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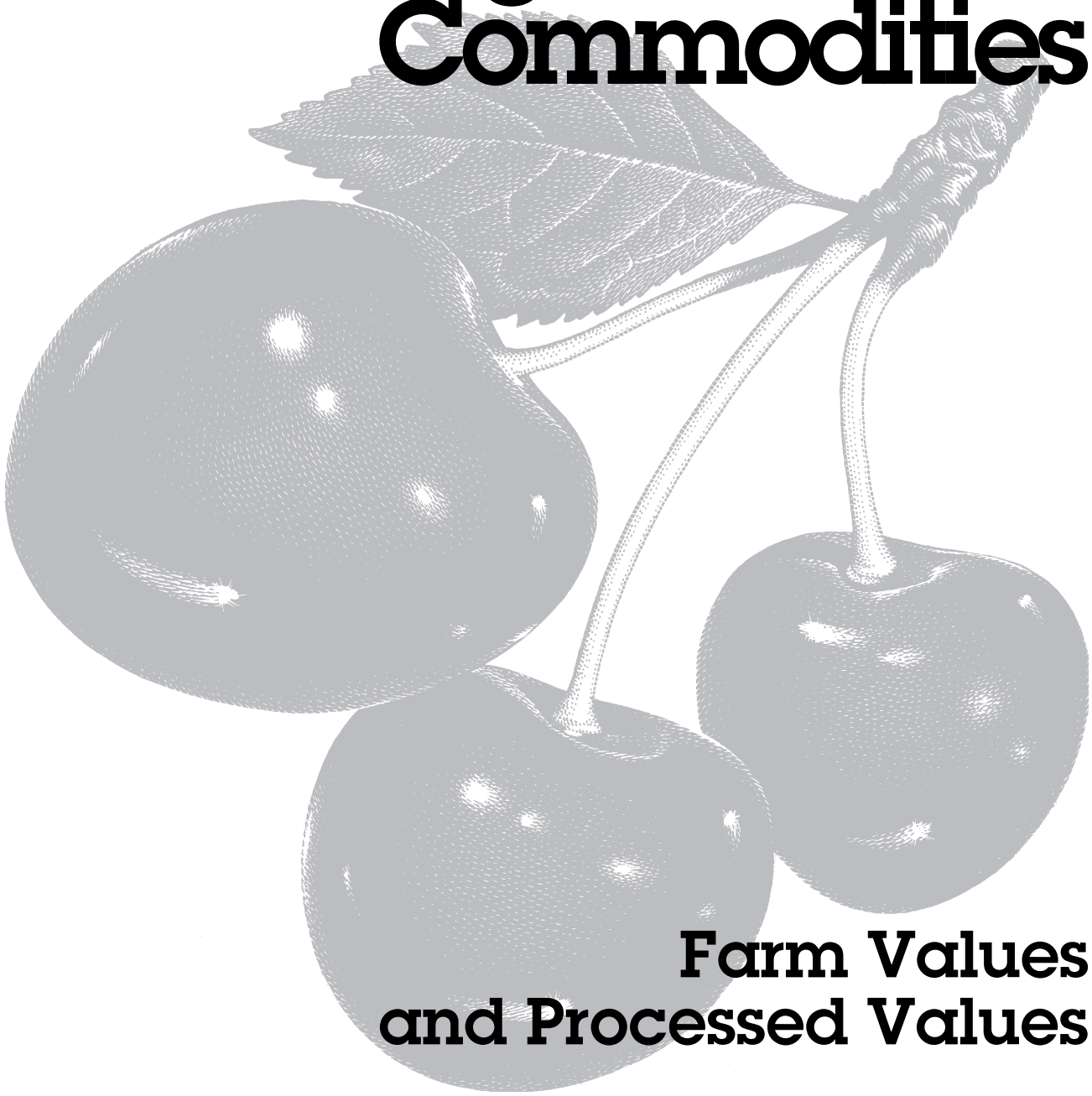
Oregon Agricultural Commodities



Farm Values and Processed Values

OREGON STATE UNIVERSITY EXTENSION SERVICE

Oregon Agricultural Commodities

Farm Values and Processed Values

S.D. Miles and J.C. Cornelius

Cash commodity sales from Oregon farms and ranches were an estimated $2.7 billion in 1992 (Figure 1). Total cash receipts in Oregon's agricultural sector have shown steady increases over the past decade—sales have climbed about 50 percent over the past 10 years.

These growth figures need to be tempered with the recognition that production costs, and inflation in our economy have also increased during this period. In inflation-adjusted or "real" terms, farm gate receipts are up by only about 7 percent since 1982 (Figure 2). This translates into real growth of a little under 1 percent annually in total gross farm gate receipts. Thus, farm and ranch production is a modest but steady contributor to Oregon's economic growth, currently accounting for about 3 to 4 percent of the gross state product.

Considering broad commodity groupings, the increase in cash sales value is the result primarily of increased crop sales. Of the $950 million increase in total farm sales between 1982 and 1992, 84 percent is due to greater reported crop sales value, and 16 percent is attributable to increased livestock sales value. More detailed accounting of trends and statistics for individual commodities are reported by commodity group in the accompanying sections.

The importance of agriculture in Oregon's economy extends beyond the farm commodity sales value. Based on estimates from a 1992 survey of Oregon agribusinesses, *an additional $1.3 billion in value is added to farm and ranch products by first handlers in processing and handling* (Table 1).

The term "value-added" as used in this report refers to the gross value that is added in processing, handling, and transportation by those Oregon agribusinesses that initially receive raw agricultural commodities from farmers and ranchers. Gross value-added includes only purchased items such as packaging materials, fuel, and utilities, as well as wages, salaries, and profit (Figure 3).

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Since the estimates include only those contributions to value made by first handlers in Oregon, the component values presented here do not represent total value-added throughout the marketing chain. Wholesale or retail value-added, for example, is not reflected in these estimates, nor is the value-added once the product is exported out of the state. Other estimates show that when including further processing beyond the first handlers, value-added for food and kindred products is about $2 billion.

The value-added by processing and handling varies greatly from one commodity to another. Fruits and vegetables generally are processed within Oregon, contributing significant value-added. On the other hand, wheat and meat animals largely are exported out of state prior to processing, and value-added accrues elsewhere.

