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THE ECONOMICS OF PRODUCING GREEN PEAS for PROCESSING IN NEW YORK STATE AND WISCONSIN

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THE ECONOMICS OF PRODUCING GREEN PEAS FOR PROCESSING IN NEW YORK STATE AND WISCONSIN

Green peas rank third in acreage among the five principal processing vegetable crops grown in New York State. Peas have held that place over the past decade with the single exception of 1976 when the pea acreage in the State declined significantly from the level of previous years. Since 1976, pea acreage has shown a steady increase (Table 1). In 1981, 7900 acres of processing peas were planted in New York and all but 100 acres were harvested.

Table 1. Vegetables for Processing
New York
1972-1981

Year	Snap Beans	Sweet Corn	Peas	Cabbage, Kraut	Beets
		- 1,000 acres planted -			
1972	55.5	13.5	5.4	3.6	4.1
1973	53.3	15.8	6.6	4.5	4.4
1974	52.7	18.9	6.9	4.7	5.4
1975	50.8	22.7	6.7	4.2	4.9
1976	46.6	22.8	4.2	4.1	4.7
1977	49.1	23.4	5.3	4.3	4.6
1978	52.3	22.4	5.8	4.2	5.3
1979	49.2	21.6	6.3	3.7	5.3
1980	49.1	17.9	6.2	3.7	3.9
1981	41.9	21.7	7.9	3.6	3.3

Source: New York Agricultural Statistics, 1980; New York Crop Reporting Service.

Nationwide, about half of the processing pea acreage has been located in the states of Wisconsin and Minnesota. Wisconsin, alone, grows about 30 percent of the national crop. The other major processing pea growing area is the Pacific Northwest. The states of Washington and Oregon together account for another 30 percent of the total acreage (Table 2). Other important states include Delaware, Maryland, California, Idaho, and Illinois. New York growers have planted between one and two percent of the United States acreage of processing peas.

Table 2. Green Peas for Processing
Planted Aceage
Selected States
1975-1981

State	1975	1976	1977	1978	1979	1980	1981
			- thousand acres -				
Wisconsin	148	121	114	113	117	110	88
Washington	84	75	82	76	85	61	64
Minnesota	76	74	69	78	82	71	67
Oregon	52	37	32	38	43	35	34
New York	7	4	5	6	6	6	8
Delaware	11	9	9	9	10	6	8
Maryland	6	7	6	6	8	4	4
Other States	83	76	67	63	67	52	44
United States	467	403	384	389	418	345	317

Source: Vegetables; Annual Summaries, Crop Reporting Board, ESCS, USDA.

Yields for green peas grown in New York State have competed very favorably with yields in other states. New York yields have consistently exceeded the national average in tons produced per planted acre (Table 3). Over the period of 1975 to 1981, New York pea yields averaged about 12 percent above the U.S. average and about 20 percent above the Wisconsin average.

Table 3. Green Peas for Processing
Yield per Planted Acre
Selected States
1975-1981

State	1975	1976	1977	1978	1979	1980	1981
		- tons per planted acre -					
Wisconsin	1.1	1.0	1.3	1.0	1.5	1.4	1.4
Washington	1.5	1.7	1.3	1.6	1.6	1.6	1.5
Minnesota	1.0	1.1	1.5	1.1	1.4	1.1	1.3
Oregon	1.1	1.2	0.7	1.2	1.0	1.6	1.3
New York	1.3	1.4	1.4	1.4	1.7	1.6	1.8
Delaware	1.2	1.3	1.3	1.2	1.3	1.5	1.6
Maryland	1.2	1.2	1.4	1.4	1.6	1.5	1.8
United States	1.2	1.3	1.3	1.2	1.5	1.4	1.5

Source: Adapted from Vegetables; Annual Summaries, Crop Reporting Board, ESCS, USDA.

The Study -

In keeping with the objective to obtain and maintain reasonably current economic data on cash crops commonly grown in New York State, data was gathered from processing pea growers to document their experience with the 1981 crop. Because of support received from one of the major vegetable processors in the State, it was also possible to obtain data from pea growers in the State of Wisconsin. Data from growers in both states are presented in this publication in an effort to evaluate the competitive position of New York producers of processing peas under current conditions.

