	4	7
1982	146	62	16	42	23	2	4	7
1983	144	60	18	41	19	2	4	8
1984	148	60	16	48	15	2	3	8
1985	145	63	16	46	33	2	2	6
1986	135	58	16	53	26	2	3	5

CATTLE: NUMBER AND VALUE OF ALL CATTLE & CALVES ON FARMS JANUARY 1, MAINE, 1977 - 1987

Year	Number	Value	
		Per Head	Total
	1,000 Head	Dollars	1,000 Dollars
1977	133	310	41,230
1978	132	325	42,900
1979	133	490	65,170
1980	131	630	82,530
1981	131	750	98,250
1982	146	715	104,390
1983	146	625	91,250
1984	148	550	81,400
1985	145	525	76,125
1986	135	505	68,175
1987	120	515	61,800

CATTLE: JANUARY 1, INVENTORY BY CLASSES, MAINE, 1977 - 1987

Year	All Cattle and Calves	Cows & Heifers That Have Calved		Heifers 500 Lbs. & Over			Steers 500 Lbs. +	Bulls 500 Lbs. +	Steers, Heifers & Bulls —500 Lbs.
		Beef	Milk	Beef Cow Replacements	Milk Cow Replacements	Other Replacements			
					1,000 Head				
1977	133	10	58	3	26	2	3	3	28
1978	132	10	58	4	23	2	4	2	29
1979	133	12	57	4	23	1	4	2	30
1980	131	12	57	3	21	3	2	2	31
1981	131	13	55	4	20	2	3	2	32
1982	145	16	58	6	23	2	3	3	34
1983	146	15	58	6	26	2	3	4	32
1984	148	15	59	6	27	1	3	4	33
1985	148	11	59	4	30	1	3	3	32
1986	125	10	54	4	28	2	5	2	30
1987	120	10	54	4	20	2	6	2	27

HOGS AND PIGS

Hog farming in Maine is a small industry with most operating on a part-time basis. Maine has about 1,800 brood sows on 125 farms with the largest farm having approximately 120 brood sows. Feeder pig operations, where pigs are raised to eight weeks and then sold for finishing, account for the majority of the commercial hog farms in Maine. Most commercial Maine farmers do not raise their pigs to slaughter weight due to the high cost of shipping feed grain from the Midwest. Most feeder pigs are sold directly to the consumer, at the Lancaster, Pennsylvania auction market or at local auctions.

Hog inventories dropped after the 1984 inventory reached 9,400. The 1985 inventory of 8,800 head was down 6 percent from 1984. Hog inventories continued to decline in 1986, dropping another 6 percent to 7,900 head. The total hog inventory rose slightly in 1987 to 8,000 head.

The pig crops were down, also, from the 1984 level of 17,600. The pig crop dropped 20 percent in 1985 to 14,100 head. There was an increase to 15,100 in 1986.

Hog production, in pounds, followed a similar trend in 1985 and 1986, dropping from 4.7 million pounds in 1984. Production was down 17 percent to 3.9 million pounds in 1985, then rose slightly in 1986 to 4.2 million pounds.

Marketings dropped, also, after 1984. Marketings went from 3.7 million pounds in 1984 to 2.7 million pounds in 1985 (down 27 percent), then rising slightly in 1986 to 2.9 million pounds.

Gross income and per pound price dropped from 1984 to 1985. Gross income decreased 28 percent, from $2.3 million in 1984 to $1.7 million in 1985. Prices dropped from $.46/pound in 1984, down 11 percent to $.41/pound in 1985. Gross income and price increased slightly in 1986 to $1.9 million and $.46/pound, the same as the 1984 price.

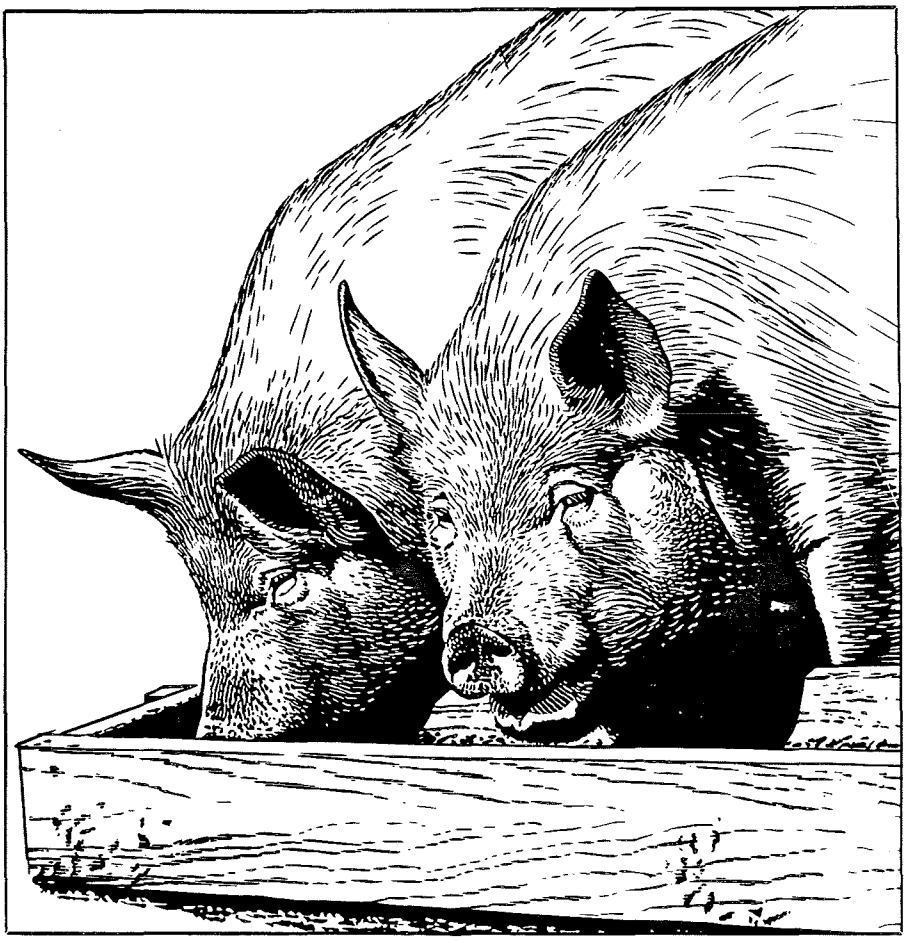
Hog and pig production and marketing have followed similar trends in recent years. The late Seventies saw a steady increase in both production and marketings. Production peaked in 1980 at 7.6 million pounds. Marketings peaked a year later at 5.6 million pounds in 1981. Production and marketing then declined until 1983. Production decreased over 50 percent from 1980 to 3.2 million pounds with marketings down over 60 percent to 1.8 million pounds in 1983. The trends reversed sharply in 1984 as production jumped 50 percent to 4.8 million pounds and marketings went to 3.7 million pounds. However both trends continued the decline after 1984 reaching 4.2 million pounds of production and 2.9 million pounds of marketings in 1986.

Starting in 1980, hog prices per pound rose from $.37/pound until it peaked at $.54/pound in 1982. The following year it dropped 22 percent and has fluctuated between $.41/pound and $.46/pound since then.

There is some interest in the industry in establishing a marketing committee with the beef industry. If established, the committee would cooperatively market beef and pork as a quality Maine product. Possible goals include increasing local markets, making Maine products more visible to the consumer, and increasing production levels to sustain a viable livestock industry in Maine.

HOGS: PRODUCTION AND INCOME, MAINE, 1977 - 1986

Year	Production	Marketings	Price Per 100 Lbs.	Value of Home Consumption	Gross Income
	1,000 Pounds		Dollars	1,000 Dollars	
1977	3,013	2,309	37.00	259	1,113
1978	2,917	1,840	45.00	354	1,182
1979	4,176	2,675	44.00	462	1,639
1980	7,656	4,630	37.00	925	2,638
1981	6,722	5,625	43.00	860	3,279
1982	3,627	2,850	54.00	527	2,066
1983	3,157	1,767	42.00	441	1,183
1984	4,752	3,668	46.00	621	2,308
1985	3,886	2,714	41.00	554	1,667
1986	4,167	2,920	46.00	529	1,872



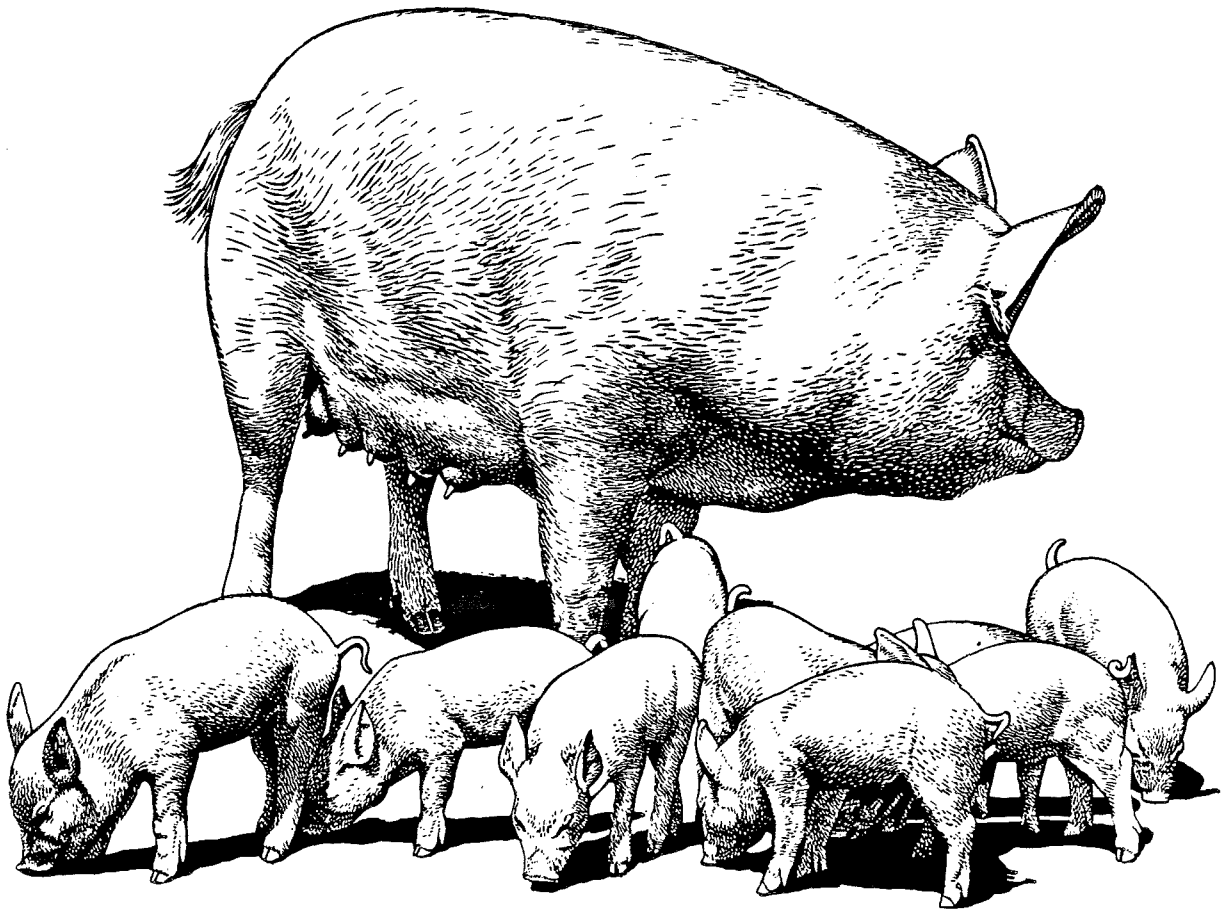
HOGS: NUMBER AND VALUE ON FARMS DECEMBER 1, MAINE, 1977 - 1986

Year	Number			Value	
	Breeding	Market	Total	Per Head	Total
		1,000 Head		Dollars	1,000 Dollars
1977	1.2	6.0	7.2	66.00	475
1978	1.9	7.1	9.0	86.50	779
1979	3.0	10.0	13.00	61.50	800
1980	3.0	13.00	16.0	74.00	1,184
1981	2.0	8.0	10.0	81.00	810
1982	2.1	7.3	9.4	84.50	794
1983	2.3	7.1	9.4	88.50	832
1984	1.8	7.0	8.8	86.00	757
1985	1.5	6.4	7.9	87.50	691
1986	1.7	6.3	8.0	100.00	800

HOGS: PIG CROP, PIGS FARROWED & PIGS SAVED, MAINE, 1977 - 1986

Market Year*	Spring Farrowings (Dec. - May)			Fall Farrowings (June - Nov.)			Total Pig Crop
	Sows	Pigs Per Litter	Pigs Saved	Sows	Pigs Per Litter	Pigs Saved	
	1,000 Head	Head	1,000 Head	1,000 Head	Head	1,000 Head	1,000 Head
1977	.8	6.8	5.4	.9	6.4	5.8	11.2
1978	.7	6.6	4.6	1.2	6.0	7.2	11.8
1979	1.4	7.1	9.9	1.2	6.3	7.6	17.5
1980	2.0	6.5	13.0	2.0	7.0	14.0	27.0
1981	2.0	7.2	14.0	1.0	7.0	7.0	21.0
1982	.9	5.4	4.9	1.5	6.0	9.0	13.9
1983	.8	7.6	5.6	.9	6.8	6.1	11.7
1984	1.3	7.7	10.0	1.1	6.9	7.6	17.6
1985	1.0	6.0	6.0	1.3	6.2	8.1	14.1
1986	1.0	6.7	6.7	1.4	6.0	8.4	15.1

* December of previous year through November of year shown.



HOGS: INVENTORY NUMBERS, PIG CROP AND DISPOSITION, MAINE, 1977 - 1987

Market Year*	On Hand Dec. 1st Previous Year	Pig Crop		Marketings	Farm Slaughter	Deaths
		Dec. - May	June - Nov.			
			1,000 Head			
1977	7.1	5.4	5.8	9.5	0.8	0.8
1978	7.2	4.6	7.2	8.2	0.9	0.9
1979	9.0	9.9	7.6	11.5	1.2	0.8
1980	13.0	13.0	14.0	21.0	2.0	1.0
1981	16.0	14.0	7.0	24.0	2.0	1.0
1982	10.0	4.9	9.0	12.5	1.0	1.0
1983	9.4	6.1	6.1	8.7	2.0	1.5
1984	9.4	10.0	7.6	15.4	1.8	1.0
1985	8.8	6.0	8.1	12.2	1.8	1.0
1986	7.9	6.7	8.5	11.7	2.3	1.0
1987	8.0					

* December of previous year through November of year shown.

SHEEP AND WOOL

Sheep farming in Maine is concentrated in the mid-coastal area of the state. Most Maine sheep farms are small operations with an average flock size of 22 brood ewes. Less than ten Maine producers have over 100 brood ewes on their farms. Most Maine sheep farmers are part-time operators, with very few earning all their income from their sheep. Sheep in Maine are raised primarily for lamb, not wool. Most lambs are slaughtered at 5 - 9 months with lambs slaughtered at Easter generally bringing a higher price. The majority of Maine lambs are sold in the freezer trade.

The total sheep inventory has dropped from a peak of 20,000 in 1984 to 19,000 (down 5 percent) in 1985 and 17,000 (down another 10 percent) in 1986. Sheep and lamb production dropped also in 1985, to 1.14 million pounds, down 11 percent from 1.29 million pounds in 1984. Production increased again in 1986 to 1.26 million, up by 9 percent. Cash receipts from marketings of sheep and lamb increased 3 percent in 1985 from $923,000 in 1984 to $952,000. However, cash receipts dropped off by 11 percent in 1986 to $852.00.

Price per pound for both sheep and lamb rose in 1985 to $.40/pound for sheep (up 11 percent) and $.99/pound for lamb (up 10 percent), compared to $.36/pound for sheep and $.90/pound for lamb in 1984. Price per pound for sheep continued to rise in 1986 to $.41/pound but dropped slightly to $.98/pound for lambs.

The lamb crop decreased 6 percent from 17,000 head in 1984 to 16,000 head in 1985. The lamb crop returned to the 1984 level of 17,000 in 1986.

Shorn wool production dropped 7 percent in 1985, to 117,000 pounds, and dropped another 8 percent to 108,000 pounds in 1986. Price per pound rose slightly to $.69/pound, up 5 percent from $.66/pound in 1984. However, the per pound price dropped sharply to $.59/pound in 1986, the lowest price since 1976.

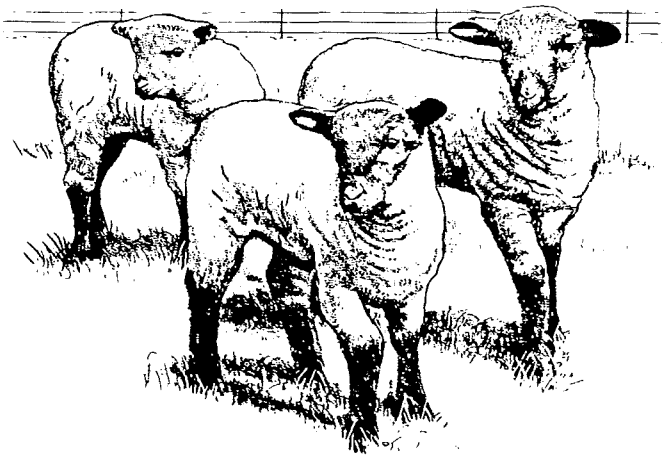
Sheep and lamb production doubled between 1976 and 1984, rising from .6 million pounds in 1976 to a peak of 1.3 million pounds in 1984. Production remained close to this peak during 1985 and 1986.

The per pound price for sheep also rose from 1976 to peak at $.42/pound in 1980. Sheep prices temporarily dropped to $.34/pound in 1983 but increased again to $.41/pound in 1986. Lamb prices followed a similar trend in the late Seventies and early Eighties to peak at $.99/pound in 1985. The 1986 lamb price remained high at $.98/pound.

Total sheep inventory increased gradually from 11,000 head in 1976 to 14,000 head in 1983. Inventory took a big jump in 1984 to 20,000 head. By 1986 the total sheep inventory had dropped back to 17,000 head.

Like sheep and lamb production, wool production nearly doubled from 1976 to 1984. Wool production increased from 68,000 pounds in 1976 to 126,000 pounds in 1984. Wool production dropped off after 1984 to 108,000 pounds in 1986. Wool prices rose steadily from $.55/pound in 1976 to $.85/pound in 1980. Prices declined after 1980 (except for a brief upswing in 1984-85) to $.59/pound in 1986.

