

**DISTRIBUTION OF GOAT MEAT IN SELECTED
METROPOLITAN FLORIDA MARKETS**

A Report by

Robert L. Degner and J. David Locascio

May 1988

**The Florida Agricultural Market Research Center
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ABSTRACT

The objective of this research was to determine the current marketing environment for goat meat in Florida. Of the 164 meat wholesalers interviewed in the Miami, Fort Lauderdale and Tampa metropolitan areas, only 24 firms were currently selling goat meat. Total goat meat sales amounted to approximately 842,500 pounds per year. Over half the respondents mentioned limited supply as a major marketing problem. The three largest firms represented only 15 percent of the firms handling goat meat, but accounted for 82 percent of the total product volume. About 96 percent of the goat meat received was from out of state including slightly less than two percent imported.

The distribution of goat meat is very limited, even in areas with large ethnic populations. Annual per capita goat meat consumption as derived from wholesale sales is only 0.26 pounds for the three metropolitan areas. In addition, present prices received by north Florida producers for live animals (on a carcass equivalent basis) are substantially higher than wholesalers are presently paying for out-of-state product.

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For more information about the Center, contact:

Dr. Robert L. Degner, Director
Florida Agricultural Market Research Center
1083 McCarty Hall
University of Florida
Gainesville, FL 32611
(904) 392-1845

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SUMMARY

- * The objective of this research was to determine the current marketing environment for goat meat in Florida sold through conventional, wholesale marketing channels for meat.
- * Data from the 1980 Census of the Population were used to identify three metropolitan areas in Florida where large concentrations of ethnic populations are located. The three areas were identified as Miami (Dade County), Fort Lauderdale (Broward County), and Tampa (Hillsborough County). Previous research indicated that these areas were likely candidates for relatively high goat meat consumption, and were selected because of this characteristic.
- * Of 164 meat wholesalers interviewed, only 24 firms (15 percent) were currently selling goat meat. Twelve firms had previously sold goat meat, and 128 had never sold goat meat.
- * Of the 12 firms that had discontinued selling goat meat, half mentioned insufficient demand as the primary reason for quitting. Five mentioned supply problems and four mentioned competition from cheaper substitutes.
- * Ninety-three percent of the goat meat was purchased in whole carcass form. Estimates of goat carcass weights ranged from 25 to 45 pounds and averaged 36.4 pounds. Over half the total volume was cut into primals before resale and 41 percent of the volume was resold in the whole carcass form. Ninety-three percent of the wholesalers' sales were comprised of frozen meat.
- * Total goat meat sales in the three major market areas identified in this study amounted to approximately 842,500 pounds per year. The three largest firms represented only 15 percent of the firms handling goat meat, but accounted for 82 percent of the total product volume.
- * The weighted average purchase price for all firms was slightly under \$0.95 per pound. The weighted average sale price for all firms was just under \$1.09 per pound. The weighted average mark-up was 15 percent.
- * On a total volume basis, about 94 percent of the goat meat received was from out of state, with about four percent being obtained within Florida. Slightly less than two percent was imported. Texas was the most commonly cited out-of-state source.
- * Approximately 52 percent of the goat meat volume reported by the firms in this study was sold to retail grocers. About one-third was sold to restaurants. Ten percent went to varied foodservice operations including ships, labor camps, and jobbers that also serve the foodservice trade. The remaining six percent went to individuals.

SUMMARY CONTINUED

- * Over half the respondents mentioned limited supply problems. Complaints of limited supplies came predominantly from large- and medium-size firms.
- * Haitians were mentioned by 13 of 22 firms as being important consumers of goat meat. Jamaicans, other Caribbean islanders, Asians, Cubans, Mexicans, other Latins, American blacks and Greeks were also mentioned as significant consumers of goat meat.
- * Three-fourths of all wholesalers carrying goat meat sell it throughout the year. About two thirds of all wholesalers (including all those in the large category) identified seasonal fluctuations in consumer demand. Generally, November through March was identified as the peak demand season for goat meat.
- * Miami, Fort Lauderdale and Tampa are thought to have the highest per capita goat meat consumption in the state. However, annual per capita goat meat consumption as derived from wholesale sales is still only 0.26 pounds for the study area.
- * The ethnic populations thought to be consuming the greatest quantities are generally on the lowest rung of the socio-economic ladder, which may make it more difficult to promote among non-ethnic populations.
- * Another consideration is the low wholesale price of goat meat relative to current live prices. For example, a live goat weighing about 75 pounds will bring about \$45.00 (\$0.60 per pound) to the farmer in north Florida. Thus, the total carcass cost is around \$1.47 per pound, exclusive of transportation and handling charges. Wholesalers are currently paying less than \$1.00 per carcass pound.