Processors cooperated in identifying growers who would be willing to participate in the study. Data collection involved a detailed interview with each grower using a procedure developed in recent years for crop production cost studies by Cornell University. The questionnaire was designed to determine the grower's cash costs for the crop and to estimate and allocate appropriate overhead costs including labor, tractor, equipment, land and other costs related to the production and disposition of the crop. The approach used relies heavily upon results and experience from the Cornell Farm Enterprise Cost Account research project for various cost factors not available apart from continuing supervised records kept by cooperating farm operators.

A detailed explanation of the procedure and forms used to accumulate crop costs and to analyze the crop enterprise is available in a bulletin published by the Department of Agricultural Economics at Cornell.*

Although the cooperating growers in each State were not randomly selected, they were selected as operators of commercial farm businesses and with acreages of the crop that contributed significantly to the farm income. It is felt that these enterprises are reasonably representative of grower's experience with processing peas in each State in 1981.

The study includes data from 18 pea growers in Western and Central New York State and 21 growers in Eastern and South Central Wisconsin.

One important difference between New York and Wisconsin processing pea contracts is the degree of responsibility for the crop on the part of the producer. In both states, growers worked closely with processor fieldmen in scheduling planting dates using seed obtained from the processor. The growing of the crop was the responsibility of the farmer. However, in New York State the farmer is also responsible for harvesting the crop and hauling it to the processor's plant. In Wisconsin, the harvesting and, in some cases, the hauling of the crop are the responsibility of the processor. This difference accounts for a major portion of the difference in price paid to the grower for his crop.

* Enterprise Analysis: A guide for determining Field and Vegetable Crop Costs and Return , A.E. Ext. 76-4, D. P. Snyder, Department of Agricultural Economics, Cornell University, Ithaca, New York 14853.

Each processor graded the delivered crop for quality based on tenderometer readings. These quality tests were the basis for price variations for peas delivered to the processor.

The analysis in this report will be concerned with identifying the current costs and returns to producers of green peas for processing in New York and Wisconsin. Comparisons will be made with Wisconsin data with regard to growing costs and overall enterprise profitability for the two states. Various measures of enterprise profits will provide an indication of the profitability of green peas as a cash crop in New York and Wisconsin.

Characteristics of the Farms -

The farms in New York State included in this study were basically cash crop farms which grew both field crops and processing vegetable crops. Of the 18 growers, 12 had no livestock, four had dairy herds and two had other livestock enterprises.

Wisconsin pea growers included in the study were fairly evenly divided between dairy and cash crop operations. The group of 21 growers included eight dairy farms, nine field and vegetable crop farms and four farms having other livestock along with field and vegetable crops.

The overall size of the New York farm operations tended to be larger than their Wisconsin counterparts for each farm type. Crop acreage and herd sizes varied widely within each state which suggests that peas, as a crop, fits in the operation as a cash crop for a wide variety of circumstances. Pea acreages tended to be smaller on Wisconsin farms; however, with the availability of custom pea harvesters small acreages are also grown on many New York farms.

Growing Costs -

In Table 4, data are presented to indicate the costs to grow green peas for processing in New York and Wisconsin.

Pea enterprises in New York tended to be larger than in Wisconsin particulary for the highest third of growers when ranked by acres per enterprise. The 18 New York growers had an average of 106 acres per enterprise and an average yield of 1.8 tons of peas per acre. Wisconsin growers in the study also averaged 1.8 tons of peas per acre on enterprises averaging 65 acres each.

As mentioned earlier, growers in both states were responsible for growing the crop in cooperation with processor fieldmen for scheduling planting dates. Although procedures were similar in the two states, several differences were noted when the various cost items were compared. Most notable was the difference in the cost for the use of cropland. The average land use cost for peas in New York was less than half the cost experienced by Wisconsin growers. These costs, $54 per acre in New York and $113 per acre in Wisconsin, are explained in more detail in the following text and Table 5.