There have been several new developments in Maine's sheep industry in recent years. The Maine Sheep Breeders Association re-established the Spirit of Maine Ram Test and Replacement Ewe Sale in 1986. The Association's annual wool pool was changed to a graded wool pool in 1985 with three different grades and prices. There is growing interest in the industry in reducing production costs through more intensive grazing management systems. In 1986, the Maine Sheep Breeders Association conducted research projects on the Voisin system of pasture management and the use of forage brassicas to extend Maine's grazing season.



The Lamb Committee of the Maine Agricultural Marketing Association (MAMA), established in 1983, has also become stronger and gained membership. The Committee's main goal is profitability for lamb producers. Lambs are grown under contract for the Committee by independent producers. Feed is purchased cooperatively at a lower cost. Processing of lambs is contracted annually by competitive bid. Lambs sold by the Committee must meet high quality standards because the lamb is marketed as high quality, naturally grown Maine lamb. The Lamb Committee's major market is Maine institutions and restaurants, with excess lambs being shipped to the Lancaster, Pennsylvania market.

SHEEP AND LAMBS:
INVENTORY NUMBERS, LAMB CROP AND DISPOSITION, MAINE, 1977 - 1987

Year	All Sheep And Lambs On Hand Jan. 1	Lamb Crop	Marketings		Farm Slaughter Sheep and Lambs	Deaths Sheep and Lambs
			Sheep	Lambs		
	1,000 Head					
1977	11	8.0	1.0	3.0	1	2
1978	12	9.0	2.0	3.0	2	2
1979	12	9.0	1.0	4.0	1	2
1980	13	10.00	2.0	5.0	1	2
1981	13	12.0	1.0	6.0	1	2
1982	15	12.0	3.5	6.9	0.7	1.9
1983	14	15.0	0.2	9.1	0.6	2.1
1984	20	17.0	4.2	11.2	0.2	2.4
1985	19	16.0	4.0	10.5	.3	3.2
1986	17	17.0	1.8	11.2	.3	2.7
1987	18					

WOOL: FARM PRODUCTION, PRICE AND VALUE, MAINE, 1977 - 1986

Year	Weight Per Fleece	Shorn Wool Production	Price Per Pound	Value	Sheep Shorn
	Pounds	1,000 Pounds	Cents	1,000 Dollars	1,000 Head
1977	7.0	70	74	52	10
1978	6.9	76	74	56	11
1979	6.8	75	80	60	11
1980	6.8	82	85	70	12
1981	6.8	86	77	66	13
1982	6.7	94	67	63	14
1983	6.8	109	62	68	16
1984	7.0	126	66	83	18
1985	7.3	117	69	81	16
1986	7.2	108	59	64	15

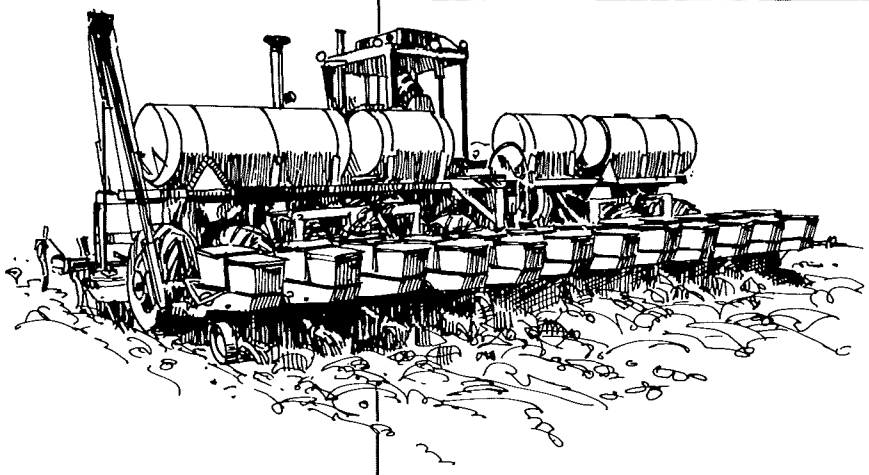
SHEEP AND LAMBS: PRODUCTION AND INCOME, MAINE, 1977 - 1986

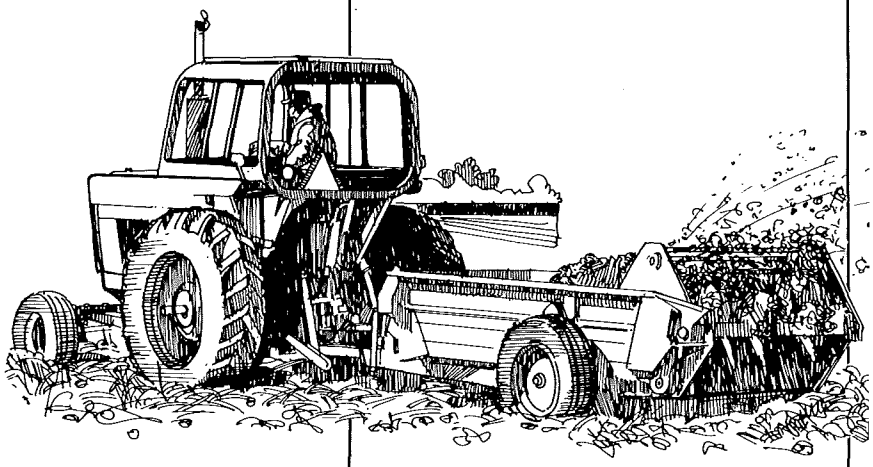
Year	Production	Marketings	Price Per 100 Pounds		Value of	
			Sheep	Lambs	Home Consumption	Gross Income
	1,000 Pounds		Dollars		1,000 Dollars	
1977	602	302	25.00	67.00	107	251
1978	672	352	33.00	80.00	256	411
1979	680	364	34.00	81.00	372	372
1980	764	580	42.00	74.00	136	476
1981	820	422	37.00	85.00	143	435
1982	882	810	36.00	84.00	136	581
1983	1,211	830	34.00	88.00	84	733
1984	1,292	1,341	36.00	90.00	86	1,009
1985	1,144	1,260	40.00	99.00	113	1,065
1986	1,265	1,001	41.00	98.00	150	1,003

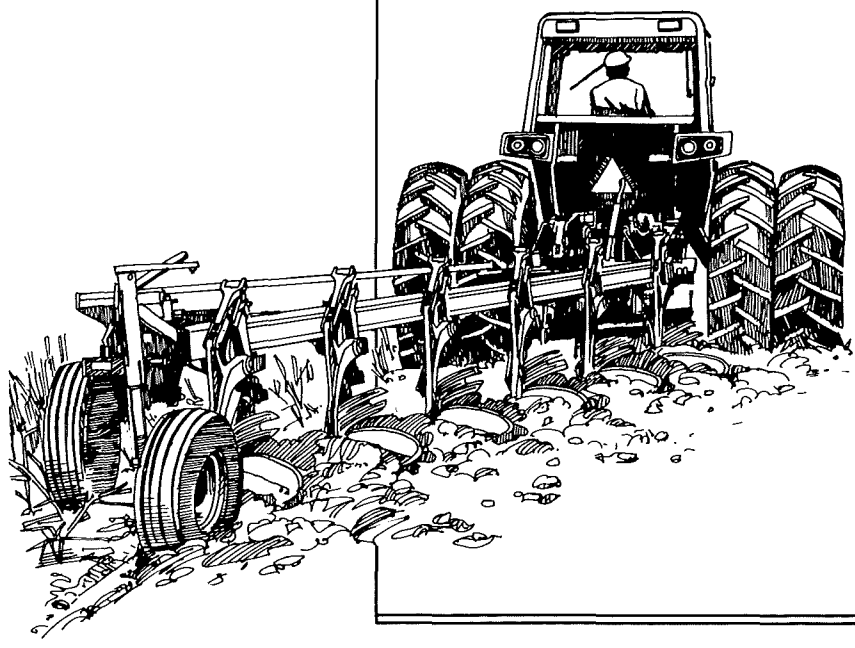
SHEEP AND LAMBS: INVENTORY NUMBER BY CLASS AND VALUE, JANUARY 1, MAINE, 1977 - 1987

Year	All Lambs	LAMBS		One Year and Over		All Sheep And Lambs	Value	
		Ewes	Wethers And Rams	Ewes	Wethers And Rams		Per Head	Total
		1,000 Head		1,000 Head		1,000 Head	Dollars	1,000 Dollars
1977	3	2	1	7	1	11	40.00	440
1978	3	2	1	8	1	12	43.50	522
1979	3	2	1	8	1	12	54.00	648
1980	3	2	1	9	1	13	81.50	1,060
1981	3	2	1	9	1	13	84.00	1,092
1982	4	3	1	10	1	15	95.00	1,425
1983	3	2	1	10	1	14	111.00	1,554
1984	4	3	1	15	1	20	93.50	1,870
1985	4	3	1	14	1	19	101.00	1,919
1986	3	2	1	13	1	17	94.00	1,598
1987	3	2	1	13	1	18	95.00	1,710

CROPS







POTATOES

Maine led the nation in potato production from the 1920's to the 1950's. Since then production has declined with Maine's 1986 production of 21 million cwt. ranked fourth nationally.

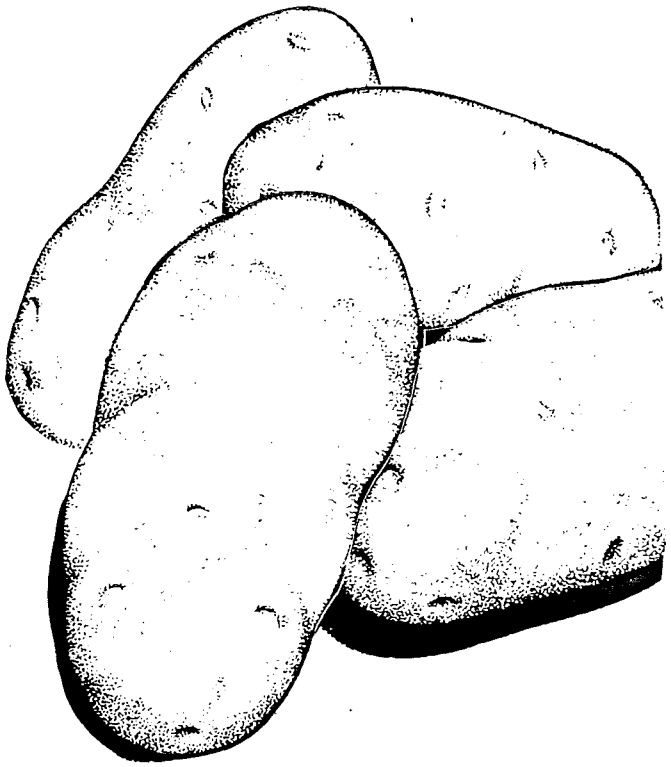
In 1985, Maine potato production reached 28.2 million cwt., a 24 percent increase from 1984 and the largest crop in the state since 1979. Ideal growing conditions throughout the summer, coupled with excellent harvesting weather, helped to produce the high yielding crop. Growers harvested 99,000 acres, averaging 285 cwt. per acre, a yield unsurpassed since 1956.

The 1986 Maine potato crop was down 26 percent from 1985. Mainly because of low prices the previous year, the state's potato acreage dropped to 87 thousand, the lowest since 1902. Wet weather and damaging frosts resulted in lower yields, averaging 255 cwt. per acre with tuber size generally medium and tuber set average to light.

More seed potatoes are shipped from Maine each year than from any other state. These exports total nearly two million cwt. The majority of these (80.4%) are sent to the following seven states: Delaware, North Carolina, Florida, Virginia, New York, Pennsylvania and New Jersey. In several of these states, Maine supplies a significant share of the market.

During the past 30 years consumption of frozen potatoes in the United States has risen from 4 pounds per person to 41 pounds per person. The consumption of potato chips has also risen, especially since 1982. This increase appears to have a correlation to a dramatic increase in expenditures for advertising. Consumption is expected to remain stable in the next few years with increases only as a result of population.

According to some recent statistics, consumers are spending approximately 45% of their total food dollars per year on meals and snacks away from home. Recent efforts in the industry have focused on providing more service and creating new products to meet these needs. The increasing use of count boxes to fulfill food service requirements and the promotion of "Baby Maines" are two specific examples. These uniformly sized (1.75 inches - 2.25 inches) gourmet potatoes, which made their debut in early 1986, are marketed exclusively to restaurants and institutions.



A reorganization plan to revitalize the Maine Potato Industry was developed in late 1985 and passed the Legislature during the first half of 1986. It created an eleven member Maine Potato Board, which replaced three industry groups: the Maine Potato Council, the Maine Potato Commission and the Maine Potato Sales Association.

Over the past twenty years farm sizes and numbers have been in changing in Maine just as in the rest of the county. From 1969 through 1987 the total number of potatoes farmers in Maine dropped from about 1400 to 642. This decrease was concentrated in Aroostook County, with central Aroostook and southern Aroostook each losing 60 percent of their potato farmers and the St. John Valley dropping 46 percent. The acreage per farm devoted to potatoes has grown most rapidly in Central Aroostook, the growing area centered near Presque Isle.

POTATOES: ACREAGE, YIELD, PRODUCTION, PRICE AND VALUE, MAINE, 1977 - 1986

Year	Acreage Harvested	Yield Per Acre	Total Production	Season Average Price per cwt.	Value of Production 1/
	1,000 Acres	Cwt.	1,000 Cwt.	Dollars	1,000 Dollars
1977	118	240	28,320	3.36	95,155
1978	118	220	25,960	3.86	100,206
1979	113	245	27,685	3.25	89,976
1980	104	240	24,960	7.25	180,960
1981	104	255	26,520	4.80	127,296
1982	106	255	27,030	3.35	90,551
1983	94	235	22,560	6.25	141,000
1984	89	240	21,360	4.30	91,894
1985	99	285	28,215	2.80	66,948
1986	86	255	21,930	6.00	131,580

1/ Relates to marketing season or crop year; includes value of crop used on farm and shrinkage.

POTATOES: PRODUCTION, SEED USED, AND DISPOSTION, MAINE, 1977 - 1986

Year	Production	Total Used For Seed 1/	Used on Farm Where Produced: For Seed, Feed and Household Use	Used on Farm Where Produced: Shrinkage And Loss	Sold 2/
			1,000 Cwt.		
1977	28,320	2,737	1,296	3,908	23,116
1978	25,960	2,668	1,250	3,067	21,643
1979	27,685	2,322	1,052	3,184	23,449
1980	24,960	2,438	1,125	2,200	21,635
1981	26,520	2,500	1,125	1,990	23,905
1982	27,030	2,043	900	3,600	22,530
1983	22,560	2,021	950	1,330	20,280
1984	21,360	2,058	865	1,450	19,045
1985	28,215	1,827	805	3,500	23,910
1986	21,930	1,785	750	2,260	18,920

1/ Includes seed purchased and seed used on farms where grown.
2/ Consists of potatoes sold for all purposes.

POTATOES USED FOR PROCESSING, MAINE, 1977 - 1986

Season 1/	Food	Starch	Total
	1,000 Cwt.		
1977	7,324	716	8,040
1978	7,297	843	8,140
1979	7,185	780	7,965
1980	6,195	465	6,660
1981	6,660	665	7,325
1982	6,780	670	7,450
1983	4,735	390	5,125
1984	5,930	900	6,830
1985	7,395	1,265	8,660
1986	N/A	N/A	6,995

Source: Marketing Maine Potatoes, Federal-State Market News Service, annual report, 1971 through 1986.
1/ Marketing season continues to May 1 of the following year.

POTATO PRODUCTION AND STOCKS DURING MARKETING MONTHS, MAINE, 1977 - 1986

Year	Production	Following Year Dec. 1	Jan. 1	Feb. 1	Mar. 1	Apr. 1	May 1
			1,000 Cwt.				
1977	28,320	22,900	20,200	17,400	14,400	10,500	N/A
1978	25,960	19,700	17,300	14,600	12,100	8,800	4,400
1979	27,685	23,300	21,200	18,500	15,800	12,000	7,700
1980	24,960	18,900	16,300	13,900	11,300	8,200	4,800
1981	26,520	21,300	18,000	15,100	12,400	8,600	5,100
1982	27,030	21,000	18,300	14,900	11,900	7,900	4,500
1983	22,090	18,100	19,600	16,200	13,400	9,400	4,600
1984	21,360	17,200	15,000	12,500	10,200	7,300	4,360
1985	28,215	22,700	20,200	17,200	14,100	10,600	7,100
1986	21,930	16,500	13,700	11,200	9,000	6,500	800

PERCENTAGE OF PLANTED ACRE BY VARIETIES, MAINE, 1980 - 1986

Variety	1980	1981	1982	1983	1984	1985	1986
				Percent			
Bel Rus	10	7	9	4	3	2	2
Atlantic	3	3	3	2	4	4	6
Katahdin	20	15	14	14	12	7	7
Kennebec	5	4	6	2	2	2	2
Ontario	8	12	12	19	24	21	18
Russet Burbank	21	19	23	23	27	28	28
Superior	20	31	26	25	16	13	9
Shepody						9	14
Other	13	9	7	11	12	9	14
TOTAL	100	100	100	100	100	100	100

POTATO PLANTING PROGRESS, MAINE, 1980 - 1986

Week Ending	1980	1981	1982	1983	1984	1985	1986
				Percentage Planted Weekly			
				Percent			
May 3 (or earlier)	1	1	3	1	—	2	2
May 10	4	8	7	1	2	11	11
May 17	22	16	27	6	8	16	29
May 24	42	39	35	20	26	31	17
May 31	25	22	19	21	38	23	29
June 7	4	12	9	26	10	13	14
June 14	1	2	—	15	9	3	1
After June 14	1	—	—	10	7	1	2
				Accumulated Percentage			
Week Ending	1980	1981	1982	1983	1984	1985	1986
				Percent			
May 3 (or earlier)	1	1	3	1	—	2	2
May 10	5	9	10	2	2	13	8
May 17	27	25	37	8	10	29	37
May 24	69	64	72	28	36	60	54
May 31	94	86	91	49	74	83	83
June 7	98	98	100	75	84	96	97
June 14	99	100	100	90	93	99	98
After June 14	100	100	100	100	100	100	100

POTATOES: PERCENTAGE OF NET YIELD WITHIN SIZE GROUP, BY TYPE, MAINE, 1980 - 1986

Percentage of Net Yield by Weight

Type and Size	1980	1981	1982	1983	1984	1985	1986
				Percent			
Round White							
Under 1 7/8"	7	4	6	6	8	5	5
1 7/8" - under 2"	5	3	5	4	7	4	5
2" - under 2 1/4"	11	10	13	13	17	12	11
2 1/4" - under 2 1/2"	20	15	16	18	20	17	17
2 1/2" - under 3 1/2"	51	60	54	53	47	56	56
3 1/2" - under 4"	5	7	5	5	1	5	5
Over 4"	1	1	1	1	0	1	1
TOTAL ROUND WHITE	100	100	100	100	100	100	100
Russet							
Under 1 1/2"	2	—	—	—	—	—	—
1 1/2" - under 1 7/8"	13	8	9	10	13	7	22
1 7/8" - under 2"	9	5	7	18	16	15	24
4 oz. - under 6 oz.	35	35	32	25	33	26	17
6 oz. - under 10 oz.	27	35	30	30	28	34	25
Over 10 oz.	14	17	22	17	10	18	12
TOTAL RUSSET	100	100	100	100	100	100	100

POTATOES: PERCENTAGE OF NET YIELD WITHIN EACH GROSS, BY TYPE, MAINE, 1980 - 1986

Round White

Grade	1980	1981	1982	1983	1984	1985	1986
				Percent			
U.S. No. 1	85	83	85	88	87	88	84
No. 2	2	3	2	2	3	3	3
Culls	13	14	13	10	10	9	13
TOTAL	100	100	100	100	100	100	100

Russet

	1980	1981	1982	1983	1984	1985	1986
U.S. No. 1	89	85	69	85	86	87	86
No. 2	2	1	5	0	4	4	4
Culls	9	14	26	15	10	9	10
TOTAL	100	100	100	100	100	100	100

ACREAGE CERTIFIED FOR SEED POTATOES, MAINE, 1981 - 1986

Year	Number of Growers	Acres Certified
1981	500	28.978
1982	525	33.108
1983	500	32.781
1984	500	32.454
1985	444	30.754
1986	374	24.858

Source: Maine Department of Agriculture, Food and Rural Resources.