Fruits, nuts, and vegetables combined accounted for about two-thirds of the total value-added by processing and handling of all Oregon crops and livestock products in 1992, yet fruits, nuts, and vegetables represent only about one-fifth of the aggregate farm gate sales (Figure 4). The economic factors that influence farm level production are often much different from those that govern processing.

The data for this report come from a combination of sources. Farm gate or cash sales receipts values are gathered at the county level by the Oregon State University Extension Service each year in cooperation with the Oregon Agricultural Statistics Service. The term *farm gate* refers to receipts by farmers and ranchers for sales of raw commodities at their "farm gates" prior to any additional handling or processing.

Figure 1.—*Agricultural sales in Oregon, 1976–1992.*

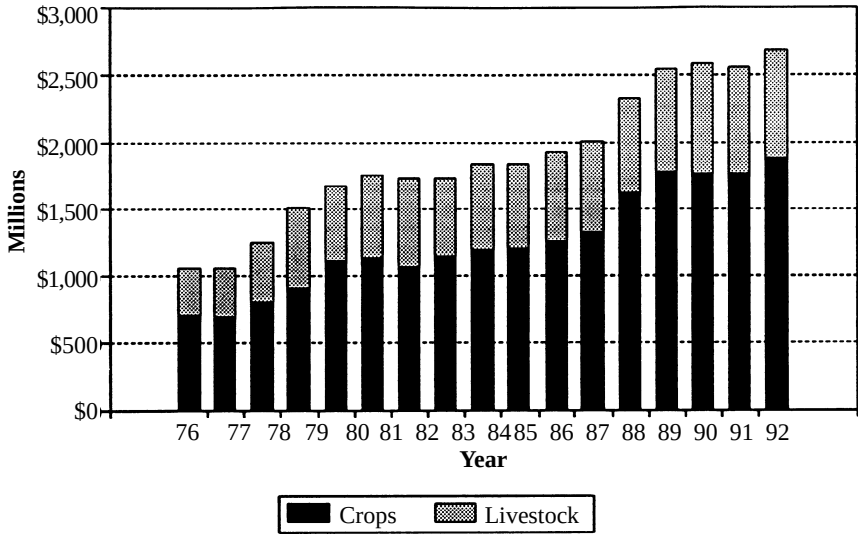
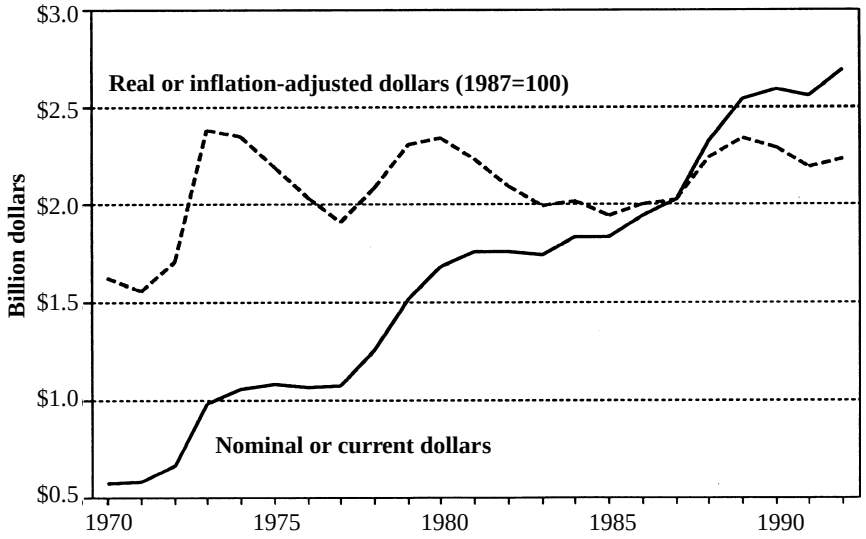


Figure 2.—*Value of Oregon agricultural sales, nominal and real values, 1970–92.*



From these cash receipts, operators pay their operating expenses, hired labor, overhead, family living expenses, and so forth.

The estimates of value-added are derived from a survey conducted through the Oregon State University (OSU) Department of Agricultural and Resource Economics. This survey is directed at Oregon agribusiness firms engaged in processing and handling of agricultural products. Cost information concerning payroll, packaging materials, and other expenses is gathered for each commodity by processor or handler. The gross value-added is the difference between the raw product value and the value of the processed product. Value-added information from the survey sample is applied to total crop and livestock production statistics in order to generate aggregate value-added estimates for Oregon's agricultural sector.

Table 1.—*Oregon farm and ranch commodity sales and value-added by processing, by commodity groups, 1992 ($ x 1000).*

Commodity groups	Income received by producers	Value-added by processing[a] Payroll	Packaging materials	Other[b]	Total	Total processed value
Livestock products						
Meat animals	428,382	12,196	1,346	14,706	28,248	456,630
Dairy products	225,642	32,492	18,051	47,516	98,059	323,701
Poultry and eggs	100,906	20,205	5,820	10,303	36,328	137,234
Other livestock and products	51,481	492	—	250	742	52,223
Total livestock	806,411	65,385	25,217	72,775	163,377	969,788
Crops						
Grain and hay	296,913	24,271	843	37,331	62,445	359,358
Fruits and nuts	254,958	97,990	62,149	120,658	280,797	535,755
Vegetables	328,582	201,553	98,614	255,612	555,779	884,361
Other crops	997,513	125,995	6,880	114,619	247,494	1,245,007
Total crops	1,877,966	449,809	168,486	528,220	1,146,515	3,024,481
All commodities	2,684,377	515,194	193,703	600,995	1,309,892	3,994,269