Table 4. Green Peas for Processing
Growing Costs
New York and Wisconsin
1981

Item	New York	Wisconsin
Number of farms	18	21
Acres per enterprise	106	65
Yield per acre planted, paid tons	1.8	1.8
	- per acre -	
Labor	$ 17	$ 10
Tractor	15	13
Equipment	14	21
Custom work, equipment rent	5	6
Land use	54	113
Cover crop	2	1
Lime	2	2
Fertilizer*	35	27
Seed	91	65
Chemicals	5	2
Interest on operating capital	5	4
All other	6	5
Total growing costs	$251	$269
Total growing costs per ton, paid weight	$142	$150
Total growing cost excluding land	$197	$156
Land cost at average rent cost	$38	$66
Total growing cost using rent cost	$235	$222
Physical factors per acre:		
Labor hours	2.3	1.5
Tractor hours	1.4	1.2
*Pounds of N	46	20
P	57	58
K	55	81
Seed	262	236

Another important cost difference between New York and Wisconsin was for fertilizer and seed costs per acre. New York growers applied more nitrogen and less potash on their peas than did their counterparts in Wisconsin. The result was that fertilizer cost New York growers $8 per acre more than Wisconsin growers. Differences in the cost per pound of nutrients was not discernable because of the wide variety of fertilizer analyses used in both states.

Seed was supplied by the processor in all cases. New York growers used higher seeding rates and more expensive seed than Wisconsin growers. Seeding rates in New York averaged 262 pounds of seed costing about 35 cents per pound. Wisconsin growers paid 27 cents per pound for 236 pounds per acre. Seed costs in New York averaged $91 per acre or 40 percent above Wisconsin seed costs at $65 per acre.

Overall, growing costs for New York pea growers averaged $251 per acre in 1981. Growing costs in Wisconsin averaged $269 per acre. Based upon the yield of 1.8 tons of paid weight per acre for both states in 1981, growing costs averaged $142 per ton in New York and $150 per ton in Wisconsin.

The cost for land used to grow the crop varied more than any other single cost between the two states. The standard approach to determine land costs was to obtain the actual cost for that portion of the enterprise cropland that was rented in. Costs for owned cropland were comprised of the sum of interest on the estimated value of open cropland as part of an operating farm unit plus real estate taxes per acre of open cropland. The resulting average land cost is, therefore, a combination of costs for rented and owned land used for the pea enterprise in each state.

When the land cost was excluded from the total growing costs, New York growers had significantly higher growing costs per acre than Wisconsin growers. Table 4 shows that, in that case, growing costs averaged $197 per acre in New York and $156 per acre in Wisconsin.

If the average cash rent paid for pea land was assumed to be the opportunity cost of land and was used as the land cost for these enterprises, growing costs averaged $235 per acre in New York and $222 in Wisconsin (Table 4).

In both New York and Wisconsin, peas were grown on rented as well as owned cropland. In New York, 24 percent of the pea acreage was double cropped. An even larger portion of the pea acreage - 51 percent - was double cropped on Wisconsin farms. When double cropping was a factor, the land cost was shared between the two crops and had the effect of reducing the land cost to peas.

Table 5. Green Peas for Processing
Cropland Factors
New York, Wisconsin
1981

Factor	New York	Wisconsin
Crop grown on:		
Rented land, %	45	25
Owned land, %	55	75
Double cropped, %	24	51
Average rented land cost per acre	$38	$66
Average owned land cost per acre	$73	$150
Average enterprise land cost per acre	$54	$113
Average value per acre owned	$740	$1589
Average taxes per acre	$11	$18

The major reason for higher land costs in Wisconsin is the higher value Wisconsin growers placed on their cropland. As shown in Table 5, owned cropland in Wisconsin was valued twice as high as cropland used for peas in New York. Real estate taxes on open cropland were also significantly higher in Wisconsin. These factors had an important effect on the total cost of growing peas for processing in each state.

Harvesting Costs in New York -

In this analysis, only costs experienced by pea growers are considered. harvesting costs for New York pea enterprises were obtained. Wisconsin growers were not responsible for harvesting their crop and, therefore, had no direct harvesting costs.