NUMBER OF POTATO FARMS, AND ACREAGE, BY REGION OF MAINE, 1969 - 1986

	1969[1]		1985[2]		1986		1987	
St. John Valley	225	27,600	147	16,147	129	14,038	121	13,484
Central Aroostook	754	62,569	361	53,892	330	46,833	304	47,095
Southern Aroostook	371	24,211	170	13,275	156	12,094	154	12,154
Rest of Maine	51	6,129	63	7,350	61	6,880	63	7,003
TOTAL	1,401	120,509	741	90,664	676	79,845	642	79,736

1/ "1970 Survey of Maine Potato Growers", E. Richard King & Winston W. Grant, Dept. of Agricultural and Resource Economics, University of Maine, ARE 187, June, 1971

2/ 1985 - 1987 compiled from "Minimum Standards for Potato Plantings" report forms, Maine Department of Agriculture, Food and Rural Resources.

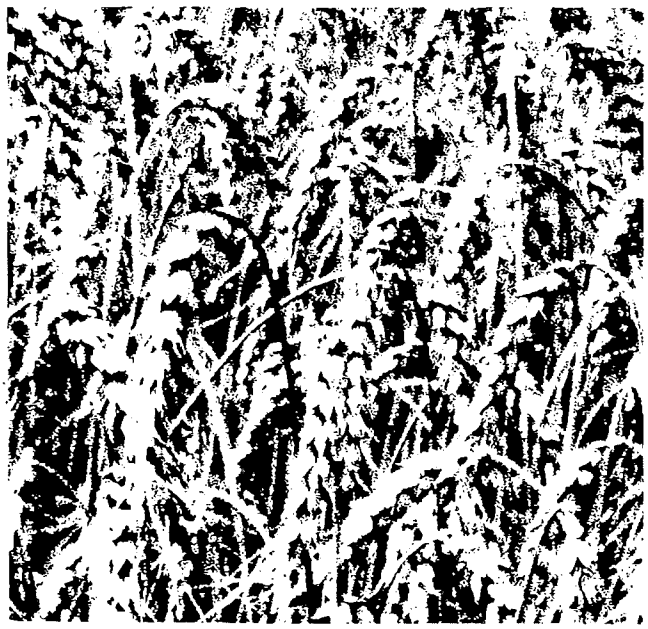
Hay, corn silage and oats are Maine's principal feed and grain crops. Combined sales of these was $4 million in 1986. Most of the first two are used on the farms where they are raised, but the majority of the oats crop is sold. Limited amounts of wheat, barley, rye and buckwheat are also grown by Maine farmers.

OATS

Oats are primarily raised as a rotation crop by potato farmers in Aroostook County. Although a majority of the crop is marketed as dairy feed to other states, some is sold as livestock feed within Maine.

Maine farmers planted 51,000 acres in 1985, 9 percent above the acreage planted the previous year. Excellent growing weather contributed to the highest yielding oat crop on record, averaging 73 bushels per acre. Growers harvested 46,000 acres for grain, 6,000 above 1984. Total production increased 50 percent reaching 3.3 million bushels. Producers received $1.50 per bushel with a total crop value of $1,950,000.

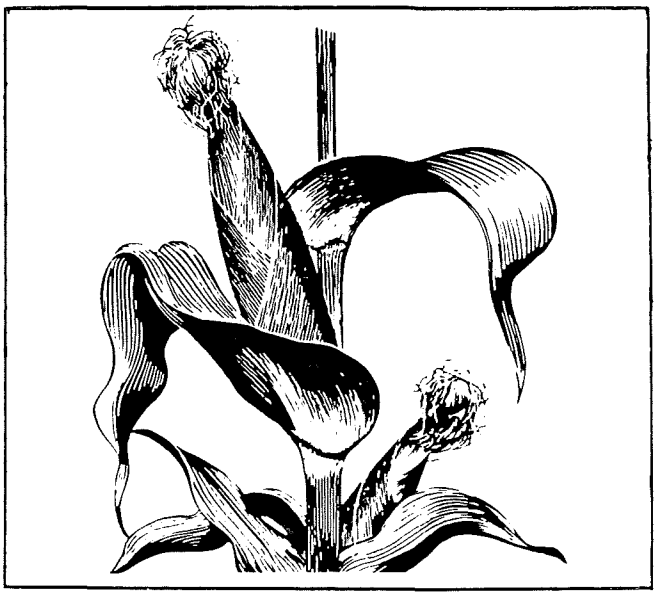
Oat production in 1986 totaled 2.6 million bushels, 23 percent under the 1985 output but 16 percent above the 1984 crop. An estimated 7,000 acres were not harvested for grain in the state due largely to excessive logging and wet conditions at harvest. Growers harvested 40,000 acres, averaging 65 bushels per acre. The price of oats dropped 50 percent in 1986 to $.75 per bushel, the lowest price since 1972.



CORN SILAGE

Production of corn silage in 1985 totaled 576,000 tons, the highest since 1972 and 23 percent above the previous year. Total value of the crop reached $15.8 million, a record high.

In 1986, production was down 18 percent, totaling only 476,000 tons. This was the result of both a smaller number of acres planted and a lower yield per acre.



HAY

The 1986 value of production was $30.9 million, slightly higher than the previous five year average of $29.5 million. Yield per acre was 1.99 tons, the highest since 1978. Price of hay in 1985 was $74 per ton a 10% decrease from the year before. In 1986 the price declined again to $69 per ton, another 7% decrease.

GRAINS FOR SEED

Some Maine farmers raise certified seed for various grain and seed crops. Up to 2,240 acres have been entered in the program in recent years. 1986 acreage was 1,038 acres, consisting largely of oats (933 acres) with smaller amounts of rye and wheat.

CORN: ACREAGE, PRODUCTION AND VALUE, MAINE, 1977 - 1986

Year	Area Planted For All Purposes	Area Harvested	Silage Yield Per Acre	Silage Total Production	Silage Value of Production
	1,000 Acres		Tons	1,000 Tons	1,000 Dollars
1977	45	37	11.0	407	10,926
1978	47	39	13.0	507	12,523
1979	45	38	13.5	513	13,082
1980	45	37	15.0	555	15,263
1981	42	35	15.0	525	12,863
1982	42	33	15.0	495	12,870
1983	40	32	16.5	528	13,940
1984	42	34	13.0	442	12,730
1985	44	36	16.0	576	15,840
1986	41	34	14.0	476	12,138

OATS: ACREAGE, YIELD, PRODUCTION, PRICE AND VALUE, MAINE, 1977 - 1986

Year	Area Harvested	Yield Per Acre	Total Production	Price Per Bu. 1/	Value of Production
	1,000 Acres	Bushels	1,000 Bushels	Dollars	1,000 Dollars
1977	35	50.00	1,750	1.10	1,925
1978	42	66.00	2,772	1.01	2,800
1979	45	62.0	2,790	1.25	3,488
1980	48	58.0	2,784	1.50	4,176
1981	45	70.0	3,150	1.40	4,410
1982	44	60.0	2,640	1.25	3,300
1983	38	62.0	2,356	1.55	3,416
1984	40	56.0	2,240	1.50	3,360
1985	46	73.0	3,358	1.50	2,921
1986	40	65.0	2,600	.75	1,950

1/ Includes allowance for loans outstanding and purchases by the government valued at the average loan and purchase rate.

GRAINS RAISED FOR CERTIFIED SEEDS, MAINE, 1979 - 1986

Unit = Acres

Year	Oats	Buckwheat	Rye	Barley	Beans	Wheat
1979	706	4	—	—	1.5	—
1980	1,800	8	—	—	15	—
1981	1,621	23	11	—	—	—
1982	2,008	8	79	15	17	—
1983	1,497	8	14	—	8	—
1984	1,294	10	—	130	—	7
1985	1,260	13	9	—	—	—
1986	933	—	80	—	—	25

Source: Maine Department of Agriculture, Food and Rural Resources.

ALL HAY: ACREAGE, YIELD, PRODUCTION, PRICE AND VALUE, MAINE, 1977 - 1986

Year	Acres Harvested (1,000)	Yield Per Acre (Tons)	Production (1,000 Tons)	Price Per Ton (Dollars	Value of Production (1,000 Dollars)
1977	214	1.59	340	54.00	18.360
1978	221	2.10	465	58.00	26.970
1979	217	1.78	387	59.00	22.833
1980	221	1.65	364	62.00	22.568
1981	226	1.83	414	61.50	25.461
1982	228	1.93	441	64.00	28.224
1983	230	1.85	425	69.00	29.325
1984	221	1.86	410	82.00	33.620
1985	222	1.90	421	74.00	31.154
1986	225	1.99	448	69.00	30.912

ALFALFA HAY: ACREAGE, YIELD AND PRODUCTION, MAINE, 1977 - 1986

Year	Acres Harvested 1,000	Yield Per Acre Tons	Production 1,00 Tons
1977	22	2.35	52
1978	21	2.60	55
1979	22	2.50	55
1980	23	2.05	47
1981	26	2.45	64
1982	25	2.60	65
1983	27	2.60	70
1984	27	2.60	70
1985	26	2.60	68
1986	23	2.35	54

ALL OTHER HAY: ACREAGE, YIELD AND PRODUCTION, MAINE, 1977 - 1986

Year	Acres Harvested 1,000	Yield Per Acre Tons	Production 1,000 Tons
1977	192	1.50	288
1978	200	2.05	410
1979	195	1.70	332
1980	198	1.60	317
1981	200	1.75	350
1982	203	1.85	376
1983	203	1.75	355
1984	194	1.75	340
1985	196	1.80	353
1986	202	1.95	394

VEGETABLES, DRY BEANS AND SMALL FRUITS

A variety of vegetables are grown commercially in Maine, both for fresh consumption and processing. Peas are grown primarily for processing. Broccoli is grown mainly for the fresh market, but some is frozen. Sweet corn is the primary vegetable grown for the fresh market. Other major vegetables include squash and pumpkins, carrots, snap beans and lettuce. Much of Maine's fresh produce is sold directly to consumers through farmers' markets and roadside stands. Currently, the Department has identified 22 farmers' markets and estimated that there are at least 600 direct market outlets in the state.

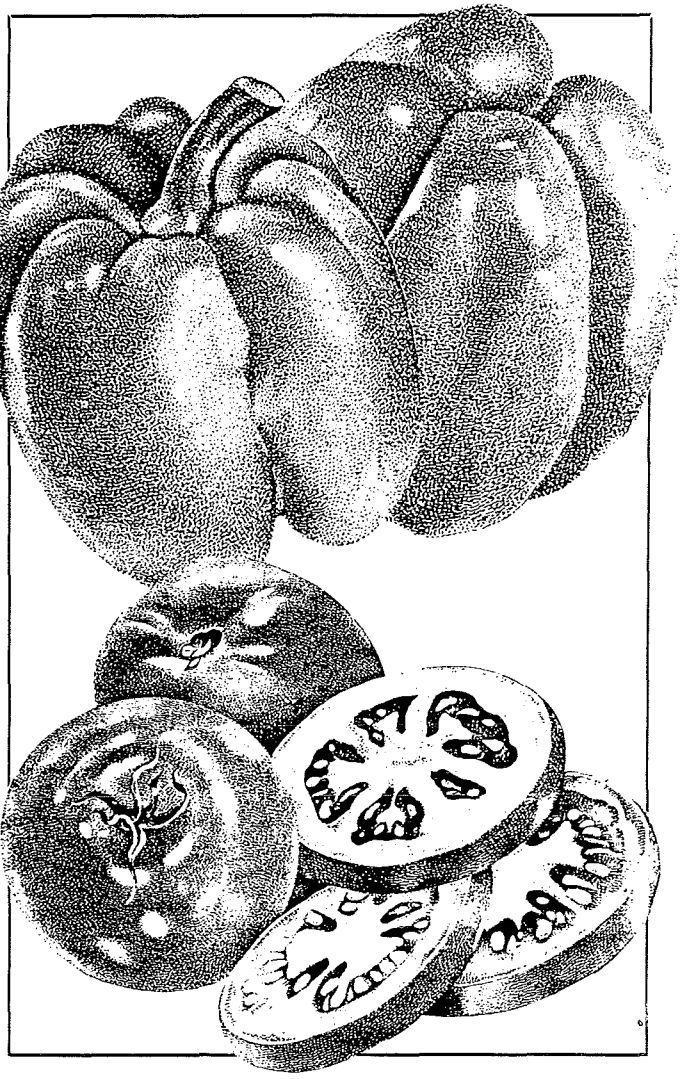
Peas, broccoli, cauliflower, lettuce, spinach and asparagus are currently being produced commercially in northern Maine. Approximately 4,100 acres of peas were harvested in 1987. Except for peas and potatoes, commercial vegetable production has been a recent development in northern Maine, occuring within the last five years. It is expected that vegetable farming will continue to develop and diversify in Maine. Total plantings of vegetables, other than peas and potatoes, are expected to exceed 5,000 acres in northern Maine. Currently, a major constraint on vegetable farmers is labor, and Maine farmers are turning more to migrant labor. Quality and yields have been high on northern Maine's vegetable farms. Maine's yields have been higher than national averages and production costs have been lower than in competing regions.

The broccoli industry in Maine has increased dramatically in the past four years. Broccoli acreage has increased from 300 acres in 1982 to 3,330 acres in 1986. Maine produces about 3.5% of the nation's crop annually and about 25% of the nation's crop during Maine's harvest period. Currently, there are five broccoli packers in Maine.

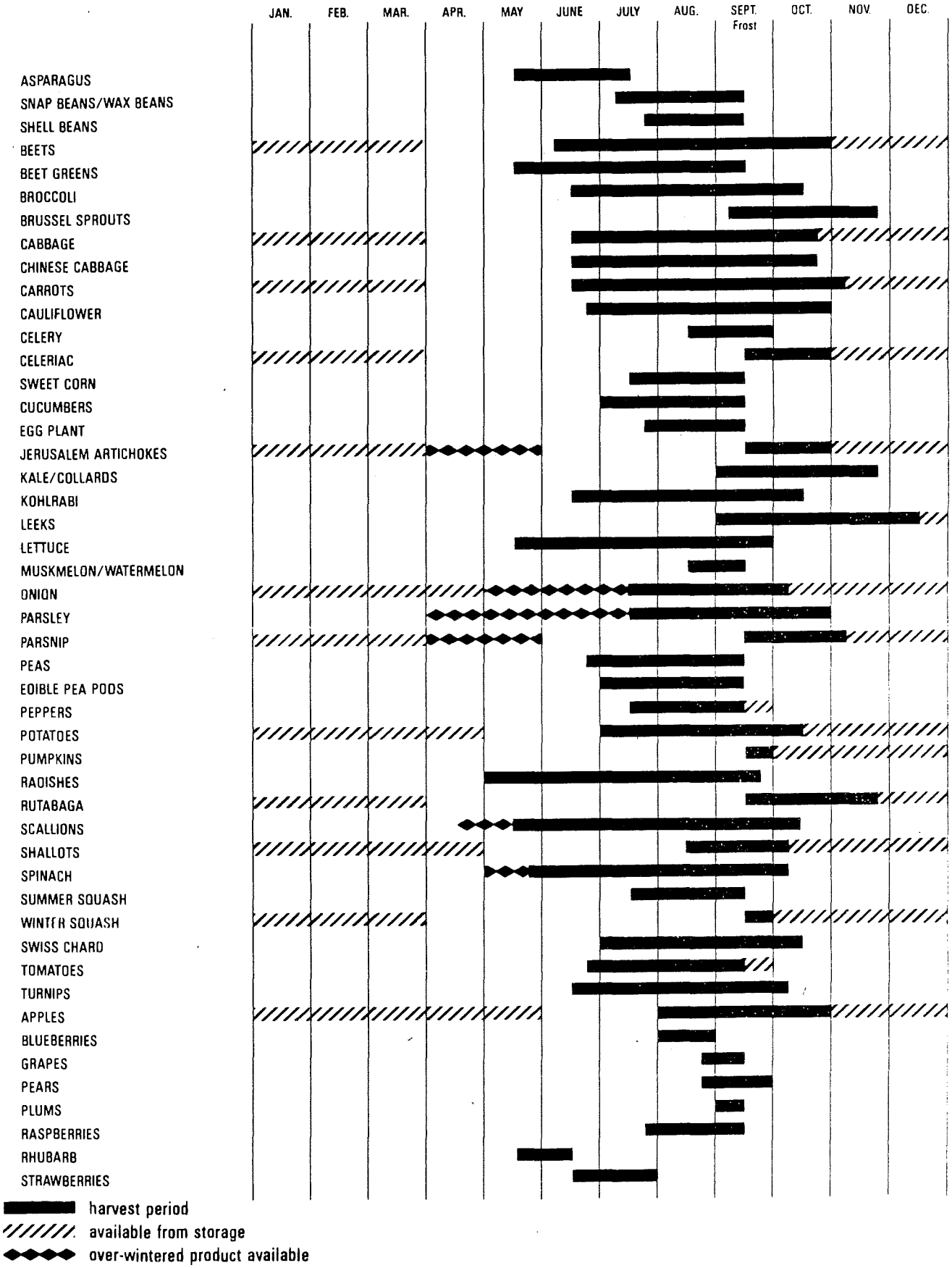
Maine's broccoli growers established a market order in 1983. The market order established quality standards for broccoli in order to develop markets for Maine broccoli by gaining a reputation of quality. The market order was amended in 1986 to expand from Aroostook County to the entire State of Maine and include more detailed quality standards.