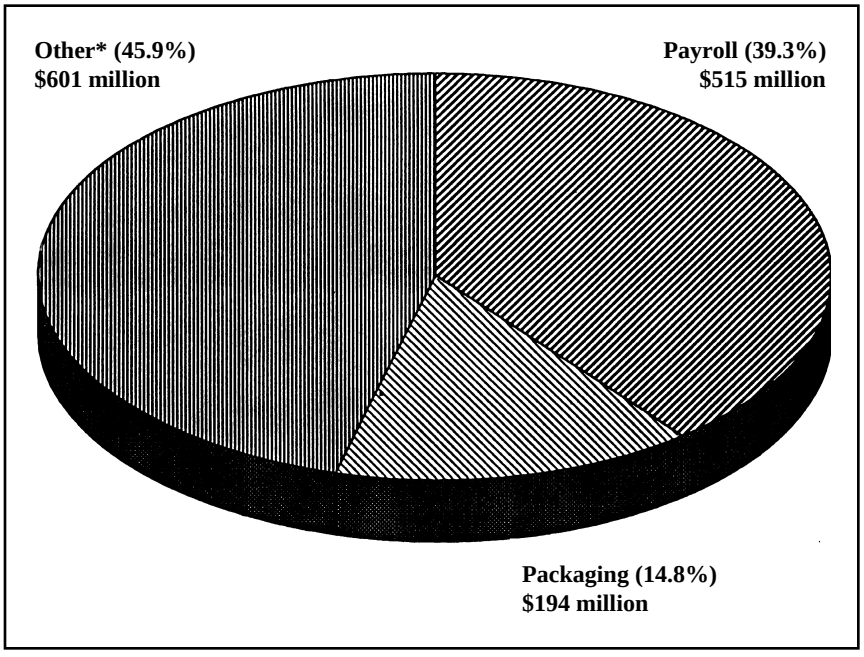
[a]Includes all the activities performed by processors or first handlers, such as meat packers, canners, freezers—or simply cleaning, grading, and sacking as in the case of grass seeds. It also includes delivery when generally practiced and costs associated with selling the product. It does not include wholesaling and retailing.

[b]Includes all items not previously accounted for, such as depreciation, utilities, repairs, insurance, supplies, licenses, rent, taxes, bad-debt loss, and profit or margin to the processing firm.

Farm gate cash sales receipts are estimated annually. The value-added survey is conducted at 4- to 5-year intervals. Summary tables in this report compare the current 1992 cash receipts and value-added results with those from previous years to illustrate trends and changes in Oregon's agricultural industry over time.

Oregon's top dollar-valued agricultural commodities in terms of farm gate sales also tend to be the top valued in terms of gross value-added. Of the top 15 farm gate commodities, 10 also appear on the top 15 list of value-added commodities, although the relative ranking is different. Some commodity names and identities are slightly different between the two lists due to the reporting procedures used in the value-added survey.

Figure 3.—*Components of value-added estimates, all agricultural commodities combined.*



**Includes utilities, repairs, insurance, supplies, licenses, rent, taxes, depreciation, and profit.*

As a group, the top 15 commodities by either farm gate or value-added ranking account for just under 75 percent of the agricultural industry's total value (Table 2). This indicates that Oregon's total agricultural industry is relatively dependent upon a subset of perhaps 20 of the highest valued crops and livestock. By comparison, however, Oregon is second only to California nationwide in terms of the state's agricultural diversity. Midwestern states such as Nebraska, Kansas, Iowa, and Illinois have over 90 percent of their cumulative agricultural value concentrated in just the top 5 commodities grown in each state.

The ranking of commodity group by farm gate dollar *totals* overlooks the *per unit* contribution to value-added. The top 15 commodities that added the most on a percentage basis (gross value-added as a percent of farm gate value) accounted for only 11 percent of the farm gate value of 1992 agricultural sales. Yet these 15 crops—all were fruits, nuts, and vegetables—accounted for 46 percent of total value-added in Oregon agriculture (Table 3).

At the other end of the scale, the bottom 10 commodities ranked by the percent of value-added to farm gate value accounted for 53 percent of farm gate but only 14 percent of value-added (Table 4). The crop and livestock products contributing the smallest percentage of value-added to farm gate value include many of Oregon's high dollar-valued agricultural industries—meat animals, nursery crops, grass seed, alfalfa hay, wheat, and mint oil.

These figures suggest that there may be significant value-added potential for some commodities, particularly when viewed on a per

Figure 4.—*Farm value and value-added by processors by commodity group, 1992.*

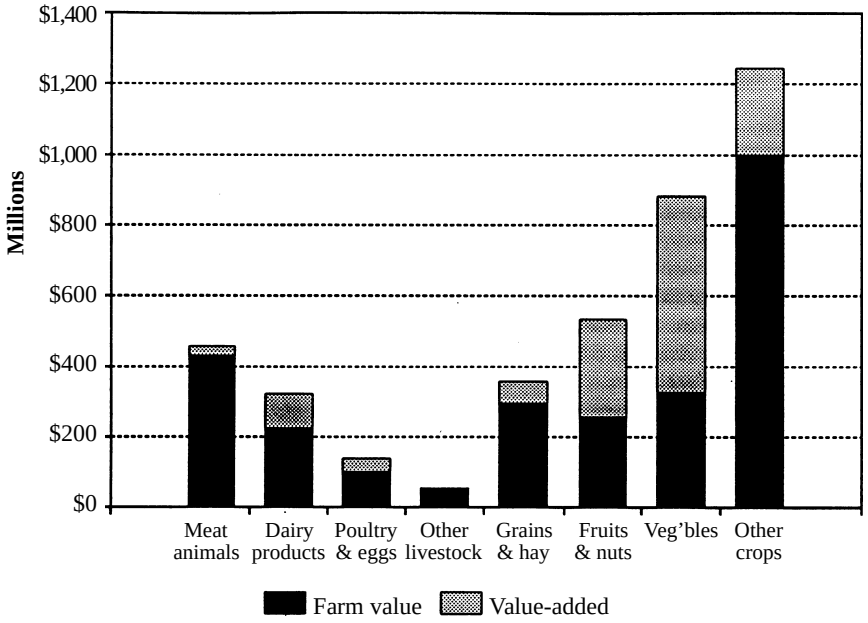


Table 2.—*Top 15 Oregon agricultural commodities, ranked by farm gate sales and value-added, 1992.*