Thirteen of the 18 New York growers hired a custom operator to harvest their pea crop. These growers had enterprises averaging 55 acres each - only slightly smaller in size than the average Wisconsin grower in the study. The five New York growers who had equipment to harvest their crop had pea enterprises averaging 240 acres in size and three of those growers did some custom harvesting for other growers.

Table 6. Green Peas for Processing
Harvesting Costs
New York
1981

Item	Owned Equipment	Custom Harvest
Number of farms	5	13
Acres per farm	240	55
Yield per acre planted, paid tons	1.7	1.9
	- cost per acre -	
Labor	$ 28	--
Tractor	26	--
Truck, equipment	79	--
Custom harvest	--	$169
All other	11	10
Total harvesting costs	$144	$179
Harvesting costs per paid ton	$ 85	$ 95

Table 6 compares harvesting costs for growers who had their own equipment and those who relied on custom operators to harvest their crop. Even though harvest costs per acre and per ton were higher for those hiring the job done, the small enterprise size would not warrent consideration of harvester ownership.

Harvesting costs include only costs related directly to the harvest activity; hauling costs are included under "selling" costs. For those who had their own equipment, harvesting costs averaged $144 per acre and, with a 1.7 ton yield, $85 per ton. Growers who hired a custom operator to harvest their crop had harvesting costs of $179 per acre and, with a 1.9 ton yield, $95 per ton.

Selling Costs -

Selling costs for processing peas consisted mainly of the cost to haul the crop to the processor. Schedules for payment to the growers varied with the processor. Because of various delayed payment schedules, interest was charged, as a selling cost, on the portion of the crop proceeds carried by the grower as an account receivable. Wisconsin pea contracts provided for a "nonharvested acreage" charge to the growers to provide a fund, matched by the processor, from which growers were paid for peas not harvested but fit for processing. Such costs as well as crop insurance costs, if any, were included as a selling cost.

Selling costs as experienced by New York pea growers are outlined in Table 7. Hauling costs varied depending on the distance from the grower to the plant. However, hauling cost New York growers an average of $19 per acre or $11 per ton. Interest on accounts receivable, due to the delayed payment schedule, amounted to $15 per acre or $8 per ton. Thus, New York pea growers had total selling costs of $34 per acre or $19 per ton.

Table 7. Green Peas for Processing
Selling Costs
New York
1981

Item	Cost	
	Per Acre	Per Paid Ton
Number of farms	18	
Acres per enterprise	106	
Yield per acre planted, paid tons	1.8	
Paid tons hauled	3,364	
	- per acre -	
Labor	$ 5	$ 3
Truck	7	4
Custom haul	7	4
Total hauling costs	$19	$11
Interest on accounts receivable	15	8
Total selling costs	$34	$19

Item	Self haul	Custom haul
Number of farms	10*	12*
Gross tons hauled	2,628	1,288
	- cost per gross ton -	
Labor	$3.45	--
Truck	5.66	--
Custom haul	--	$10.20
Total hauling costs	$9.11	$10.20

* Four farmers hired some custom hauling to supplement their own trucks.

Hauling costs for the 18 New York growers were divided into self haul and custom haul groups. Growers having large acreages of peas generally hauled their own crop while the smaller acreage growers relied heavily on custom haulers. Distance to the plant varied greatly within each group as well as between the two groups. Even so, average costs per ton were quite similar for each group. Hauling costs for growers who hauled their own crop averaged $9 per ton. Growers who hired their hauling done paid an average of $10 per ton (Table 7).

In Wisconsin, one pea contract for ten growers delivering to two plants, included provision for the growers to pay for hauling their crop. The other two contracts for the remaining eleven growers provided for the peas to be hauled by the processors. Table 8 shows that custom hauling costs for the ten growers averaged $10 per acre or $6 per ton. Selling costs for the whole group of 21 Wisconsin growers averaged $13 per acre or $7 per ton. Interest cost to the grower for delayed payments was less than half the cost to New York growers because of the shorter payment schedules of Wisconsin processors. Costs for crop insurance and nonharvested acre charges amounted to over $1 per acre and less than $1 per ton for Wisconsin growers.