Several types of dry beans are grown in Maine with yellow eye beans dominating the acreage. Kidney, soldier and Jacob's cattle beans are grown also. Approximately 2,900 acres of dry beans are harvested annually in Maine. Average yields in Maine range from 1,200 to 1,500 pounds per acre for a total annual harvest of 3,480,000 to 4,350,000 pounds of dry beans. Over half of the State's bean production is located in Penobscot and Oxford counties. There are several companies in Maine which sell beans either in consumer packs or processed as baked beans. Not all of the beans marketed come from Maine and in 1986-87 more beans are coming from out-of-state to be processed in Maine. This is the result of low yields in Maine in 1986 due to wet weather during the harvest season in mid-September.

Except for blueberries, strawberries and raspberries are the most important small fruits grown in Maine. The majority of strawberries and raspberries are sold directly to consumers through roadside stands or pick-your-own operations. Most berry farms are small operations ranging from one to five acres. There are about 200 producers growing strawberries on 500 acres and 70 raspberry growers with 100 acres. Currently, there is some interest among producers in expanding their markets by freezing excess berries. Blueberry freezing plants, which would be idle otherwise, could be used for freezing other berries, producing additional income for both producers and processors.



State of Maine Fruit and Vegetable Availability Chart

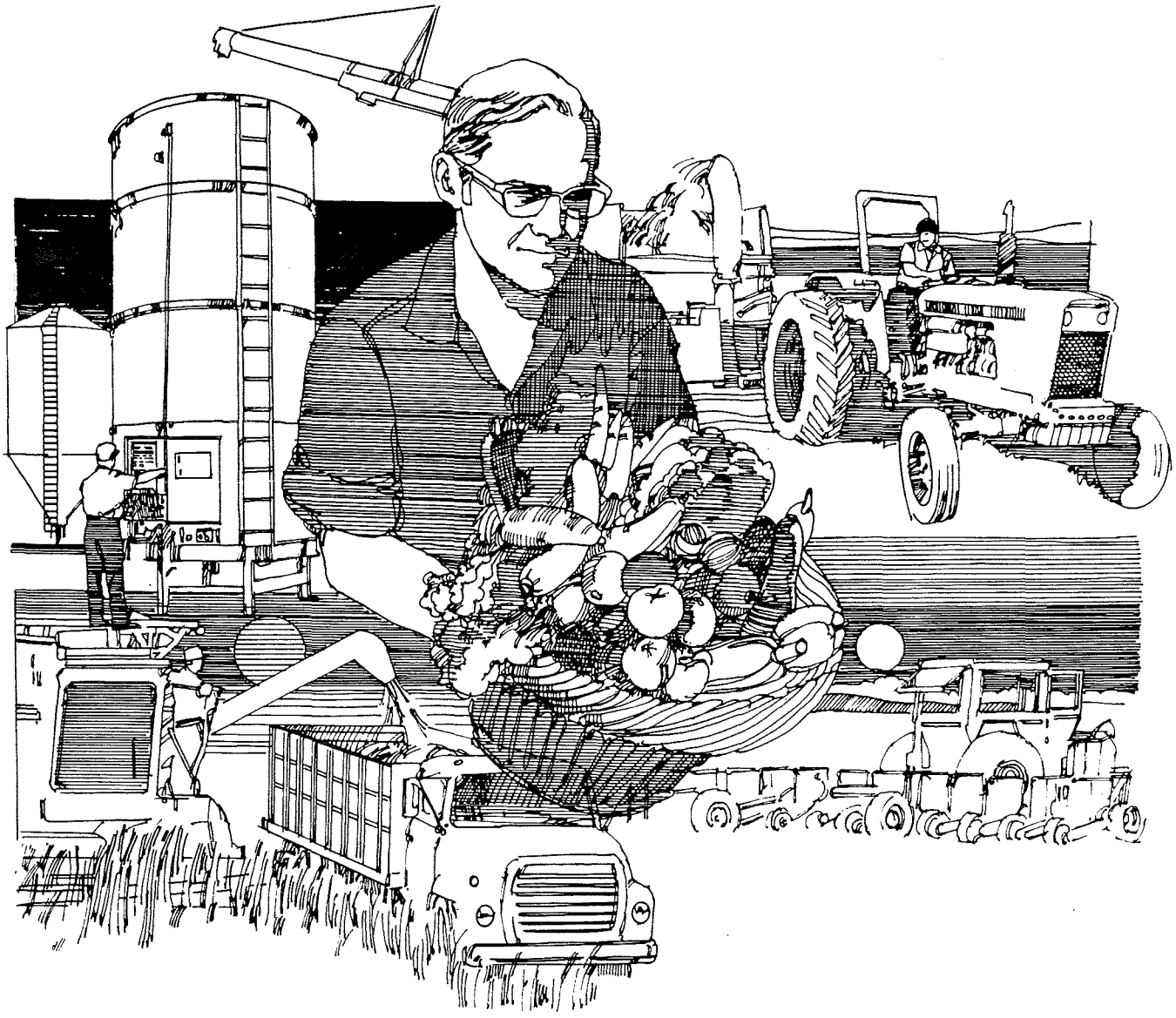


These dates are averages. Availability will vary with such factors as locality, weather and variety grown.

VEGETABLES HARVESTED FOR SALE
COUNTY DISTRIBUTION, MAINE, 1978 AND 1982

County	Number of Farms		Number of Acres	
	1978	1982	1978	1982
Androscoggin	34	38	300	196
Aroostook	85	97	6,686	7,995
Cumberland	72	49	1,225	831
Franklin	15	12	108	62
Hancock	20	26	49	49
Kennebec	48	40	351	310
Knox	20	11	145	103
Lincoln	19	28	128	167
Oxford	38	33	648	159
Penobscot	46	50	333	238
Piscataquis	11	6	30	21
Sagadahoc	15	16	171	182
Somerset	37	26	134	220
Waldo	25	29	166	108
Washington	22	21	54	58
York	52	53	514	581
Maine	559	535	11,044	11,278

Source: 1982 Census of Agriculture



MAINE BROCCOLI ACREAGE AND PRODUCTION, 1982 - 1986

Year	Acreage	Production	Pounds/Acre	Value
1982	300	NA	NA	NA
1983	900	4,500,000	5,000	1,012,500
1984	2,000	10,000,000	5,000	2,250,000
1985	2,300	17,000,000	7,400	3,825,000
1986	3,300	20,625,000	6,250	3,712,500

Source: Maine Department of Agriculture, Food and Rural Resources

DRY BEAN ACREAGE IN MAINE, BY VARIETY (1987)

Variety	Acres	Total Production	
		Pounds	Bushels
Red Kidney	600	810,000	13,500
Soldier	500	675,000	11,250
Yellow Eye	1,500	2,025,000	33,750
Jacob's Cattle	250	337,500	5,625
Marafax	25	33,750	562.5
Total	2,875	3,881,250	64,687.5

Source: Maine Department of Agriculture, Food and Rural Resources.

STRAWBERRIES HARVESTED FOR SALE COUNTY DISTRIBUTION, MAINE, 1978 AND 1982

County	Number of Farms		Number of Acres		Production (Pounds)	
	1978	1982	1978	1982	1978	1982
Androscoggin	17	13	20	32	43,269	98,392
Aroostook	15	12	12	25	22,587	36,850
Cumberland	32	31	71	73	242,874	254,509
Hancock	4	4	(D)	(D)	(D)	(D)
Kennebec	11	17	10	18	15,612	37,682
Knox	16	15	25	37	138,137	130,737
Lincoln	4	5	(D)	1	(D)	4,117
Oxford	5	5	(D)	(D)	(D)	(D)
Penobscot	15	10	29	42	106,774	238,970
Sagadahoc	18	23	35	55	98,352	199,900
Somerset	9	13	3	15	5,342	47,554
Waldo	8	11	(D)	8	(D)	19,310
Washington	10	12	2	16	8,250	41,416
York	19	37	20	80	115,705	252,408
All Other Counties	5	5	3	4	13,450	12,150
Maine	188	213	287	454	1,000,278	1,562,119

Source: 1982 Census of Agriculture

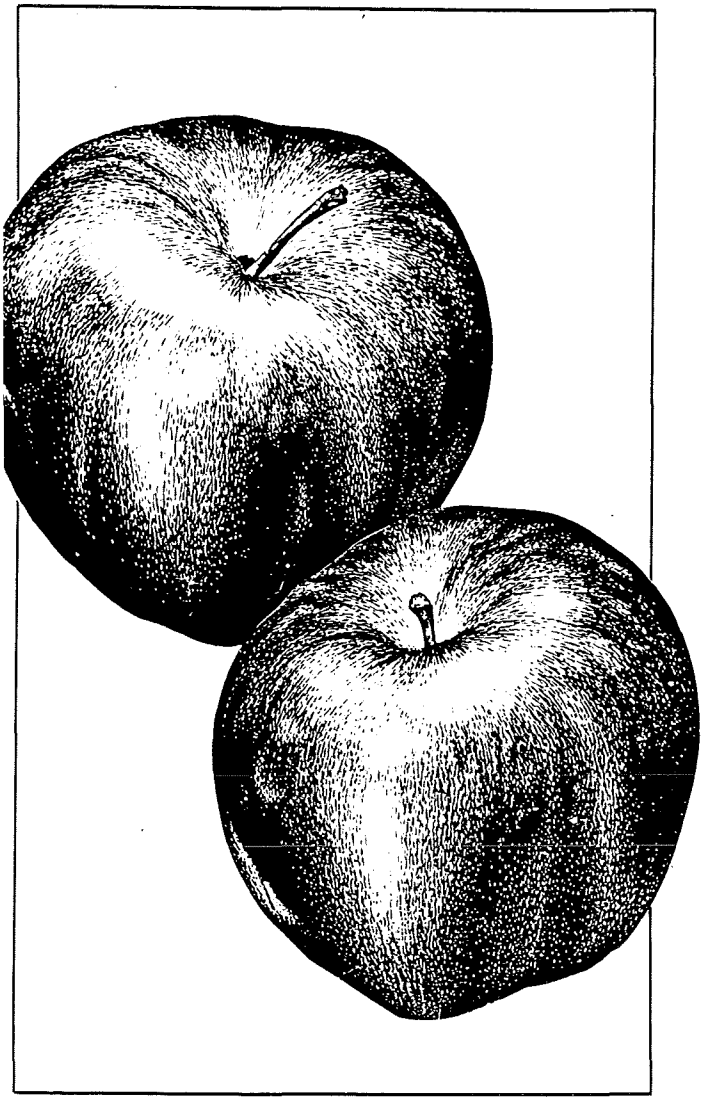
RASPBERRIES HARVESTED FOR SALE COUNTY DISTRIBUTION, MAINE, 1978 AND 1982

County	Number of Farms		Number of Acres		Production (Pounds)	
	1978	1982	1978	1982	1978	1982
Androscoggin	4	4	2	3	1,135	2,925
Aroostook	6	5	3	1	2,285	1,130
Cumberland	8	—	2	—	2,091	—
Hancock	3	7	(Z)	(D)	(D)	1,671
Kennebec	3	6	1	3	450	7,358
Knox	—	3	—	(D)	—	370
Lincoln	3	5	(D)	(D)	1,000	1,135
Oxford	4	5	1	(D)	725	1,856
Penobscot	6	7	3	(D)	3,349	2,310
Sagadahoc	—	4	—	2	—	837
Somerset	4	3	1	(D)	892	350
Waldo	5	4	2	(D)	3,837	745
Washington	3	3	(D)	1	4,620	(D)
York	4	12	1	1	(D)	(D)
All Other Counties	4	3	1	3	1,256	3,226
Maine	57	71	20	27	22,322	27,737

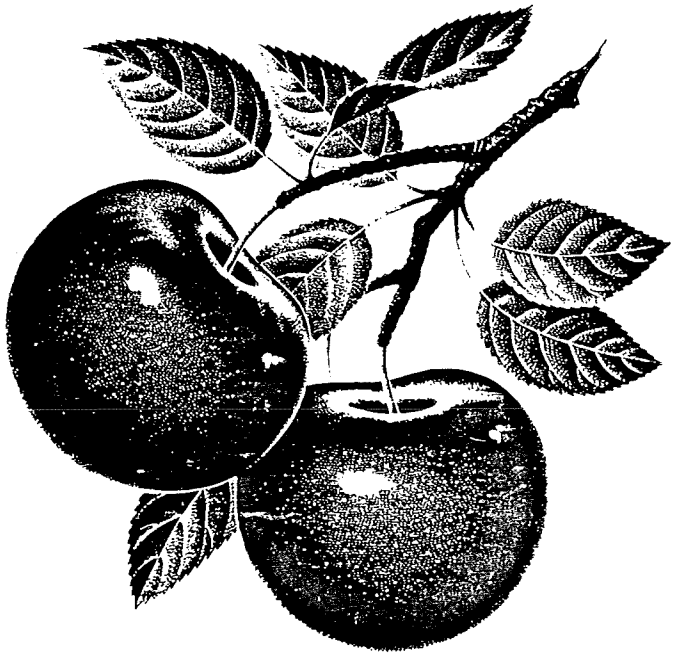
Source: 1982 Census of Agriculture

Maine exports apples to England and Canada as well as marketing them throughout the United States. About one fourth of the annual crop is sold in-state. Although MacIntosh is by far the most common variety, others like Cortland, Red Delicious, Golden Delicious and Northern Spy are also grown. Recently there has been a renewed interest by some orchardists in raising older varieties which were grown locally during the early part of this century.

Apples are now second only to bananas as the fruit of choice in the United States. There is a corresponding national trend toward increased consumption of processed apple products. Maine producers, especially small scale operators, are responding by direct marketing to consumers through an increasing number of pick-your-own situations and road side stands. Many of these operators have also begun producing apple cider for sale using the same marketing method.



Maine's 1985 apple crop totaled 85 million pounds, an increase of 18 percent from the previous year's production. The combination of higher production and a better price resulted in a crop value of $13.3 million, an increase of 13 percent from 1984. Some Maine orchards experienced severe hail during July, but damage from disease and insects was light throughout the state. Hurricane Gloria hit New England in late September midway through the harvest. An estimated 15 percent of Maine's crop was lost to the storm.

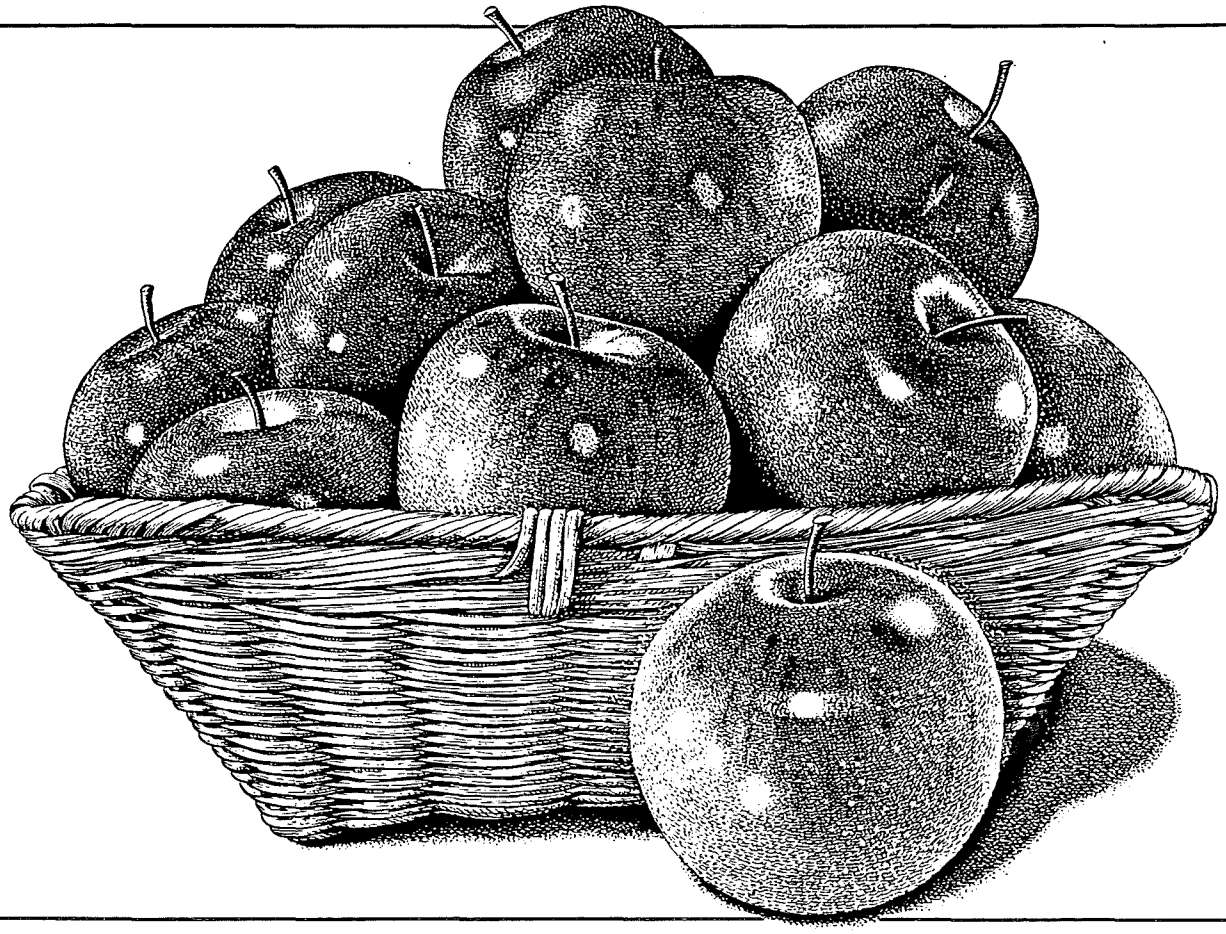


A public controversy arose in 1986 regarding the use of the chemical daminozide (trade-name Alar) on apples. The State considered setting a residue standard for daminozide stricter than the federal Environment Protection Agency due to questions about possible health effects. Eventually, this action proved unnecessary when several major processors decided to no longer accept daminozide treated apples, and most Maine producers voluntarily reduced or suspended their use of the chemical.