Rank	Comm. ranked by farm gate sales val.	Est. farm gate sales	Comm. ranked by value-added	Estimated value-added
1	Cattle and calves	$400,000,000	Potatoes	$161,993,000
2	Nursery crops	$268,240,000	Farm forestry	$130,000,000
3	Farm forestry	$255,828,000	Dairy	$98,059,000
4	Dairy	$225,642,000	Pears	$88,230,000
5	Wheat	$182,471,000	Sweet corn	$85,014,000
6	Potatoes	$93,131,000	Snap beans	$70,820,000
7	Dry onions	$71,913,000	Dry onions	$49,336,000
8	Christmas trees	$70,753,000	Sweet cherries	$46,135,000
9	Pears	$66,790,000	Nursery crops	$43,316,000
10	Alfalfa hay	$62,600,000	All grass seed	$38,224,000
11	Greenhouse crops	$62,270,000	Wine grapes	$35,272,000
12	P. ryegrass seed	$54,313,000	Caneberries	$32,211,000
13	Peppermint oil	$48,571,000	Wheat	$32,011,000
14	Sweet cherries	$47,670,000	Green peas	$28,381,000
15	Chicken eggs	$43,312,000	Meat animals	$28,248,000
	Group total	$1,953,504,000	Group total	$967,250,000
	% of Oregon total	73%	% of Oregon total	74%

unit or percentage contribution basis. But there are practical limitations on the amount of value that can be added in Oregon.

Some commodities, such as nursery crops, leave the farm in nearly consumer-ready condition, such that adding further value may be limited by the nature of consumer demand. Products with obvious further processing opportunities, such as feeder cattle or wheat, face much different competitive forces in the food processing compared to agricultural production.

Because much of Oregon agricultural output is shipped out of the state, processors in Oregon must compete with established domestic and international food manufacturers often closer to consumer markets, with lower-priced inputs, or government protection. Adding more value to raw agricultural products in this environment will require inventive entrepreneurial strategies combining market development, competitive prices, innovative products, and a competitive return on investment.

The following sections provide a more detailed examination of economic trends for individual value-added industries in Oregon agriculture over the past several years.

Table 3.—*Top 15 Oregon agricultural commodities ranked by percent value-added to farm value.*

Rank	Commodity	'92 Farm value	Value-added	Percent Value-added
1	Beets	$1,896,000	$10,954,000	578%
2	Squash	$3,478,000	$17,912,000	515%
3	Cucumbers	$5,347,000	$22,001,000	411%
4	Wine grapes	$9,533,000	$35,272,000	370%
5	Green peas	$8,472,000	$28,381,000	335%
6	Carrots	$3,847,000	$11,241,000	292%
7	Snap beans	$24,762,000	$70,820,000	286%
8	Sweet corn	$31,862,000	$85,014,000	267%
9	Plums/prunes	$2,456,000	$6,388,000	260%
10	Broccoli	$5,677,000	$11,856,000	209%
11	Potatoes	$93,131,000	$161,993,000	174%
12	Apples	$18,070,000	$25,211,000	140%
13	Hazelnuts	$15,180,000	$20,996,000	138%
14	Cauliflower	$9,453,000	$12,762,000	135%
15	Pears	$66,790,000	$88,230,000	132%
Group subtotal		$299,954,000	$609,031,000	203%
All commodities		$2,684,377,000	$1,309,892,000	49%
Group percent of total		11.2%	46.5%	

Table 4.—*Bottom 10 Oregon agricultural commodities ranked by percent value-added to farm value.*

Rank	Commodity	'92 Farm value	Value-added	Percent Value-added
1	Mint	$51,121,000	$2,303,000	5%
2	Meat animals	$428,382,000	$28,248,000	7%
3	Hops	$21,849,000	$2,337,000	11%
4	Cranberries	$15,669,000	$1,690,000	11%
5	Nursery/ greenhouse	$364,690,000	$43,316,000	12%
6	Barley	$19,135,000	$2,610,000	14%
7	Wheat	$182,471,000	$32,011,000	18%
8	Christmas trees	$70,753,000	$14,010,000	20%
9	Grass seed	$191,122,000	$38,224,000	20%
10	Hay	$70,800,000	$16,857,000	24%
Group subtotal		$1,415,992,000	$181,606,000	13%
All commodities		$2,684,377,000	$1,309,892,000	49%
Group percent of total		52.7%	13.9%	

Meat

Receipts from the sale of meat animals for 1992 were $428 million, an increase of about 111 percent from 1976. Cattle and calves are by far the most significant in farm sales value of all the livestock categories, with receipts of $400 million. Sheep and hogs each accounted for $16 to $12 million, respectively.

Handling and processing values beyond the farm gate for meat animals are relatively small. Value-added ($28 million) is proportionally less than for most other commodity groupings, because most beef animals are shipped out of state for feeding prior to slaughter.

The meat packing and marketing business has seen significant change in the past 15 to 20 years. Oregon now brings in a larger proportion of its fresh and processed meats from other states. In 1992, Oregon meat packing plants slaughtered only about one-fourth the weight of meat animals they handled in 1976.

The cattle and calf business continues to be one of Oregon's most significant agricultural enterprises, primarily because of the state's extensive range resources, but sheep and hog numbers have trended downward. One of the drawbacks to feeding cattle and hogs in the state is the lack of local feed grain production. Cattle feeding in Oregon is closely linked with the supply of byproduct feeds from the agricultural processing industry in the state.

Sheep slaughter in Oregon in 1992 was about 3 percent of the state's total production of sheep and lambs.

In the tables that follow, all dollar amounts are expressed in thousands.

Total received by producers for all meat animals	**428,382**
Total value-added through packing, processing, and delivery	**28,248**
Total received by producers plus value-added through packing, processing, and delivery	**456,630**
Received by producers	
Cattle and calves	400,000
Sheep and lambs	16,500
Hogs	11,882
Total received by producers	428,382
Received by producers for livestock slaughtered in Oregon (value/cwt; live weight lb slaughtered)	
Cattle ($67.40 x 37,331,000)	25,161
Sheep and lambs ($55.00 x 965,000	531
Hogs ($45.70 x 37,466,000)	17,122
Total received by producers for slaughtered livestock	42,814
Value-added through packing and processing[a]	
Payroll	4,485
Packing materials	1,346
Other	3,139
Total value-added through packing and processing	8,970
Value-added through transportation and handling of livestock not slaughtered	
Labor	7,711
Other	11,567
Value-added in transportation and handling	19,278

Meat animals	**Years**				
Item	1976	1983	1987	1992	% Change 1976–1992
Cash receipts	202,590	310,710	389,951	428,382	111%
Value-added	33,280	29,991	33,164	28,248	-15%
Total	235,870	340,701	423,115	456,630	94%

Dairy

The value of milk sold by Oregon dairy farmers has grown slowly over the past 5 years, increasing about 4 percent per year. Cash receipts to dairy farmers now total about $225 million: 60 percent of the milk is sold as fluid product, and 40 percent is processed into products including cheese, butter, and ice cream.