Table 8. Green Peas for Processing
Selling Costs
Wisconsin
1981

Item	Cost	
	Per Acre	Per Paid Ton
Number of farms	21	
Acres per enterprise	65	
Yield per acre planted, paid tons	1.8	
Paid tons custom hauled for grower	1,181	
Custom hauling (10 farms)	$10	$6
Selling costs (average of 21 farms)		
Custom hauling	$ 6	$3
Interest on accounts receivable	6	3
Other costs	1	1
Total selling costs	$13	$7

Costs and Returns - 1981 Yields -

Even though there were differences in grower-processor contractural arrangements to produce peas between New York and Wisconsin, enterprise profits may still be meaningfully compared. In both areas, pea production involves a commitment of certain resources to the enterprise with the desire for a positive return. Enterprise profits are determined by the cultural, cost and marketing practices of the farmer, the yield which is largely controlled by weather factors and the price received for the product which is influenced by consumer demand and processor competition.

Table 9 indicates the costs and returns for pea enterprises in New York and Wisconsin in 1981. Yields for groups in both states were 1.8 tons of paid weight per acre planted. Yields for the New York growers in the study were the same as the State average. On the other hand, Wisconsin growers in the study had yields over 25 percent higher than their state's average for 1981. The figures for profit and return per dollar of cost show the average net results of these pea enterprises in each state.

Profits for New York growers averaged $126 per acre or $72 per ton and they received $1.29 return over each dollar of all costs including the operator's labor and management. Wisconsin growers also had a profitable year with peas but much less profitable than New York growers. Pea enterprises in Wisconsin showed a profit of $19 per acre or $11 per ton and $1.07 return per dollar of cost.

Land is a basic resource for a crop farmer and each year the farmer must make decisions as to the acreage of the various crops to be grown. Once the crop is planted the land is committed for the year. The lower portion of Table 9 provides a calculation of the return to the land resource realized by the pea enterprise for 1981 in both New York and Wisconsin. Based on the profits and the average land values for the pea enterprises in each state, New York growers realized a significantly higher return on their land than did Wisconsin growers in 1981.

Table 9. Green Peas for Processing
Costs and Returns
New York and Wisconsin
1981

Item	New York	Wisconsin
Number of farms	18	21
Acres per farm	106	65
Yield per acre planted, paid tons	1.8	1.8
	- per acre -	
Costs to: Grow	$251	$269
Harvest	157	0
Sell	34	13
Total costs	$442	$282
Total returns	$568	$301
Profit	$126	$ 19
	- per paid ton -	
Costs to: Grow	$142	$150
Harvest	89	0
Sell	19	7
Total costs	$250	$157
Total returns	$322	$168
Profit	$ 72	$ 11
Return per dollar of cost	$1.29	$1.07
Alternative profit calculations:		
Profit using average rent as land cost - per acre	$ 142	$ 66
per ton	$ 80	$ 37
	- per acre -	
Profit excluding land cost	$ 180	$ 94
less land taxes	-11	-18
Return to land	$ 169	$ 76
Average land value	$ 740	$1589
Rate of return on land	22.8%	4.8%

Costs and Returns - Average Yields -

One of the major factors that affects profits in crop production is the yield harvested per planted acre. Weather conditions can vary greatly during the growing seasons of one year as well as between years. Practices such as irrigation can be used in some cases to lessen the effects of unfavorable weather, but weather remains largely an uncontrollable factor that has a significant effect on crop yield and, therefore, profit per acre in the two states included in this study.

Under 1981 conditions, New York processing pea growers competed very favorably with growers in Wisconsin. As mentioned earlier, yields on the sample farms in New York equaled the State average for 1981. However, yields on the Wisconsin sample of farms were above their state average. This study documents the experience for only one year and so the question may be raised: With normal weather (or yield experience) how would the processing pea enterprise fare in each state?

To answer that question and to, perhaps, provide a more objective perspective of the competitive position of New York growers, yield experience over a period of years should be considered. Table 10 presents data to indicate how the 1981 pea enterprise results would have changed if the growers in each state had crop yields equal to the average of the most recent five year period.