In 1986, apple production was 84 million pounds, down slightly from the year before. Adequate moisture resulted in moderate to heavy fruit set. Also, the crops of two other apple producing states, Michigan and New York, were severely damaged by frost and hail. The subsequent decrease in supply caused a rise in price for producers here. Maine orchardists received a premium price of $8.07 per 42-pound units. Total crop value reached a record high of $15.9 million.

APPLES: PRODUCTION, PRICE AND VALUE, MAINE, 1977 - 1986

Year	Total	Having Value	Price Per Unit	Value of Utilized Production
1977	2,190	2,095	5.00	10,472
1978	1,786	1,786	5.54	9,900
1979	2,048	2,048	6.13	12,556
1980	2,024	2,024	5.88	11,900
1981	1,905	1,905	7.98	15,200
1982	2,119	2,119	6.07	12,872
1983	2,024	2,024	6.47	13,124
1984	1,667	1,667	7.60	12,646
1985	2,024	1,952	6.86	13,395
1986	2,000	1,976	8.07	15,948



MAINE APPLE PRODUCTION BY VARIETY, ACREAGE, AND BUSHELS PRODUCED, 1984

Variety	Acres	1984 Production IN Bushels		Apple Growers	
McIntosh	2,148	737,107	71.3%	57	79
Red Delicious	464	125,459	12.1%	51	71
Cortland	257	85,013	8.2%	53	74
Golden Delicious	125	32,630	3.2%	31	43
Paulared	44	8,776	0.8%	17	24
Jerseymac	47	7,160	0.7%	16	22
Early McIntosh	32	8,105	0.8%	17	24
Vista Bella	29	1,534	0.1%	9	13
Northern Spy	30	5,396	0.5%	24	33
Puritan	33	6,500	0.6%	16	22
Macoun	36	6,971	0.7%	20	28
Other	90	9,176	0.9%	25	35
Total for 1984	3,335	1,033,827	100.0%		
Total for 1976	6,690				

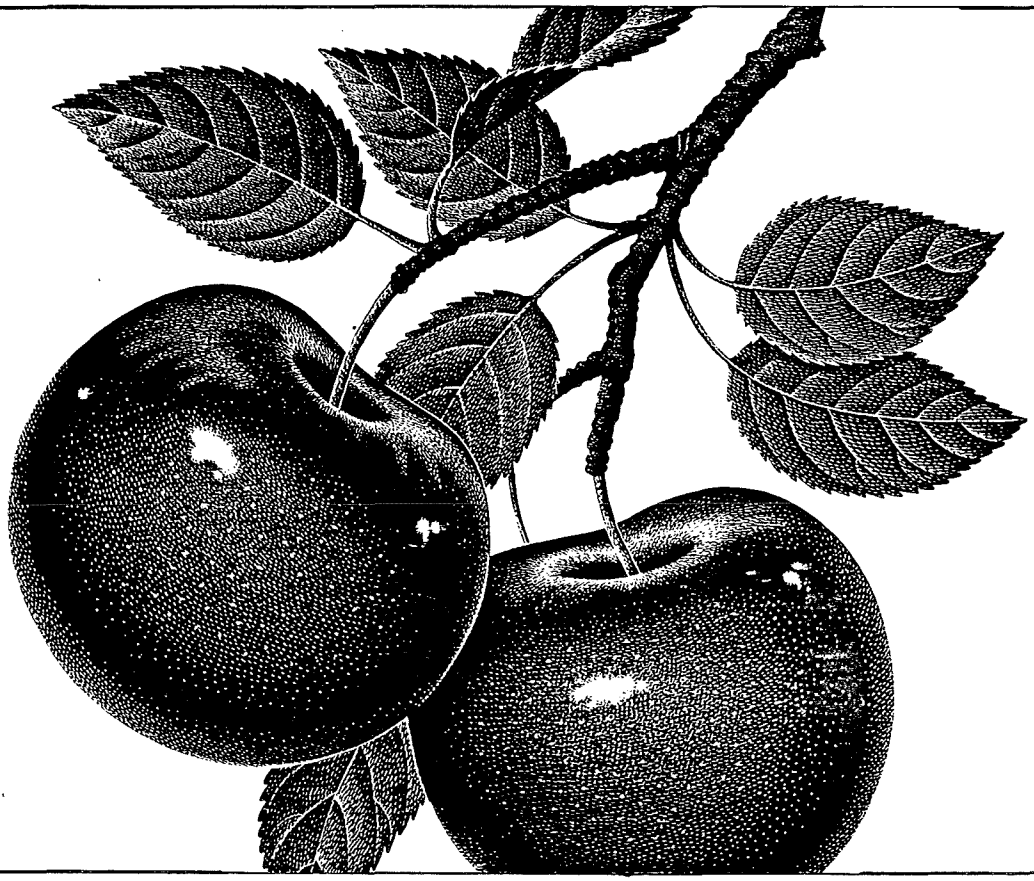
Based on 72 producers reporting bushels produced. Includes acres not yet in production.

Source: Maine Department of Agriculture, Food and Rural Resources.

FRESH APPLE MARKETING CHANNELS UTILIZED BY MAINE APPLE GROWERS AND UTILIZED PRODUCTION, 1984

Marketing Method	Producers	Percent	Bushels	Percent
Roadside Stand/Farm Market	55	76	67,833	8
Out-of-State Broker	28	39	422,118	51
Pick-Your-Own	22	31	9,821	1
Direct to Stores, in-State	20	28	108,843	13
Other Methods	14	19	48,206	6
In-State Broker	14	19	127,419	15
Direct to Other Producers	8	11	30,465	4
Direct to Stores, Out-of-State	5	7	13,886	2
Total			828,594	

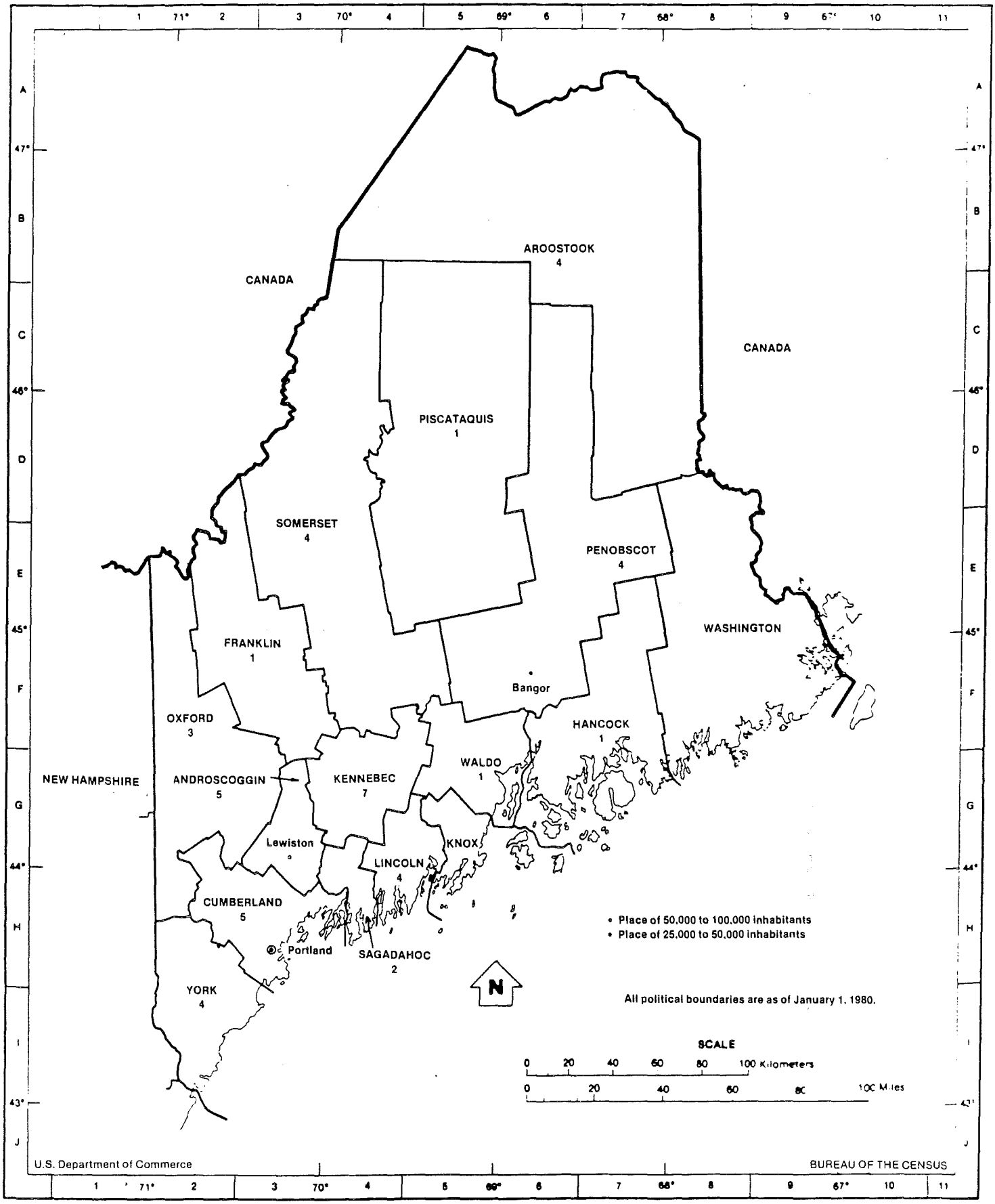
Based on 72 producers providing complete marketing data. Percentages do not add up to 100% because of multiple responses.
Source: Maine Department of Agriculture, Food, and Rural Resources.



MAINE APPLE TREE NUMBER BY VARIETY AND AGE GROUP, 1984

Variety	Age of Tree					
	1 - 6 Years		7 - 21 Years		22 + Years	
	Number	Percent	Number	Percent	Number	Percent
McIntosh	54,783	48.7%	77,894	69.2%	54,409	48.4%
Red Delicious	13,729	12.2%	20,369	18.1%	13,483	12.0%
Cortland	21,248	18.9%	6,570	5.8%	7,454	6.6%
Golden Delicious	1,723	1.5%	3,078	2.7%	3,725	3.3%
Paulared	3,548	3.2%	5,041	4.5%	300	0.3%
Jerseymac	6,671	5.9%	3,544	3.1%	—	0.0%
Early McIntosh	1,010	0.9%	885	0.8%	779	0.7%
Vista Bella	3,648	3.2%	693	0.6%	—	0.0%
Northern Spy	598	0.5%	237	0.2%	612	0.5%
Puritan	25	.0%	1,851	1.6%	483	0.4%
Macoun	2,291	2.0%	1,343	1.2%	749	0.7%
Empire	538	0.5%	130	0.1%	—	0.0%
Other	2,697	2.4%	1,722	1.5%	656	0.6%
Total	112,509	100.0%	123,357	100.0%	82,650	100.0%

Based on 72 producers reporting bushels produced. Includes acres not yet in production
Source: Maine Department of Agriculture, Food and Rural Resources.



CIDER PRODUCERS IN MAINE, 1986

Source: Maine Department of Agriculture, Food and Rural Resources.

WILD BLUEBERRIES

Most of the blueberries grown in Maine are the lowbush variety known as "wild blueberries". These are grown on a two year cycle. Only half of the estimated 50,000 acres of blueberry barrens in Maine are harvested each year, as the other half is mowed or burned over. Most of these are located in the easternmost counties of the state, although some production is located in other areas. Over 98 percent of the wild blueberries produced in the United States are grown in Maine.

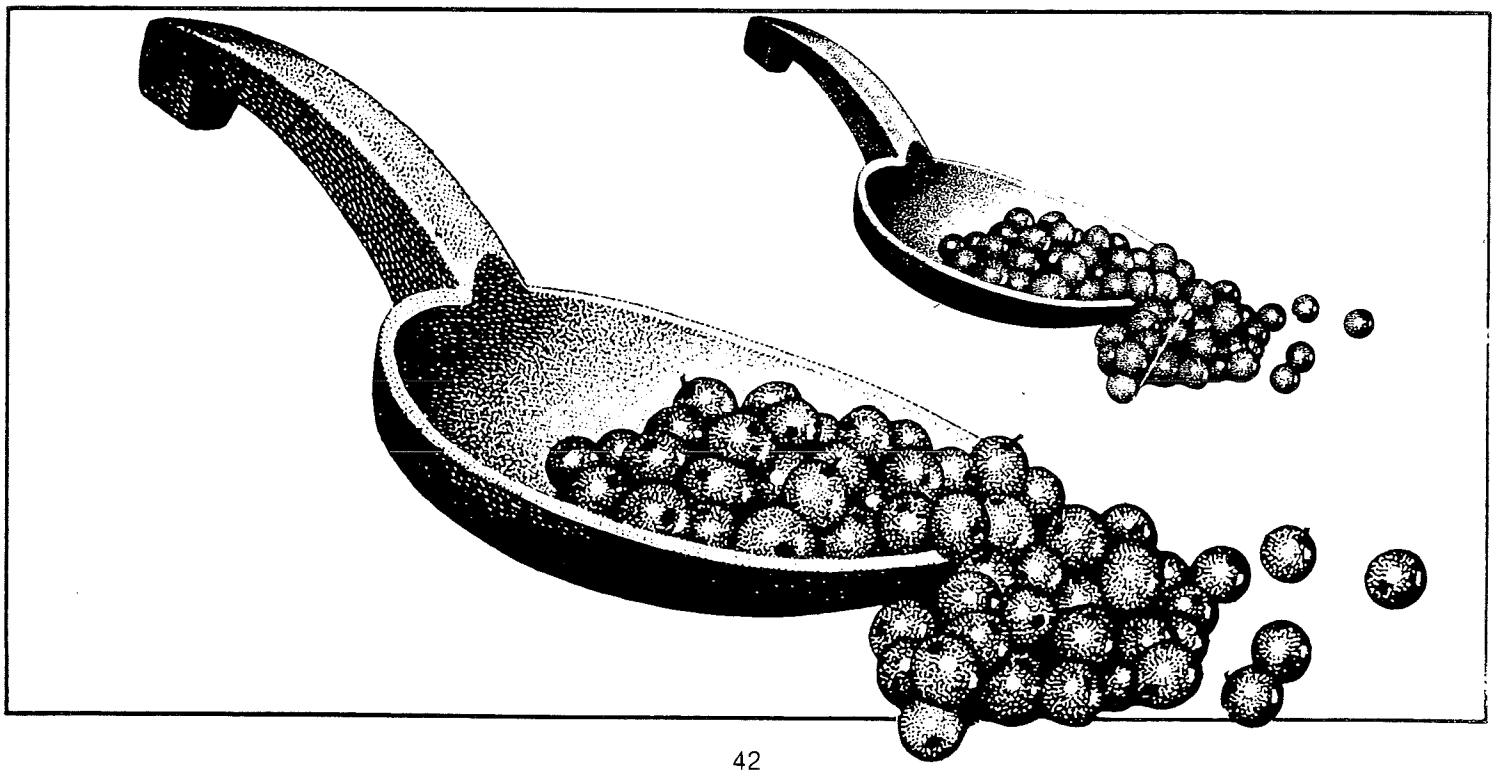
According to the North American Blueberry Council (NABC) statistics, annual per capita consumption of blueberries is on the increase. More fresh blueberries are being consumed and processed blueberries are definitely holding their own.

The majority of the crop has, historically, been processed and shipped out of state with only small amounts sold locally to the fresh market. Recent efforts have been made to expand markets of fresh packs of Maine blueberries. One example is a state market order approved in late 1986 which sets quality standards for fresh blueberries being shipped out of Maine. The "Wild Blueberry Market Order" was developed by the Department at the request of several major fresh blueberry packers. It requires that fresh blueberries being exported from the state must be "uniform, high quality, inspected and graded product.

Recently, new products have been developed for frozen and processed blueberries. Freeze dried blueberry raisins, blueberry fruit roll ups and blueberry beverages are just a few examples.

The 1985 blueberry crop in Maine reached 44 million pounds. Total tonnage exceeded the previous year's production by 78 percent and fell only 1 percent short of 1983's record production. Favorable growing conditions prevailed during June and July with adequate moisture and heat promoting good berry size and quality. Berries sold for processing averaged 26 cents per pound while producers received 60 cents per pound for berries sold on the fresh market.

Maine's 1986 blueberries crop was reported at 42 million pounds, a decrease of 4 percent from 1985 production. Ample rain from July through harvest helped produce mostly large sized berries. The quality of the crop was generally above average with some berry splitting and flavor loss from abundant moisture. Although harvest proceeded slowly due to rainy conditions most of the crop was raked by the first week of September, on schedule with normal. Maine farmers received an average of 30 cents per pound for blueberries sold for processing.