The number of dairy cows had shown a downward trend over the years, from more than 200,000 head in 1945 to slightly more than 90,000 in 1987. Dairy cow numbers have since increased to 102,000 in 1992.

Milk production per cow has increased to 16,800 pounds, and total milk production in Oregon for 1992 was a record 1.7 billion pounds.

Given the changing technology, efficiencies are being achieved in the processing and handling of milk and milk products. Because of this, processing costs (even with inflation) have shown only a gradual increase.

In the tables that follow, all dollar amounts are expressed in thousands.

Total received by producers for sales of milk	**225,642**
Total value-added by processing and distribution	**98,059**
Total value of milk and milk products to market	**323,701**

Milk 1992

Total cwt sold: 16,860,000 @ $13.40	
Received by producers	225,642
Value-added by processing and distribution	
Payroll	32,492
Packaging materials	18,051
Other	47,516
Total value-added	98,059
Value of milk and milk products delivered to market	323,701

Dairy products

Item	Years 1976	1983	1987	1992	% Change 1976–1992
Cash receipts	98,000	188,020	183,213	225,642	130%
Value-added	37,740	56,400	63,072	98,059	160%
Total	135,740	244,420	246,285	323,701	138%

Poultry and eggs

Egg production, with sales of $43 million, accounts for the largest share of farm sales in the Oregon poultry industry. Broiler production is second, with farm sales of $37 million. The poultry and egg business in Oregon now generates $137 million annually in processed products, an increase of more than 110 percent since 1976.

While turkey hatching and egg production have dropped off significantly, other types of poultry production have shown stability or gradual growth trends. The poultry and egg industry is characterized by relatively large, specialized operations. This sector has taken advantage of efficiencies and economies of size that have resulted in lower-cost products for consumers.

In the tables that follow, all dollar amounts are expressed in thousands.

Total received by producers	**100,906**
Total value-added by processing	**36,328**
Total value after processing and delivery	**137,234**

Broilers, 1992

Number of head sold: 24,000,000 @ $1.56	
Received by producers	37,440
Value-added by processing and distribution	
Payroll	10,109
Packaging materials	2,527
Other	4,212
Total value-added	16,848
Total value after processing and delivery	54,288

Turkeys, 1992

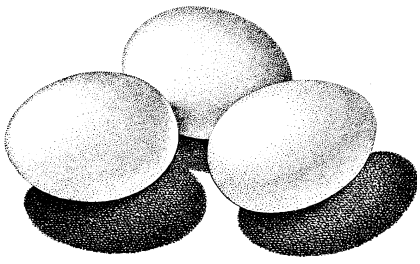
Number of head sold: 2,400,000 @ $7.40	
Received by producers	17,784
Value-added by processing and distribution	
Payroll	3,913
Packaging materials	1,067
Other	2,134
Total value-added	7,114
Total value after processing and delivery	24,898

Eggs, 1992

Dozens sold: 57,170,000 @ 75.8 cents	
Received by producers	43,352
Value-added by processing and distribution	
Payrol	5,717
Packaging materials	2,058
Other	3,659
Total value-added	11,434
Total value after processing and delivery	54,786

Other poultry products, 1992

Received by producers	2,330
Value-added by processing and distribution	
Payrol	466
Packaging materials	168
Other	298
Total value-added	932
Total value after processing and delivery	3,262



Poultry and eggs

Item	Years 1976	1983	1987	1992	% Change 1976–1992
Cash receipts	50,440	59,380	61,487	100,906	100%
Value-added	14,770	18,010	26,066	36,328	146%
Total	65,210	77,390	87,553	137,234	110%

Miscellaneous livestock

The value of farm and ranch sales of Oregon horses in 1992 was $20.8 million, up 27 percent from the 1987 report.

The value of Oregon's 1992 mink sales was substantially lower than the 1987 value. Pelt prices have dropped and many of Oregon's producers have gone out of the mink business.

While the estimates are not very precise, llama sales make up most of the other miscellaneous livestock figures. Central Oregon (Redmond area) has become the primary llama production and expertise area in the United States.

In the tables that follow, all dollar amounts are expressed in thousands.

Total received by producers	**51,481**
Total value-added by processing	**742**
Total value after processing and delivery	**52,223**

Wool, 1992

Total pounds sold: 2,752,000 @ 48 cents	
Received by producers	1,321
Value-added by grading, handling, and marketing (10 cents/lb)	
Payrol	165
Other	110
Total value-added	275
Value of crop delivered to market	1,596

Mink, 1992

Number of pelts sold: 216,000 @ $24	
Received by producers	5,184
Value-added by marketing costs (6–8% of farm value)	
Payroll	327
Other	140
Total value-added	467
Value of crop delivered to market	5,651

Horses, 1992

Farm and ranch sales	20,795

Other livestock and livestock products, 1992[a]

Farm and ranch sales	24,181

[a]Rabbits, honey, hatchery sales, llamas, miscellaneous poultry, and other livestock.

Fruits and nuts

In 1992, Oregon growers received about $255 million for their fruit and nut crops. The total value-added to these products from processing, packing, and other first-step marketing services was just over $280 million, a 110 percent increase over the farm-gate value. The total value of Oregon processed fruit and nut products in 1992 was $536 million, a 180 percent increase over 1976.

The Oregon fruit and nut industry has become very specialized with production concentrated in specific areas. Pears, the largest total-dollar volume fruit crop, are produced primarily in the Medford and Hood River areas. Some additional pear production comes from the Willamette Valley area.