Data for the two states for 1981 were adjusted only to the extent that different yields would suggest. Costs to grow and harvest the crop would remain essentially unchanged. The only adjustments to costs made were to hauling costs and interest on accounts receivable which are directly related to the volume produced.

Table 10 indicates the most recent five year average pea yield for New York is 1.6 tons per planted acre. For Wisconsin, the five year average yield is 1.3 tons per planted acre. 1 Both of these yields are below the 1981 study yields. Thus, pea profits for both states would have been less in 1981 if yields had been "normal" - that is, equal to the most recent five year average. New York growers would have received a profit of $78 per acre and a 16 percent rate of return on their land. Wisconsin growers would have had a loss of $60 per acre and a return of two percent on their land.

Table 10. Processing Peas
Costs and Returns
Using a Five Year Average Yield
New York and Wisconsin, 1981

Item	New York	Wisconsin
Number of farms	18	21
Acres per enterprise	106	65
Yield per acre planted, tons average for 1977-81*	1.6	1.3
	- per acre -	
Costs to: Grow	$251	$269
Harvest	157	0
Sell	29	9
Total Costs	$437	$278
Total Returns	$515	$218
Profit	$ 78	$ 60-
	- per ton -	
Costs to: Grow	$157	$207
Harvest	98	0
Sell	18	7
Total Costs	$273	$214
Total Returns	$322	$168
Profit	$ 49	$ 46-
Return per dollar of cost	$1.18	$0.78
Alternative profit calculations		
Profit using average rent as land cost - per acre	$ 94	$ 13-
per ton	$ 59	$ 10-
	- per acre -	
Profit excluding land cost	$132	$ 53
Less land taxes	- 11	- 18
Return to land	$121	$ 35
Average land value	$740	$1,589
Rate of return on land	16.4%	2.2%

* Source - Adapted from Vegetables; Annual Summaries, Crop Reporting Board, ESCS, USDA.

Selected Factors for Each State -

In the following two tables several factors are shown for each pea producer in each state. This information will indicate the range of yields, costs, and returns between the growers and between the states under 1981 costs, returns, and yield experience.

The data presented in these tables includes the land costs as determined from the growers' information. Land costs are the result of the mixture of the actual cost of rented land and the estimated cost of owned land for each cooperating grower.

In both Table 11 and Table 12, the overall group for each state is divided into thirds and weighted averages for each factor are presented for each subgroup. Enterprise size of the second and third groups for each state is quite similar. The smaller enterprises in New York had somewhat lower yields but higher profits per acre than Wisconsin pea enterprises of the same size in 1981. On the other hand, the group of New York growers with the largest acreage of peas had enterprises about twice the size of the Wisconsin "largest acreage" group. Both groups had the same yield in 1981 but the New York group had substantially higher profits per acre.

Table 11. Green Peas for Processing
Selected Factors
New York, 1981
1,906 acres on 18 farms

Farm No.**	Yield per acre	Average per acre planted: Grow cost	Harvest cost	Profit	Average per ton*: Cost	Return	Return per $ of cost
	tn.*	$	$	$	$	$	$
601	1.6	224	125	5	245	248	1.01
602	1.7	267	167	161	276	371	1.34
603	1.9	258	141	244	225	352	1.56
604	2.1	229	182	217	210	312	1.49
605	2.1	267	245	308	259	404	1.56
606	1.9	209	139	277	202	347	1.72
Weighted Av. of 6	1.9	243	167	202	237	340	1.45
607	2.2	334	198	105	262	310	1.18
608	1.5	221	139	55	261	298	1.14
609	1.7	256	165	92	264	318	1.21
610	1.9	270	187	148	276	356	1.29
611	1.1	261	117	36-	375	342	0.91
612	1.7	290	163	53	282	313	1.11
Weighted Av. of 6	1.7	272	162	70	287	323	1.14
613	1.2	278	112	110-	364	270	0.74
614	2.3	277	180	62	225	252	1.12
615	1.7	235	144	30	235	252	1.07
616	1.5	197	137	60	234	273	1.17
617	2.0	262	157	49	220	245	1.11
618	2.1	292	177	87	243	285	1.17
Weighted Av. of 6	1.9	257	152	30	254	263	1.06
Range	1.1 to 2.3	197 to 334	112 to 245	110- to 308	202 to 375	245 to 404	0.74 to 1.72
Weighted Av. of 18	1.8	251	157	126	250	322	1.29