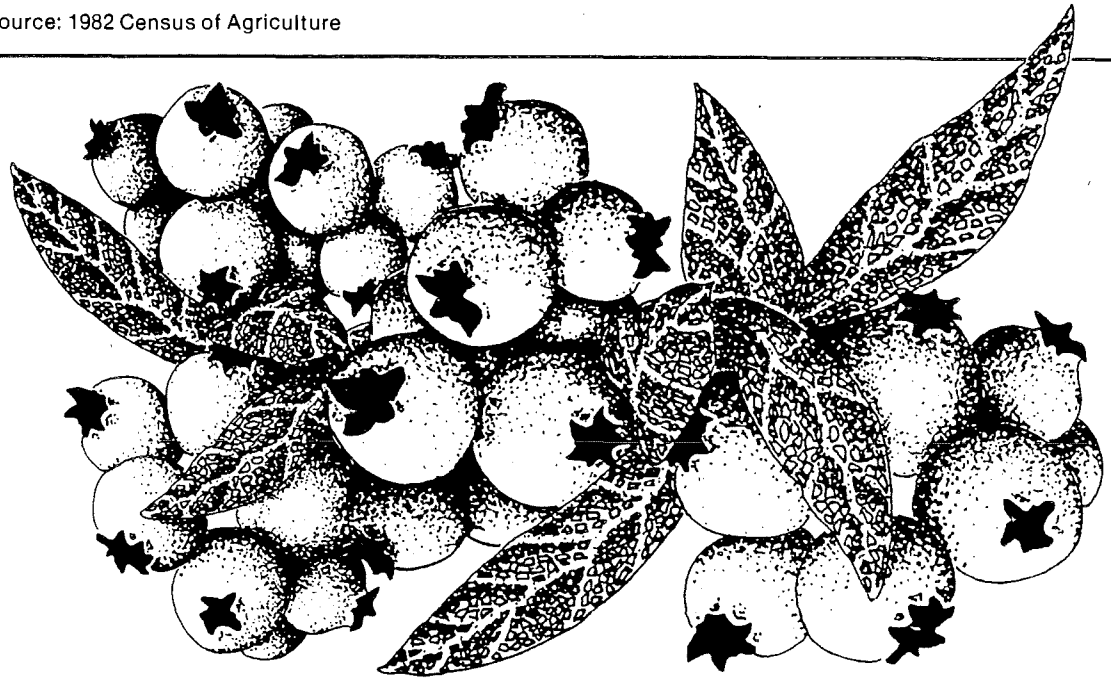
WILD BLUEBERRY PRODUCTION AND VALUE, MAINE, 1977 - 1986

Year	Production	Price Per Pound	Value of Production
	1,000 Pounds	Cents	1,000 Dollars
1977	14,369	60.6	8,708
1978	18,100	51.0	9,231
1979	17,600	36.0	6,336
1980	21,200	38.0	8,056
1981	21,746	42.0	9,199
1982	35,925	52.0	18,681
1983	44,653	37.0	16,522
1984	24,684	25.0	6,171
1985	43,750	23.0	10,062
1986	42,000	30.0	12,600

WILD BLUEBERRIES, COUNTY DISTRIBUTION, MAINE, 1982

County	Number of Farms	Acres	Production (Pounds)
Androscoggin	1	(D)	(D)
Aroostook	—	—	—
Cumberland	8	235	277,826
Franklin	1	(D)	(D)
Hancock	118	3,088	6,072,424
Kennebec	3	55	32,560
Knox	44	1,212	947,139
Lincoln	19	367	331,491
Oxford	6	78	106,800
Penobscot	10	165	157,269
Piscataquis	3	36	105,447
Sagadahoc	—	—	—
Somerset	1	(D)	(D)
Waldo	27	688	847,747
Washington	230	11,168	20,043,424
York	3	(D)	(D)
Maine	474	17,773	29,661,891

Source: 1982 Census of Agriculture



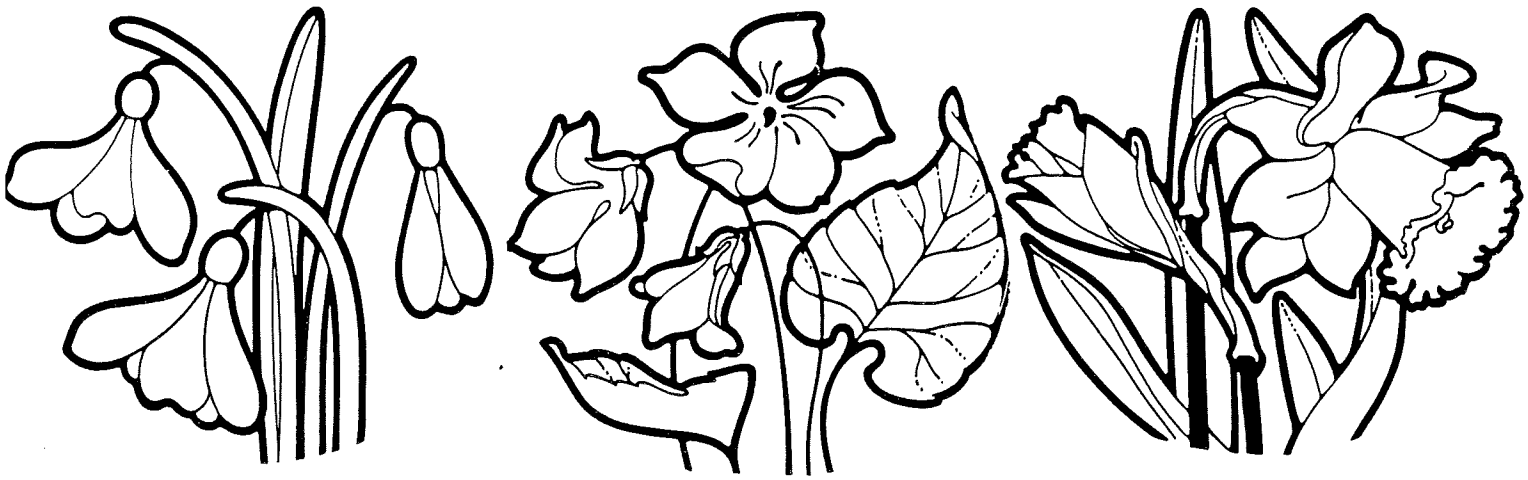
NURSERY AND GREENHOUSE PRODUCTS

Maine's greenhouses and nurseries have been experiencing substantial growth in recent years as ornamental horticulture has become more important and visible. Increasing knowledge of ornamentals among consumers and a growing economy have led to more acceptance of ornamentals in the landscape. As southern Maine's housing industry has expanded, landscaping services have become more popular. Florists are now supplied with product year-round, and have expanded their services to match.

According to the USDA, the value of greenhouse and nursery crops grown within the State was $8,850,000 in 1985 and $9,400,000 in 1986. Sales have grown almost $3 million over the past five years. A total of 460 greenhouse operations are registered with the State with nearly 1.6 million square feet of greenhouse space. An additional 240 nurseries are licensed, with approximately 453 acres in production.

Because the importance of the industry seemed to be undercounted by USDA estimates, the Department undertook a survey of Maine's ornamental horticulture industry in early 1986. This included greenhouses, nurseries, florists, and landscapers. Based on over four hundred operations' responses, we estimate a total value of production, retail sales, and services provided of $63 million in 1985. Production alone is estimated at $16 million, twice the level of USDA statistics. Full-time employees totaled 826, part-time 750, and seasonal, 802. Each firm averaged 5.6 employees. As might be expected, businesses and employment were concentrated in York and Cumberland counties. The State Bureau of Taxation also released sales figures indicating total sales of $35 million for the florist industry in 1985, a figure similar to Department estimates for that segment.

Recent trends in the ornamental horticulture industry that may help Maine producers include a move towards use of plants that can be used for both landscape and food purposes, the use of more native materials in landscaping projects, and increased use of and demand for ornamentals in daily life.



CASH RECEIPTS FOR GREENHOUSE AND NURSERY PRODUCTS, 1977 - 1986

Year	Cash Receipt (000 Dollars)
1977	5,417
1978	5,959
1979	6,555
1980	6,555
1981	6,567
1982	7,500
1983	7,770
1984	8,350
1985	8,850
1986	9,400

DISTRIBUTION OF ORNAMENTAL HORTICULTURE FIRMS BY INCOME AND PRINCIPAL BUSINESS, 1985

Income Range	Total	Florists	Greenhouse	Nurseries	Landscapers
$0-9,999	175	13	74	44	6
$10,000-24,999	37	4	12	7	5
$25,000-49,999	36	9	8	2	9
$50,000-99,999	55	22	11	4	10
$100,000-249,999	64	31	7	4	13
$250,000-499,999	40	18	4	2	11
$500,000-999,999	10	2	2	0	3
$1,000,000-1,499,999	3	0	0	1	1
$1,500,000-1,999,999	2	1	0	1	0
$2,000,000 or greater	6	3	0	0	0
Total Firms	428	103	118	65	58
Mid-point estimate of sales:	$62,947,500	$25,047,500	$5,930,000	$5,167,500	$11,105,000

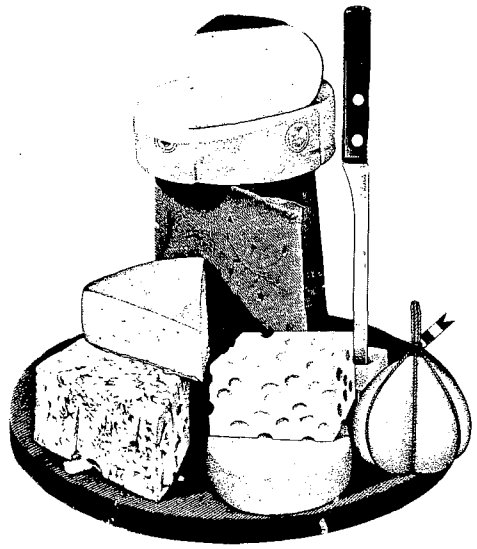
Source: Maine Department of Agriculture, Food and Rural Resources.

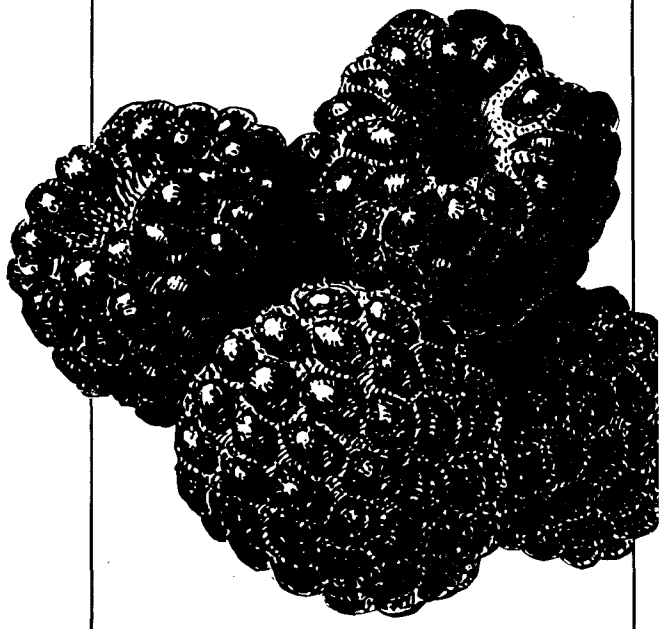
ESTIMATES OF THE VALUE OF ORNAMENTAL HORTICULTURE IN MAINE, 1985

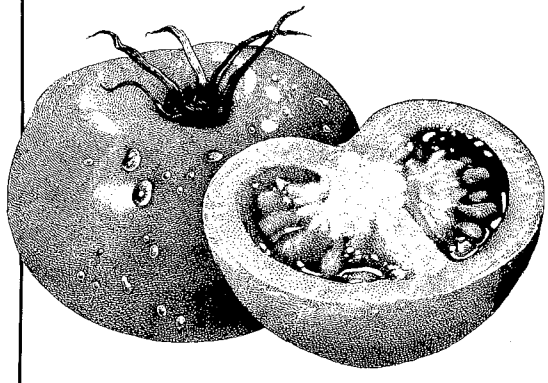
Income Range	Number of Firms	Low $Value	Low $ Total (000)	Medium $Value	Medium $Total (000)	High $Value	High $Total (000)
$0-9,999	175	1,000	175	5,000	875	10,000	1,750
$10,000-24,999	37	10,000	370	17,500	647.5	25,000	925
$25,000-49,999	36	25,000	900	37,500	1,350	50,000	1,800
$50,000-99,999	55	50,000	2,750	37,500	4,125	100,000	5,500
$100,000-249,999	64	100,000	6,400	175,000	11,200	250,000	16,000
$250,000-499,999	40	250,000	10,000	375,000	15,000	500,000	20,000
$500,000-999,999	10	500,000	5,000	750,000	7,500	1,000,000	10,000
$1,000,000-1,499,999	3	1,000,000	3,000	1,250,000	3,750	1,500,000	4,500
$1,500,000-1,999,999	2	1,500,000	3,000	1,750,000	3,500	2,000,000	4,000
$2,000,000 or greater	6	2,000,000	12,000	2,500,000	15,000	3,000,000	18,000
Total Sales		Low Range = $43,595,000		Mid Range = $62,947,500		High Range = $82,475,000	

Note: Only 428 of the 430 respondents provided data on income.
Source: Maine Department of Agriculture, Food and Rural Resources.

OTHER AGRICULTURAL PRODUCTS







BEES AND HONEY

Beekeeping for honey production and pollination services is popular among many hobbyists and part-time farmers in Maine. However, the two year priod from 1984 to 1986 showed a decline in the number of registered Maine beekeepers and colonies. The former decreased 20 percent from 802 to 644 during this time while the latter dropped 15 percent from 10,200 to 8,694. This development corresponds to a noticible increase in the use of imported colonies to meet the state's pollination needs. The number of registered imported colonies rose from 7,732 in 1984 to 13,588 in 1986. This is a trend which is expected to continue.

In May of 1985, tracheal mite (Acarapis woodi) was introduced into the state via imported colonies. By 1986, it had spread to all of Maine's commercial migratory beekeeping operations except for one. Hives with significant mite infestations (25% or greater) can experience several detrimental effects. Among these are a lower adult population, reduced honey production and pollination efficiency and high winter mortality.

The 1985 honey crop was below average. This was followed by another very poor year for honey production in 1986 because of excessive rain. Bees were confined much of the summer and consumed honey made in the spring. Colonies entered the winter with light honey stores and clusters of many older bees. Both these factors have a significant impact on winter mortality.

Hives are rented to producers to ensure pollination and improve yields in apple and blueberry crops. They are also used by strawberry producers, although to a lesser degree. Rental prices remained relatively stable during the 1985-1986 season, ranging from $20 to $30 per hive.

MAINE HONEY PRODUCTION, 1977 - 1986

	Beekeepers	Colonies of Bees	Yield Per Colony Pounds	Production (000 Pounds)	Price Per Pound Cents	Value of Production
1977	N/A	5,000	18	90	85.8	77,000
1978	N/A	5,000	36	180	98.2	177,000
1979	N/A	5,000	36	180	68.9	124,000
1980	N/A	7,000	19	133	83.1	111,000
1981	N/A	8,000	28	224	89.1	200,000
1982	795	10,577	N/A	N/A	N/A	N/A
1983	728	10,907	50	545	90.0	491,000
1984	802	10,200	32	326	69.0	225,000
1985	717	10,616	26	276	64.0	177,000
1986	646	8,696	5	43	67.0	29,000

Data through 1981 from New England Corp & Livestock Reporting Service. 1982 to date based on estimates from the Maine Department of Agriculture, Food and Rural Resources.

MIGRATORY COLONIES IMPORTED FOR POLLINATION PURPOSES, 1981 - 1986

1981	9,454
1982	11,332
1983	11,424
1984	12,072
1985	14,800
1986	17,055

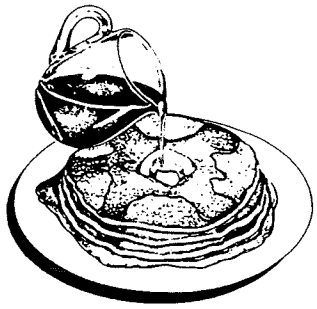
Source: Maine Department of Agriculture, Food and Rural Resources.

MAPLE SYRUP

Maine is one of the nine states in the United States where maple syrup is produced commercially. Canadian syrup producers who tap trees and produce syrup in Maine have been subject to the state's requirements for licensing and inspection since 1983. The volume of syrup produced by the Canadian producers represents over 90 percent of the total amount produced in Maine. Since the data given here reflects the additional production, numbers may not correspond to USDA statistics, which do not include the border production in their calulations.

Recently, some of the producers have adopted a new processing technique called reverse osmosis separation. Because a sustantial financial investment in equipment is required, adoption of this technology has been limited to a few larger producers. However, the process reduces the amount of sap needed to make a gallon of syrup by approximately 50 percent. Additional income from sales of distilled water, a by-product of the process, can also help offset equipment costs.

The 1985 maple syrup season lasted about 39 days. It was generally reported as being unfavorable in most of New England and parts of Maine with the weather being too warm or too cool. Maple syrup production, up 10 percent from the previous season, totaled 65 thousands gallons. The sap was in the normal range and mostly medium in color. The average price of 1985 maple syrup in Maine was $24.70 per gallon, compared to $23.20 per gallon in 1984. This combined increase in production and price resulted in a 17 percent rise in value of production.



The maple syrup season was shorter in 1986, lasting only 25 days. The weather was generally as unfavorable as the previous year. However, one geographical area in Maine experienced excellent weather conditions for sap production. Increased production in Northwest Maine, where a large majority of producers are located, offset the lower production in other areas. Over 66,000 gallons were produced in 1986, slightly more than the year before. The average price per gallon reached a record high of $29.60 causing a 16 percent increase in total value of production compared to 1985.