The second highest total-dollar-volume crop is sweet cherries. They are produced for processing in the Willamette Valley and The Dalles. Cherries for fresh market are produced primarily in the Milton Freewater area, The Dalles, Hood River, and Cove.

Strawberries, which rank third, are grown primarily in the Willamette Valley.

Cranberries come in fourth at $15.7 million. These berries, produced mostly on the coast south of Coos Bay, have been gradually increasing in acreage and production.

Fifth-ranked in 1992 was hazelnuts (filberts) with farm sales of nuts at $15.2 million. The sales of these nuts have grown dramatically from $6.5 million in 1976.

The sixth-ranked fruit and nut crop, by total dollar volume, is apples. Production is spread around the state, with the Hood

In the tables that follow, all dollar amounts are expressed in thousands.

Total received by producers	**254,958**
Total value-added by processing	**280,797**
Total value after processing and delivery	**535,755**

Strawberries, 1992

Total pounds sold: 61,000,000 @ 34.6 cents	
Received by producers	21,105
Value-added by processing and distribution	
Payroll	5,487
Packaging materials	2,744
Other	10,361
Total value-added	18,592
Total value after processing and delivery	39,697

Pears, 1992

Total tons sold: 214,000 @ $312	
Received by producers	66,790
Value-added by processing and distribution	
Payroll	32,574
Packaging materials	27,666
Other	27,990
Total value-added	88,230
Total value after processing and delivery	155,020

Sweet cherries, 1992

Total tons sold: 55,000 @ $867	
Received by producers	46,670
Value-added by processing and distribution	
Payroll	18,775
Packaging materials	11,010
Other	16,350
Total value-added	46,135
Total value after processing and delivery	92,805

Apples, 1992

Boxes sold, fresh and for processing: 4,167,000 @ $4.35	
Received by producers	18,070
Value-added by processing and distribution	
Payrol	9,584
Packaging materials	6,251
Other	9,376
Total value-added	25,211
Total value after processing and delivery	43,281

River area being the most specialized.

The wine grape business is becoming a more significant part of agriculture. While these grapes had only a $9.5 million farm-gate value, value-added contributed another $35.3 million. Wine grapes are one of the highest per-unit value-added commodities reported in this survey.

Cranberries, 1992

Total barrels produced: 285,000 @ $55	
Received by producers	15,669
Value-added by handling and transportation	
Payroll	215
Packaging materials	420
Other	1,055
Total value-added	1,690
Total value after processing and delivery	17,359

Peaches, 1992

48-pound boxes sold: 291,700 @ $15.45	
Received by producers	4,511
Value-added by processing and distribution	
Payroll	1,128
Packaging materials	338
Other.	790
Total value-added	2,256
Total value after processing and delivery	6,767

Hazelnuts, 1992

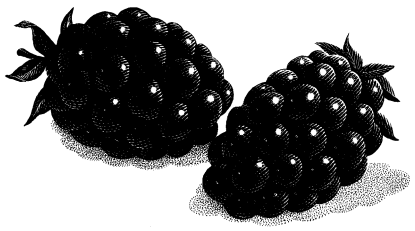
Total tons sold: 27,500 @ $552	
Received by producers	15,180
Value-added by processing and distribution	
Payroll	7,349
Packaging materials	1,050
Other	12,597
Total value-added	20,996
Total value after processing and delivery	36,176

Prunes and plums, 1992

Total tons sold: 16,000 @ $154	
Received by producers	2,456
Value-added by processing and distribution	
Payroll	1,960
Packaging materials	1,173
Other	3,255
Total value-added	6,388
Total value after processing and delivery	8,844

Other berries, 1992

Received by producers	51,129
Value-added by processing and distribution	
Payroll	11,248
Packaging materials	4,090
Other	16,873
Total value-added	32,211
Total value after processing and delivery	83,340



Wine grapes, 1992

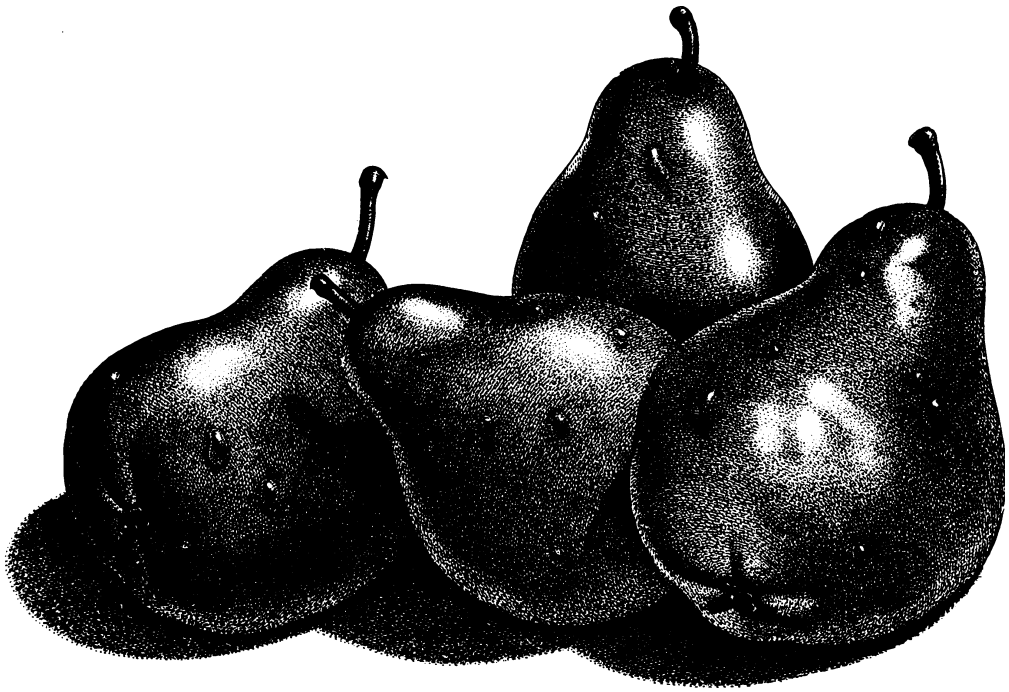
Total tons sold: 12,300 @ $775	
Received by producers	9,533
Value-added by processing and distribution	
Payroll	8,103
Packaging materials	6,196
Other	20,973
Total value-added	35,272
Total value after processing and delivery	44,805