* Paid weight.
**Ranked from largest to smallest acreage
Enterprise size: Group 1 - 236 acres average
2 - 56 acres average
3 - 26 acres average

Table 12. Green Peas for Processing
Selected Factors
Wisconsin, 1981
1,359 acres on 21 farms

Farm No.**	Yield per acre	Average per acre planted: Grow cost	Harvest cost	Profit	Average per ton*: Cost	Return	Return per $ of cost
	tn.*	$	$	$	$	$	$
501	1.4	246	0	15	182	193	1.06
502	2.0	301	0	32-	156	140	0.89
503	2.3	301	0	10	147	152	1.03
504	1.8	316	0	17-	182	173	0.95
505	1.4	223	0	52	167	204	1.22
506	1.4	315	0	45-	235	204	0.87
507	2.4	231	0	87	99	136	1.36
Weighted Av. of 7	1.9	277	0	10	168	172	1.05
508	1.3	199	0	58	165	210	1.27
509	1.8	276	0	5	153	155	1.02
510	1.1	222	0	6	214	220	1.03
511	2.0	341	0	39-	179	159	0.89
512	1.7	221	0	59	133	167	1.26
513	2.0	169	0	146	88	161	1.83
514	2.4	339	0	45-	143	124	0.87
Weighted Av. of 7	1.8	253	0	27	154	171	1.17
515	2.0	223	0	95	119	166	1.39
516	1.7	308	0	42	186	210	1.13
517	2.5	355	0	94	149	186	1.25
518	1.9	305	0	11-	160	154	0.96
519	1.9	192	0	112	102	161	1.57
520	1.6	310	0	50-	206	174	0.85
521	2.4	290	0	56	123	146	1.18
Weighted Av. of 7	2.1	284	0	48	150	172	1.19
Range	1.1 to 2.5	169 to 355	0	50- to 146	88 to 235	124 to 220	0.87 to 1.57
Weighted Av. of 21	1.8	269	0	19	157	168	1.07

* Paid weight.

**Ranked from largest to smallest acreage

Enterprise size: Group 1 - 114 acres average
2 - 51 acres average
3 - 29 acres average

Summary and Conclusions

The processing pea crop is one of five major processing vegetable crops grown in New York State. The crop ranks third behind snap beans and sweet corn in terms of acres planted to the crop. In 1981, an estimated 7,900 acres of peas were grown in the State. This was over two percent of the national crop.

Processing peas are relatively easy to grow and are not labor intensive like cabbage and beets. It is an early, short season crop that may fit in well with field crops or other vegetables as a cash crop. However, peas are a crop that is highly sensitive to weather conditions while growing and especially so at harvest time. Its sensitivity makes the crop quite speculative but the pea enterprise has been profitable for most growers.

Yields of processing peas in New York have consistently exceeded the national average. Of the major pea producing states, only Washington has pea yields that average higher than New York over a period of time (Table 3).

Higher than average yields generally translate into higher than average profits for the producer.

Under 1981 economic conditions, pea enterprises were significantly more profitable for New York growers than for Wisconsin growers. This was true with average yields for the past five years as well as with the 1981 yields (Tables 9 and 10).

New York growers used higher seeding rates, more nitrogen, and less potash on their pea crop than did growers in Wisconsin.

The cost of cropland was a major difference between the two states. New York growers valued their cropland at $740 per acre compared to the value of $1,589 per acre used for Wisconsin growers. Real estate taxes for cropland averaged $11 per acre in New York and $18 per acre for Wisconsin growers in the study. The average cost of cropland rented for pea production averaged $38 per acre in New York and $66 per acre in Wisconsin.

When the cost of land to grow the pea crop is excluded, New York growers had significantly higher growing costs per acre than did Wisconsin growers. This was primarily because of higher seed and fertilizer costs (Table 4). However, with low land costts, high yields, nearby markets, and increasing transportation costs, New York growers should be able to maintain or improve their competitive position in the production of green peas for processing.