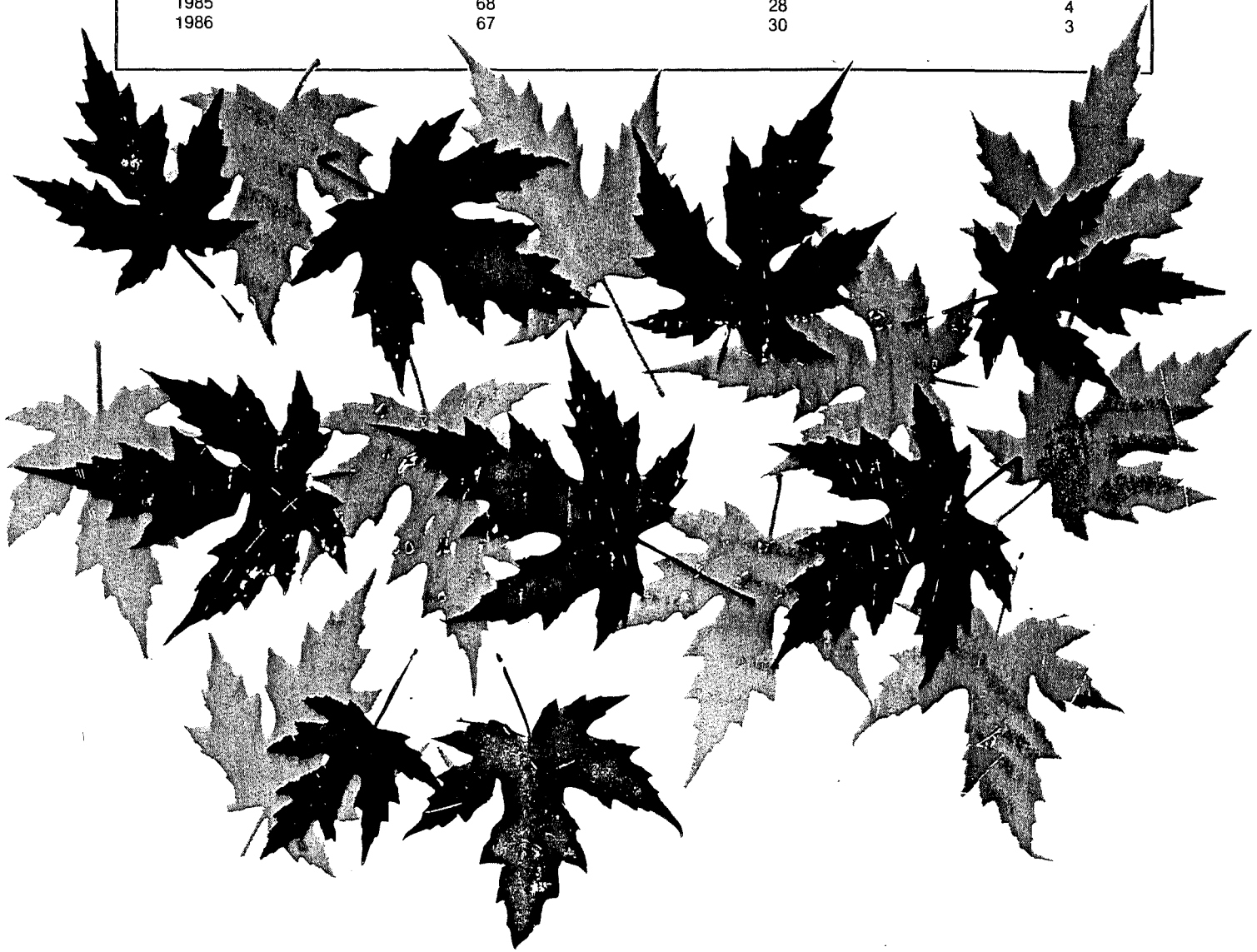
MAPLE SYRUP: PRODUCTION, PRICE AND VALUE, MAINE, 1976 - 1986

Year	Production			Price	Value
	Southern	Border Areas	Total		
	1,000 Gallons			Dollars	1,000 Dollars
1976	7.0	—	7.0	13.70	96
1977	8.0	—	8.0	15.50	124
1978	7.0	—	7.0	16.00	112
1979	9.0	—	9.0	17.90	161
1980	5.0	—	5.0	19.80	99
1981	12.0	—	12.0	23.00	276
1982	10.0	—	10.0	21.60	216
1983	8.0	45.5	53.5	22.30	1.193
1984	10.0	48.0	58.0	23.20	1.345
1985	10.0	55.0	65.0	24.70	1.605
1986	6.0	60.9	66.9	29.60	1.980

Source: Maine Department of Agriculture, Food and Rural Resources.

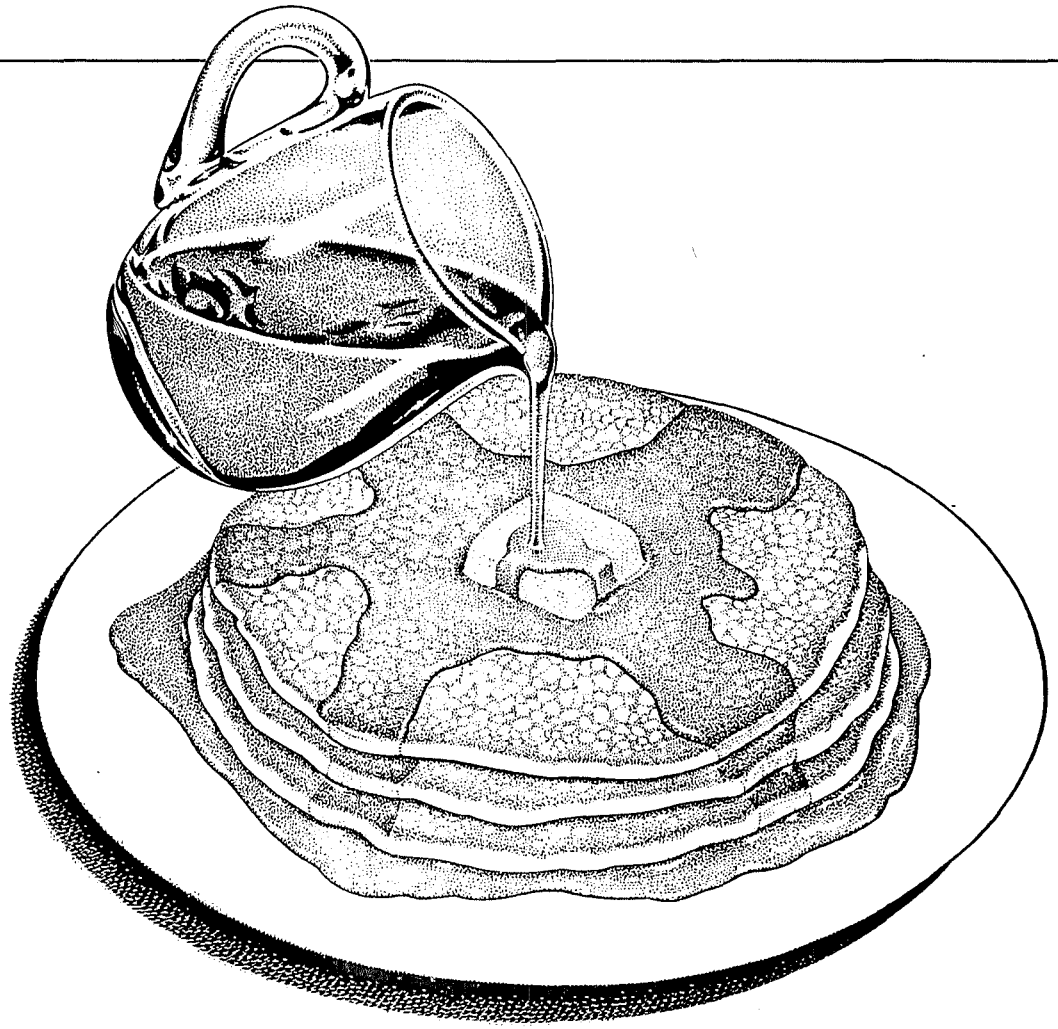
MAPLE SYRUP: PERCENTAGE BY TYPE OF SALE, MAINE, 1977 - 1986

Year	Retail	Wholesale	Bulk
		Percent	
1977	69	30	1
1978	71	29	—
1979	74	26	—
1980	66	34	—
1981	60	40	—
1982	60	40	—
1983	60	38	2
1984	59	41	—
1985	68	28	4
1986	67	30	3



MAPLE SYRUP: PRICES BY TYPE OF SALE AND SIZE OF CONTAINERS, MAINE, 1977 - 1986

	Retail				Dollars		Wholesale				All Sales Equiv. Per Gallon
Year	Gallons	½ Gallons	Quarts	Pints	½ Pints	Gallons	½ Gallons	Quarts	Pints	½ Pints	
1977	13.25	6.90	4.20	2.90	1.55	11.75	6.35	3.85	2.40	1.50	15.50
1978	14.13	7.50	4.35	2.59	1.72	12.00	6.50	3.68	2.15	1.20	16.00
1979	15.55	7.96	4.88	3.04	2.14	12.50	7.25	3.92	2.42	1.55	17.90
1980	18.40	9.71	5.40	3.38	2.25	15.00	8.00	4.25	2.95	1.90	19.80
1981	19.99	11.33	6.37	3.96	2.48	17.65	9.83	5.88	3.33	2.01	23.00
1982	20.07	12.40	6.18	4.40	2.54	15.74	10.03	5.25	3.35	1.93	21.60
1983	20.26	11.82	6.01	4.30	2.67	17.80	10.13	5.44	3.34	2.01	22.30
1984	21.36	12.82	6.63	4.18	2.88	17.60	9.90	5.40	3.30	2.13	23.20
1985	21.80	12.25	6.85	4.05	2.80	18.45	10.45	5.75	3.30	2.15	25.70
1986	24.20	13.80	7.65	4.55	3.35	23.40	13.65	7.55	4.30	2.90	29.60



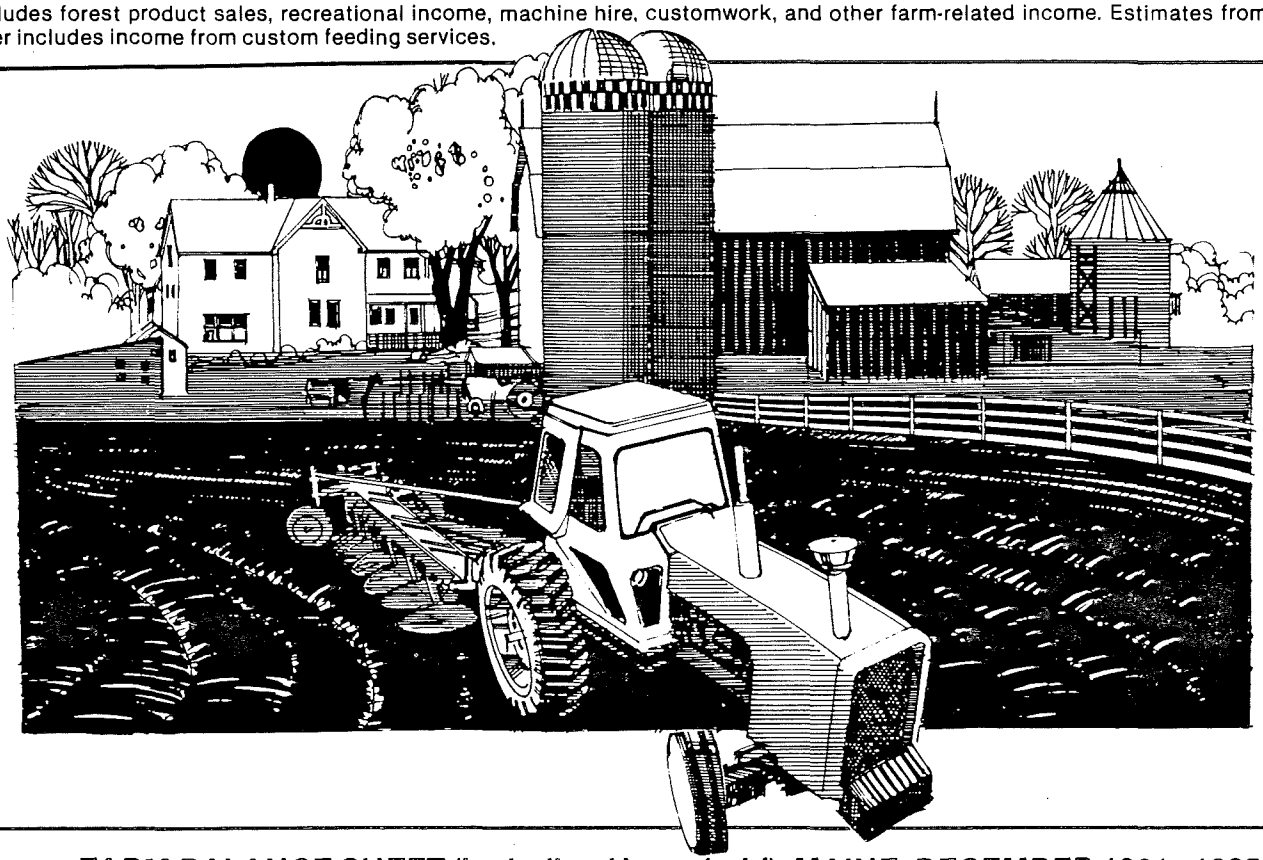
FINANCIAL INDICATORS

MAINE: GROSS AND NET INCOME FROM FARMING (Including Households) 1981 - 1985

Million Dollars

Item	1982	1983	1984	1985	1986
Cash Receipts	418.4	412.4	430.9	365.9	365.4
Government Payments	2.3	2.7	4.3	3.6	6.8
Non-Cash Income	42.0	43.6	43.9	51.2	58.3
Other Farm Income	13.4	13.7	16.0	17.8	17.4
Value of Inventory Adjustment	16.6	-1.8	4.5	21.7	-17.4
Total Gross Farm Income	492.7	470.7	499.8	460.2	431.5
Total Farm Production Expenses	423.2	448.7	429.0	409.1	393.8
Net Farm Income	69.5	22.0	70.8	51.1	37.7
Total Number of Farms	7,900	8,100	8,000	7,800	7,800
Average Net Income (Dollars)	8,797	2,716	8,850	8,551	4,833

Includes forest product sales, recreational income, machine hire, customwork, and other farm-related income. Estimates from 1982 and later includes income from custom feeding services.



FARM BALANCE SHEET (Including Household), MAINE, DECEMBER 1981 - 1985

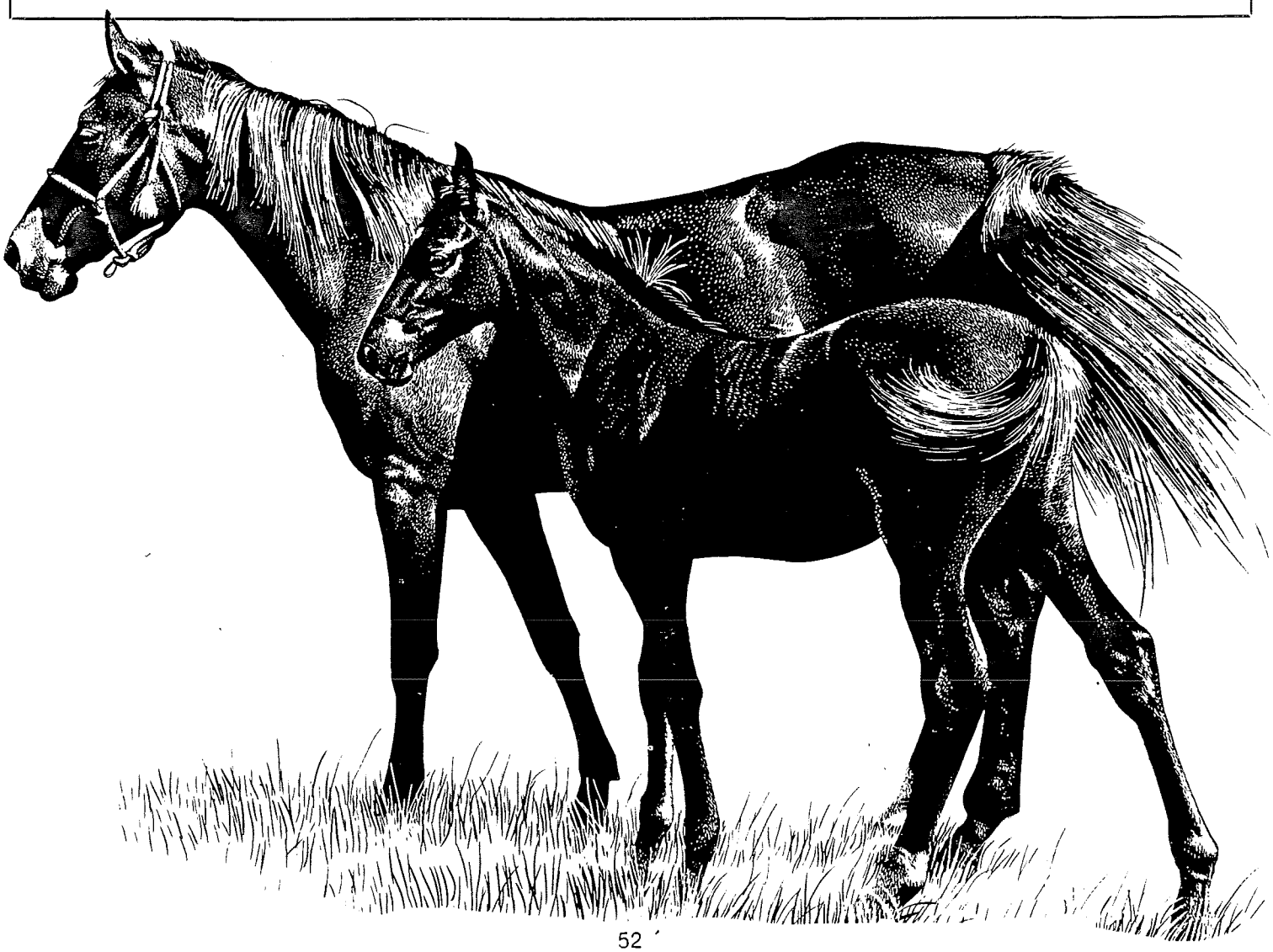
	1982	1983	1984	1985	1986
ASSETS					
Real Estate	1,118.6	1,170.0	1,335.4	1,509.4	1,644.6
Livestock & Poultry	109.8	101.2	97.0	84.7	79.6
Machinery & Motor Vehicles	299.7	297.6	287.6	265.9	247.8
Crops[1]	83.9	143.8	90.8	75.0	92.1
Household equip. & furnishings	73.9	83.3	115.3	155.7	200.5
Financial Assets	84.3	88.2	94.0	102.4	114.8
Total Assets					
DEBTS	183.2	182.1	173.6	164.7	149.4
Real Estate Debt	228.3	232.0	236.5	238.8	223.0
Non-Real Estate Debt[2]	411.5	414.1	410.1	403.5	372.4
Total Farm Debt	1,358.7	1,470.0	1,609.9	1,789.6	2,007.0
EQUITY					

NOTES:
1. All crops held on farms including crops under CCC and CCC crops held off farms by farm operators.
2. Includes debt owed to institutional lenders and to noninstitutional or miscellaneous lenders.