Other fruits and nuts, 1992[b]

Received by producers	3,845
Value-added by processing and distribution	
Payroll	1,567
Packaging materials	1,211
Other	1,038
Total value-added	3,816
Total value after processing and delivery	7,661

[b]*Walnuts, apricots, tart cherries, and miscellaneous.*

Fruits and nuts	**Years**				
Item	1976	1983	1987	1992	% Change 1976–1992
Cash receipts	90,600	139,030	193,312	254,958	181%
Value-added	100,550	194,340	248,016	280,797	179%
Total	191,150	333,370	441,328	535,755	180%



Vegetables

Oregon has a national and international reputation for producing high-quality vegetables for both fresh and processed markets. A large portion of most crops is processed.

In 1992, Oregon ranked second nationally in the production of snap beans, fourth in sweet corn, and sixth in potatoes. Vegetable production has increased over the past 20 years, and Oregon's share of the processed vegetable market has been maintained. As a group, vegetables account for the largest contribution in value-added of all Oregon's agricultural sectors. Potatoes are the single highest value-added crop in the state.

In 1992, growers received a total of $329 million for their vegetables. Total value-added in processing and handling was about $556 million, a 169 percent increase in value above the farm-gate level.

Most of the commodities had similar percentage increases compared to 1987. The exceptions were green peas, cucumbers, and beets, which had higher value-added percentages. For green peas, the value-added from processing was $28.4 million, a 335 percent increase over the grower value. The value-added to cucumbers by processing and handling was 412 percent above farm value in 1992. That compared to a 322 percent increase in 1987. In 1992, the farm value for cucumbers was $5.3 million, while value-added was $22.0 million.

In the tables that follow, all dollar amounts are expressed in thousands.

Total received by producers	**328,582**
Total value-added by processing	**555,779**
Total value after processing and delivery	**884,361**

Potatoes, 1992

Total cwt sold, fresh and for processing: 21,676,000 @ $4.30	
Received by producers	93,131
Value-added by handling and/or processing	
Payroll	69,848
Packaging materials	19,508
Other	72,637
Total value-added	161,993
Total value after processing and delivery	255,124

Onions, 1992

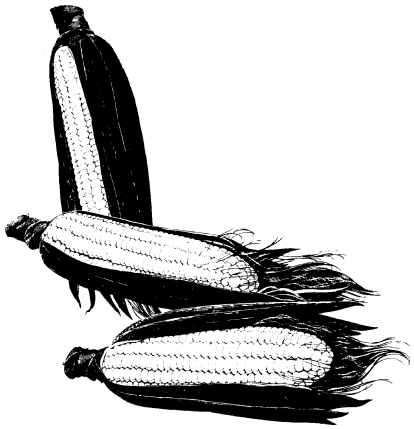
Total cwt sold: 9,313,000 @ $7.70	
Received by producers	71,913
Value-added by grading, sacking and handling	
Payroll	14,966
Packaging materials	8,842
Othe	25,528
Total value-added	49,336
Total value after processing and delivery	121,249

Sweet corn, 1992

Tons sold for processing: 391,450 @ $81.40	
Received by producers	31,862
Value-added by processing	
Payroll	22,303
Packaging materials	16,250
Other	46,461
Total value-added	85,014
Total value after processing and packaging	116,876

Snap beans, 1992

Tons sold for processing: 124,430 @$199	
Received by producers	24,762
Value-added by processing	
Payroll	19,810
Packaging materials	12,629
Other	38,381
Total value-added	70,820
Total value after processing and packaging	95,582



Green peas, 1992

Total tons sold: 37,820 @ $224	
Received by producers	8,472
Value-added by processing	
Payroll	6,354
Packaging materials	5,930
Other	16,097
Total value-added	28,381
Total value after processing and packaging	36,853

Cauliflower, 1992

Total tons sold (fresh and for processing): 18,150	
Received by producers	9,453
Value-added by processing and/or handling	
Payroll	4,254
Packaging materials	1,891
Other	6,617
Total value-added	12,762
Total value after processing and packaging	22,215

Cucumbers, 1992

Total tons sold (fresh and processed): 22,850	
Received by producers	5,347
Value-added by processing and distribution	
Payroll	5,104
Packaging materials	8,755
Other	8,142
Total value-added	22,001
Total value after processing and delivery	27,348

Broccoli, 1992

Total tons sold (fresh and processed): 12,800	
Received by producers	5,677
Value-added by processing and distribution	
Payroll	3,406
Packaging materials	1,925
Othe	6,525
Total value-added	11,856
Total value after processing and delivery	17,533

Carrots, 1992

Received by producers	3,847
Value-added by processing and distribution	
Payroll	3,085
Packaging materials	2,770
Other	5,386
Total value-added	11,241
Total value after processing and delivery	15,088

Squash and pumpkins, 1992

Total tons sold (fresh and processed): 40,550	
Received by producers	3,478
Value-added by processing and distribution	
Payroll	6,043
Packaging materials	5,348
Other	6,521
Total value-added	17,912
Total value after processing and delivery	21,390

Beets, 1992

Total tons sold (fresh and processed): 25,700	
Received by producers	1,896
Value-added by processing and distribution	
Payroll	2,275
Packaging materials	3,740
Other	4,939
Total value-added	10,954
Total value after processing and delivery	12,850

Other vegetables, 1992

Received by producers	68,744
Value-added by processing and distribution	
Payroll	44,105
Packaging materials	11,026
Other	18,378
Total value-added	73,509
Total value after processing and delivery	142,253

Vegetables	**Years**				
Item	1976	1983	1987	1992	% Change 1976–1992
Cash receipts	155,255	221,610	263,378	328,582	112%
Value-added	260,805	362,660	468,309	555,779	113%
Total	416,060	584,270	731,687	884,361	113%

Grain and hay

Wheat traditionally has been one of the highest farm-gate-value crops produced in Oregon. In recent years, production has been around 50 million bushels; over 85 percent of the wheat crop is being exported. Hay, including alfalfa, is the second most valuable crop in this category, but of the 2½ to 3 million tons produced, only about .85 to .9 million tons are sold each year. The rest of the hay is fed on the farms and ranches where it is produced.

Cash receipts from all hay and grain sales for 1992 were $297 million, a 28 percent increase since 1976 (these dollar values do not include government payments). Other crops in this grouping include barley (which has declined in acreage over the past 15 years), oats, and smaller acreage of rye and corn for grain and silage (Oregon is not known for its feed grain and silage production).

Value-added to the crops in this section comes primarily from transportation and handling, although there is some wheat milling and forage processing (pellets and cubes) in the state. The percentage contributed by value-added, which is still relatively low, has moved much higher in recent years. Value-added costs have increased proportionally more than crop prices.

Also, the value-added estimate for wheat for 1992 includes transportation to the Port of Portland for the amount exported. More of the hay for sale in recent years has been produced in concentrated areas and hauled longer distances. For example, some of the hay grown in Hermiston is trucked to Tillamook.

In the tables that follow, all dollar amounts are expressed in thousands.

Total received by producers[1]	**296,913**
Total value-added by processing	**62,445**
Total value after processing and delivery	**359,358**

Wheat, 1992

Total bushels sold: 46,800,000 @ $3.90	
Received by producers	182,471
Value-added by transportation and handling	
Payroll	11,254
Packaging materials	843
Other	19,914
Total value-added	32,011
Value of crop delivered to market	214,482

Barley, 1992

Total bushels sold: 8,700,000 @ $2.20	
Received by producers	19,135
Value-added by transportation and handling	
Payroll	1,044
Other	1,566
Total value-added	2,610
Value of crop delivered to market	21,745

Hay, 1992

Tons sold: 840,000 @ $84	
Received by producers	70,800
Value-added by transportation and handling	
Payroll	7,586
Other	9,271
Total value-added	16,857
Value of crop delivered to market	87,657

Oats, 1992

Total bushels sold: 3,510,000 @ $1.50	
Received by producers	5,270
Value-added by transportation and handling	
Payroll	281
Other	422
Total value-added	703
Value of crop delivered to market	5,973

Corn, 1992

Total bushels sold: 1,570,000 @ $2.55	
Received by producers	4,004
Value-added by transportation and handling	
Payroll	157
Other	235
Total value-added	392
Value of crop delivered to market	4,396

Other grain and forage, 1992 (includes grass straw for export)

Received by producers	15,233
Value-added by transportation and handling	
Payroll	3,949
Other	5,923
Total value-added	9,872
Value of crop delivered to market	25,105

[1]*Does not include any government payments.*

Grain and Hay	**Years**				
Item	1976	1983	1987	1992	% Change 1976–1992
Cash receipts	231,700	379,230	249,435	296,913	28%
Value-added	26,380	44,280	48,840	62,445	137%
Total	258,080	423,510	298,275	359,358	39%

Other crops

The "other crops" listed in this section are becoming more important in Oregon. This category has shown steady gains over the past 10 years, with much of the growth coming from nonfood crops such as nursery, greenhouse, farm forestry, and Christmas trees. Combined, these 4 commodities accounted for 25 percent of the farm gate value of Oregon agriculture in 1992.

Nursery and greenhouse production has shown dramatic increases in the past few years, primarily in the northern Willamette Valley. Farm value is now over $360 million and increasing. The value of timber cut on farms and small woodlots also is increasing with improved management techniques and higher prices. Christmas trees also have shown steadily increasing production with sales at $70 million. Oregon Christmas trees are known for their quality and are shipped all over the U.S. and to foreign countries.

Of the other crops in this grouping, grass and legume seed crops now generate around $200 million in farm sales annually. Oregon leads the nation in grass seed production and sales. Mint production has been increasing because of recently higher prices to the point of generating farm value of $51 million in 1992. Oregon produces close to 50 percent of the peppermint oil in the United States. Hop production has been increasing in recent years, and in 1992, reported sales reached $22 million.

Sugar beet production has been quite stable with production primarily in Malheur County. Growers also are starting to raise beets in Klamath County and sending them to California for processing.

In the tables that follow, all dollar amounts are expressed in thousands.

Total received by producers	**997,513**
Total value-added by processing	**247,494**
Total value after processing and delivery	**1,245,007**

Grass and legume seeds, 1992

Received by producers	191,122
Value-added by cleaning, sacking, and handling	
Payroll	15,290
Packaging materials	6,880
Other	16,054
Total value-added	38,224
Value of crop delivered to market	229,346

Nursery, greenhouse, and specialty horticulture, 1992

Received by producers	364,690
Value-added by transportation and handling	
Payroll	24,789
Other	18,527
Total value-added	43,316
Value of crop delivered to market	408,006

Farm forestry, 1992

600,500 MBF @$426/M mill price

Received by producers	255,828
Value-added by processing and/or exporting	
Payroll	64,000
Other	66,000
Total value-added	130,000
Value of crop delivered to market	385,828

Mint, 1992

Pounds of oil sold: 3,543,000 @ $14.40

Received by producers	51,121
Value-added by transportation and handling	
Payroll	1,205
Other	1,098
Total value-added	2,303
Value of crop delivered to market	53,424

Sugar beets, 1992

Total tons sold: 397,000 @ $34.50

Received by producers	13,696
Value-added by transportation, storage, and processing	
Payroll	6,387
Other	5,226
Total value-added	11,613
Value of crop delivered to market	25,309

Hops, 1992

Pounds sold: 11,684,000 @ $1.87	
Received by producers	21,849
Value-added by handling and storage	
Payroll	1,285
Other	1,052
Total value-added	2,337
Value of crop delivered to market	24,186

Christmas trees, 1992

Trees sold: 7,840,000 @ $9.00	
Received by producers	70,753
Value-added by transportation and handling	
Payroll	9,340
Other	4,670
Total value-added	14,010
Value of crop delivered to market	84,763

Miscellaneous field crops, 1992

Received by producers	28,454
Value-added by processing and handling	
Payroll	3,699
Other	1,992
Total value-added	5,691
Value of crop delivered to market	34,145

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