FARM PRODUCTION EXPENSES (Including Households), MAINE, 1981 - 1985

Current Farm Operating Expenses	1982	1983	1984	1985	1986
Total production expenses	423.2	448.7	429.0	409.1	393.8
Intermediate product expense	253.0	269.2	258.3	235.6	215.6
Farm origin	129.4	142.4	128.0	114.0	103.5
Feed	102.5	115.0	98.8	84.7	74.2
Livestock	17.7	18.7	19.2	19.5	20.6
Seed	9.2	8.7	10.0	9.8	8.7
Manufacturered	58.0	55.8	56.0	55.3	45.2
Fertilizer	22.4	21.1	20.6	21.1	16.6
Pesticides	9.9	9.6	11.0	11.1	10.0
Fuel & oil	18.7	17.8	17.0	15.6	11.4
Electricity	7.0	7.4	7.4	7.4	7.3
Other	65.5	71.0	74.4	66.4	66.9
Repair & operation	19.0	20.5	20.7	22.4	25.2
Other miscellaneous[1]	46.5	50.4	53.7	44.0	41.7
Interest	32.5	33.2	31.4	33.4	32.0
Real Estate	13.8	14.8	14.8	12.5	11.6
Non-real estate	18.7	18.4	16.6	20.9	20.4
Contract and hired labor	51.2	49.3	49.1	49.5	50.0
Cash labor expenses[2]	47.1	45.4	44.9	45.5	46.6
Perquisites	4.0	3.9	4.2	4.0	3.3
Net rent to nonoperator landlord[3]	.7	.0	.6	.5	-0.5
Capital consumption	74.4	82.5	75.3	75.6	81.8
Business taxes	11.5	14.5	14.2	14.4	15.0

NOTES:
1. Includes machine hire and customwork expenses; marketing, storage and transportation expenses; and miscellaneous expenses. Defination and data sources for 1978 and later are not directly compatible with those of earlier years.
2. Includes contract labor expenses, hired labor wages, and Social Security payments.
3. Uses different data sources for periods before 1979, 1979-83 and 1984 and later. Estimates are not directly compatible among periods.



MISCELLANEOUS INFORMATION

Maine soils are mostly glacial till with some glacial outwash and marine sediments. The temperatures of most Maine soils are considered "frigid" with some northern soils considered "cyric" (very cold) and one very small area at the southern tip of Maine considered "mesic" (moderate). Generally speaking, the soils most suitable for agriculture are located in a band stretching from Lewiston through Bangor then north to Presque Isle.

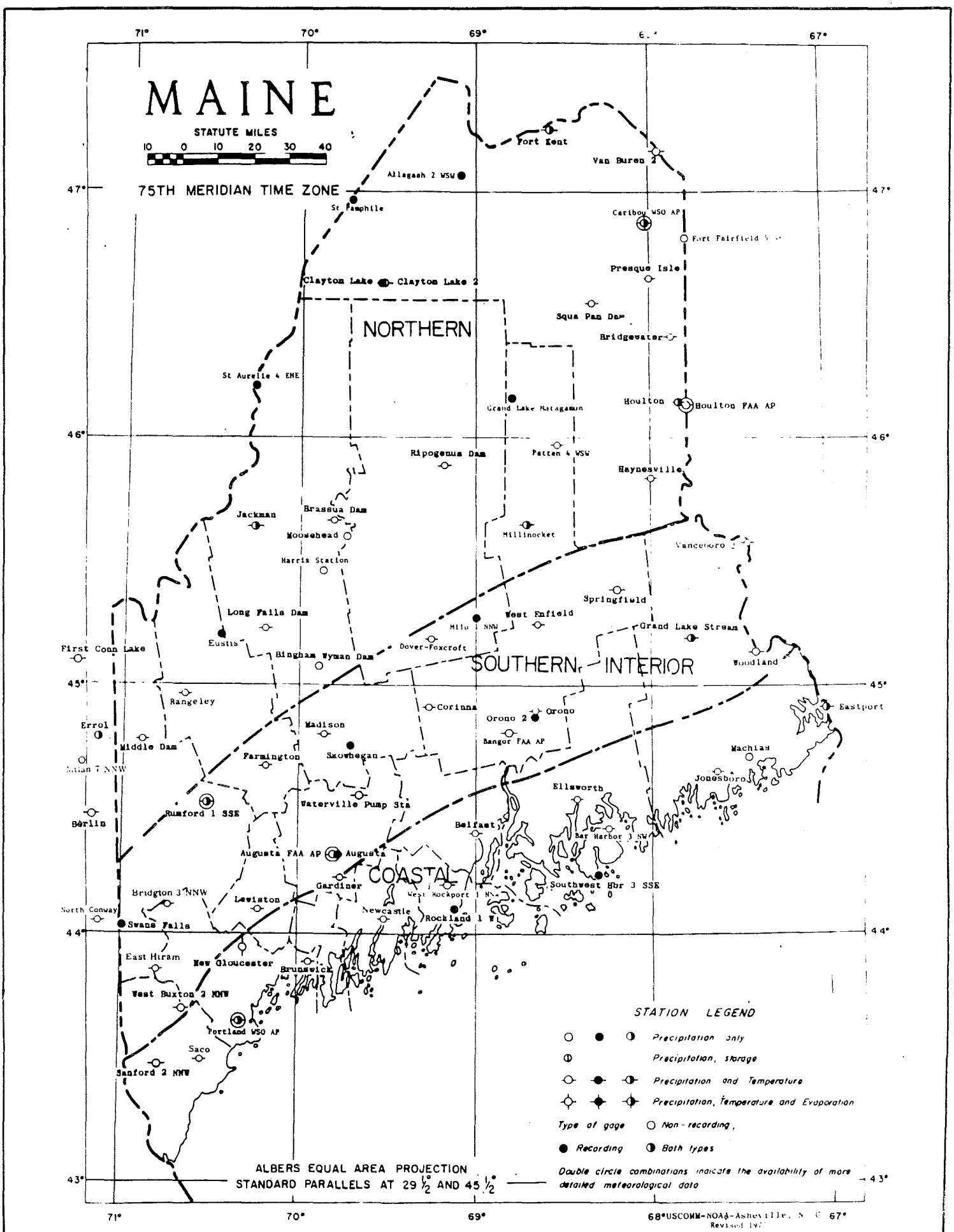
Maine's climate is influenced by three major weather forces — northern arctic air masses from Canada, westerly influences from the Great Lakes region and southerly air flows from the Gulf Stream. There are three general climatalogical zones in Maine: Northern, Interior and Coastal. Due to the moderating effects of the ocean, the coastal region generally has the longest growing season. The Northern zone has the shortest growing season. Precipitation is usually adequate throughout the growing months in Maine. Annual precipitation averages over 40 inches in most coastal and central interior areas with northern areas receiving a little less (averaging 35-40 inches).

The most notable meteorological event of 1985 was Hurricane Gloria which hit New England on September 27. The storm brought high winds and heavy rains. Southern Maine was the most affected area of the State with extensive damage to corn crops and fruit trees. In southern Maine, 30-40% of the corn crop remaining in the fields was lost.

An early, dry spring in 1985 enabled Maine farmers to get an early start on their field work. The 1985 growing season was generally good with adequate temperatures and precipitation. Farmers also got an early start planting in 1986, with another early, dry spring. However, much of the 1986 growing season was dominated by cool, wet weather.

FROST DAYS BY REGION IN MAINE, 1985 - 1986

Year	1985			1986		
Station	Last Frost	First Frost	# of Frost-Free Days	Last Frost	First Frost	# of Frost-Free Days
NORTHERN DIVISION						
Fort Kent	6/5	9/12	99	6/12	8/29	78
Caribou	5/9	9/12	126	5/9	9/18	132
Houlton	No Data	10/8	No Data	5/26	9/9	106
Presque Isle	5/29	9/12	106	5/13	9/18	128
SOUTHERN INTERIOR						
Corinna	5/9	9/12	126	5/13	9/27	137
Farmington	5/16	9/12	119	6/3	8/29	87
Bridgton	5/15	10/17	155	5/10	10/7	150
COASTAL DIVISION						
Jonesboro	5/15	10/12	150	5/9	10/6	150
Ellsworth	5/24	10/13	142	5/15	10/8	146
Portland	5/9	10/21	165	5/10	10/10	153
Brunswick	5/9	10/12	156	5/4	10/8	157


MAINE
STATUTE MILES
10 0 10 20 30 40
75TH MERIDIAN TIME ZONE
NORTHERN
SOUTHERN INTERIOR
COASTAL
71°
70°
69°
68°
67°
47°
46°
45°
44°
43°
Fort Kent
Van Buren 2
Allagash 2 WSW
St Pamphile
Caribou WSO AP
Fort Fairfield
Presque Isle
Clayton Lake
Clayton Lake 2
Squa Pan Dam
Bridgewater
St Aurelie 4 ENE
Grand Lake Matagamon
Houlton
Houlton FAA AP
Ripogenus Dam
Patten 4 WSW
Haynesville
Jackman
Brassua Dam
Moosehead
Millinocket
Harris Station
Springfield
Long Falls Dam
West Enfield
Grand Lake Stream
Eustis
Dover-Foxcroft
First Conn Lake
Bingham Wyman Dam
Woodland
Rangeley
Corinna
Orono 2
Orono
Eastport
Errol
Madison
Bangor FAA AP
Middle Dam
Farmington
Skowhegan
Machias
Jonesboro
Rumford 1 SSE
Waterville Pump Sta
Ellsworth
Berlin
Belfast
Bar Harbor 3 NW
Augusta FAA AP
Augusta
Gardiner
Southwest Hbr 3 SSE
Bridgton 3 NNW
Lewiston
West Rockport 1 NW
North Conway
Newcastle
Rockland 1 W
Swans Falls
East Hiram
New Gloucester
Brunswick
West Buxton 2 NNW
Portland WSO AP
Saco
Sanford 2 NNW
STATION LEGEND
Precipitation only
Precipitation, storage
Precipitation and Temperature
Precipitation, Temperature and Evaporation
Type of gage
Non-recording
Recording
Both types
Double circle combinations indicate the availability of more detailed meteorological data
ALBERS EQUAL AREA PROJECTION
STANDARD PARALLELS AT 29 1/2° AND 45 1/2°
USCOMM-NOAA-Asheville, N C
Revised 197

FERTILIZER USE IN MAINE

Fertilizer and Harvested Acreage

	1965	1970	1975	1980	1983	1984	1985	1986
Harvested crop acreage (thousand acres)	634	435	409	405	394	384	403	383
Total nutrients (lbs/acre harvested)	187	256	236	195	174	195	178	168

Year Ending June 30

	1955	1960	1975	1980	1983	1984	1985	1986
	Commercial Fertilizers (Tons)							
Total fertilizer material	182,312	160,353	124,997	101,515	85,809	91,951	91,029	80,632
Total N	13,055	13,462	14,929	12,607	11,353	12,586	12,746	11,900
N in mixtures	12,469	12,738	12,186	10,907	9,622	10,465	10,124	8,802
Total P205	20,207	19,312	16,316	13,278	11,208	12,526	11,254	9,884
P205 in mixtures	19,377	18,230	15,524	13,159	10,956	12,327	11,118	9,819
Total K20	22,344	19,112	16,972	13,612	11,654	12,280	11,834	10,439
K20 in mixtures	22,291	19,055	15,911	12,547	10,625	10,887	10,657	9,036
Total plant nutrients	55,606	51,886	48,217	39,497	34,215	37,392	35,834	32,223
Average analysis	30.5	32.4	38.7	39.0	40.0	40.7	40.8	41.1
Total nutrients in mixtures	54,137	50,023	43,621	36,613	31,203	33,679	31,899	27,657
Average analysis of mixtures	30.9	32.9	38.8	39.5	40.5	41.4	40.4	41.7
	Selected Single-Nutrient Materials (Tons of Material)							
Ammonium nitrate	1,122	1,228	3,971	1,664	1,659	1,330	1,396	899
Nitrogen solutions	24	264	4	12	—	—	—	21
Urea	81	162	2,211	2,170	2,185	3,366	4,548	4,052
Ammonium sulfate	54	72	677	499	29	—	265	4,375
Sodium nitrate	135	146	46	2	36	—	—	6
Ordinary superphosphate	3,708	5,024	45	20	1	—	—	1
Concentrated superphosphate	—	30	237	132	185	77	296	140
Secondary and micronutrients	38	19	339	212	167	118	3,195	2,172
Potash materials (chloride)	20	69	1,701	1,575	1,557	2,170	1,718	2,245

Leading Grades

1960		1980		1984		1985		1986	
Grade	**Tons**	**Grade**	**Tons**	**Grade**	**Tons**	**Grade**	**Tons**	**Grade**	**Tons**
8-12-12	60,499	10-15-15	26,722	14-14-14	25,651	14-14-14	24,703	14-14-14	17,246
10-10-10	25,306	14-14-14	16,973	10-15-15	15,669	10-15-15	12,731	15-15-15	11,009
8-16-16	13,116	12-12-12	9,933	15-15-15	8,035	15-15-15	10,633	10-15-15	8,855
6-9-12	12,285	15-15-15	7,512	12-15-15	4,237	12-15-15	5,647	12-15-15	6,460
11-12-14	8,744	12-15-15	5,146	18-46-0	2,938	12-12-12	3,295	12-12-12	3,322
8-9-10	6,845	10-20-10	2,456	10-10-10	2,904	10-10-10	3,145	10-10-10	2,515
10-15-15	6,667	5-10-10	2,366	12-12-12	2,723	15-8-12	2,636	10-20-10	1,847
5-10-10	5,197	5-20-20	1,820	15-8-12	2,364	10-20-10	2,380	18-46-0	1,781
15-10-10	1,673	18-46-0	1,586	5-10-10	1,468	16-20-0	1,951	15-8-12	1,492
5-8-7	1,401	8-12-16	1,569	5-10-5	522	5-10-10	1,623	23-12-18	1,218
Total 10 leading grades									
141,733		76,083		66,511		68,744		55,745	

Consumption of Fertilizers by Class (Tons of material)

Dry bulk single-nutrient	167	1,101	5,600	2,800	4,767	6,520	7,371	10,019
Dry bagged single-nutrient	7,093	6,927	6,600	5,700	4,767	6,521	1,509	2,052
Dry bulk multiple-nutrient	2,639	13,586	65,500	75,200	59,313	61,488	68,186	57,334
Dry bagged multiple-nutrient	172,359	138,509	46,300	16,700	15,269	15,827	10,301	8,661
Fluid single-nutrient	41	209	—	100	—	9	7	9
Fluid multiple-nutrient	13	21	600	900	1,526	1,586	460	386
Total single-nutrient	7,263	8,218	12,213	8,525	8,672	10,437	8,887	12,080
Total multiple-nutrient	175,011	152,116	112,445	92,778	76,970	81,396	78,947	66,380
	Consumption of Multiple-Nutrient Fertilizers (Tons of Material)							
N-P-K	—	—	—	—	—	—	76,407	63,606
N-P	—	—	—	—	—	—	2,024	2,100
N-K	—	—	—	—	—	—	146	299
P-K	—	—	—	—	—	—	370	375

UNITED STATES: CIVILIAN PER CAPITA CONSUMPTION OF MAJOR FOOD COMMODITIES, 1980 - 1985

Commodity	1980	1981	1982	1983	1984	1985
Meats:	147.7	145.1	139.3	143.9	143.6	144.3
Beef	76.5	77.1	77.2	78.6	78.5	79.1
Veal	1.5	1.6	1.6	1.6	1.8	1.8
Lamb & Mutton	1.4	1.4	1.5	1.5	1.5	1.4
Pork	68.3	65.0	59.0	62.2	61.8	62.0
Fish (edible weight)	12.8	12.9	12.3	13.1	13.6	14.5
Canned	4.5	4.8	4.3	4.8	5.0	5.2
Poultry Product:						
Eggs	34.6	33.8	33.4	33.1	33.0	32.4
Chicken (ready-to-cook)	50.1	51.7	53.1	53.8	55.7	57.4
Turkey (ready-to-cook)	10.5	10.8	10.8	11.3	11.4	11.9
Dairy Products:						
Cheese (excluding cottage)	17.6	18.4	20.1	20.6	21.6	22.4
Condensed/Evaporated milk	3.8	4.1	4.0	3.9	3.8	3.7
Fluid milk & cream	249.6	245.4	241.9	242.3	243.3	245.1
Ice Cream (product weight)	17.3	17.2	17.5	17.9	18.0	18.0
Fats & Oils — Total fat content	60.4	60.6	61.3	63.0	61.8	67.2
Butter (80% of actual wt.)	4.5	4.3	4.3	4.9	4.9	4.9
Margarine (80% of act. wt.)	11.4	11.2	11.1	10.4	10.4	10.7
Lard	2.6	2.5	2.5	2.1	2.1	1.8
Shortening	18.2	18.5	18.6	18.5	21.3	22.8
Other edible fats & oils	26.7	23.2	23.4	25.1	21.5	25.1
Fruits:						
Fresh	86.7	83.9	83.9	87.5	86.6	88.2
Citrus	28.1	24.2	23.9	28.2	23.1	21.8
Noncitrus	58.6	59.7	60.0	59.8	64.4	66.4
Processed:						
Canned fruit	10.6	10.0	9.7	9.3	8.9	8.5
Canned juice	16.7	19.1	N/A	N/A	N/A	N/A
Frozen (including juices)	13.0	12.7	14.1	15.1	13.6	16.2
Chilled citrus juices	5.8	4.1	3.5	4.1	3.7	3.2
Dried fruit	2.2	2.5	2.8	2.8	2.9	2.9
Vegetables:						
Fresh	73.2	72.4	76.8	75.7	80.7	81.4
Canned (excluding potatoes	35.3	32.0	32.6	33.7	32.6	N/A
Frozen (excluding potatoes)	10.4	11.5	10.9	11.1	12.0	N/A
Fresh potatoes	44.2	43.6	48.5	45.9	44.7	49.9
Frozen potato products	16.9	18.2	18.1	18.8	20.8	21.2
Sweet potatoes	4.3	5.3	5.7	4.6	5.1	5.6
Grains:						
Wheat flour	116.9	115.9	119.4	115.9	117.6	122.5
Rice	9.4	11.0	11.8	9.8	8.5	9.3
Other:						
Coffee	7.7	7.7	7.6	7.6	7.5	7.4
Cocoa	2.7	2.8	3.0	3.1	3.5	3.6
Peanuts	4.9	5.6	6.0	5.9	6.0	6.2
Dry edible beans	5.8	6.8	6.4	4.4	6.1	N/A
Melons	16.9	18.8	N/A	N/A	N/A	N/A
Sugar (refined)	83.6	79.4	73.7	71.1	67.7	63.4
Corn sweeteners (product wgt.)	52.7	58.8	63.8	69.4	77.3	87.5