Distribution of Goat Meat in Selected Metropolitan Florida Markets

by R. L. Degner and J. D. Locascio*

INTRODUCTION

American consumers are among the best fed in the world. They enjoy a diverse, high-quality diet in which animal protein plays a major role. Although many species of animals are consumed in the United States, beef, pork and poultry are the most important. In other countries, particularly developing countries, goat meat is a more common source of animal protein.

Goat meat consumption in the United States is limited at this time. However, there is increasing interest in goat production as an alternative agricultural enterprise for small farms in north Florida. While dairy products are important to Florida's emerging goat industry, increased goat meat consumption can improve the economic viability of goat production.

OBJECTIVES

For the last several years, faculty at the University of Florida have cooperated with Florida A & M University in assessing the marketing environment for goat meat in Florida. In 1986, livestock auction managers were interviewed to identify buyers of live goats and to determine typical marketing channels for these animals in Florida. As a result of this preliminary work, additional research was conducted in

*R. L. Degner is Professor and Director, and J. D. Locascio is a Research Assistant in the Florida Agricultural Market Research Center, Institute of Food and Agricultural Sciences, University of Florida.

late 1986 and early 1987. The basic objective of the more recent research was to determine the marketing environment for goat meat in Florida sold through conventional, commercial marketing channels for meat. The results are published in two parts. This report focuses on wholesale distribution channels, and another looks at supermarkets as a marketing outlet (Locascio and Degner).

Specific objectives of the wholesale study were to (1) determine the present levels of goat meat being marketed through wholesale meat firms, (2) determine wholesalers' attitudes towards handling goat meat, (3) evaluate the potential for selling more goat meat through wholesale outlets, and (4) identify marketing problems and constraints on market expansion.

PROCEDURES

Data from the 1980 census of the population were used to identify three metropolitan areas where large concentrations of ethnic populations are located. The three areas were identified as Miami (Dade County), Fort Lauderdale (Broward County), and Tampa (Hillsborough County) (Table 1). These three markets total over 3.2 million people, of which 1.3 million were comprised of ethnic groups hypothesized to be likely consumers of goat meat. These ethnic groups included Spanish, American blacks, Greeks, Italians and Portuguese, with fifty-three percent of the ethnic residents being of Spanish descent. Meat wholesalers in the three market areas were identified through advertisements in telephone companies' Yellow Pages. A total of 164 wholesale firms were identified and their managers interviewed by telephone. It should be stressed that these three market areas are not representative of the state as a whole.

Table 1.--Florida standard metropolitan areas with highest concentrations of selected ethnic populations.

Ethnic Group	Standard Metropolitan Areas					
	Miami	Tampa ^a	Ft. Lauderdale/Hollywood	Jacksonville	Orlando	West Palm Bch./Boca Raton
Spanish Origin	580,994	64,199	40,315	13,366	25,972	28,505
Black	269,670	84,834	111,258	156,575	90,595	76,764
Greek	4,685	1,248	3,960	1,201	910	1,603
Italian	34,742	18,849	73,092	8,327	14,919	23,405
Portuguese	1,795	670	1,536	458	645	687
Total	891,886	169,800	230,161	179,927	133,041	130,464

^aThe Tampa metropolitan area includes only Hillsborough County.

Source: 1980 Census of Population.

Previous research indicated that these areas were likely candidates for relatively high goat meat consumption, and were selected because of this characteristic. Thus, the following findings should be judged as indicative of relatively high goat meat consumption areas rather than being typical of the state as a whole.

FINDINGS

Availability of Goat Meat

Of the 164 meat wholesalers interviewed, only 24 firms or 15 percent were currently selling goat meat (Table 2). Seven percent had previously sold goat meat, and 78 percent had never sold goat meat. Of the 12 firms that had discontinued selling goat meat, half mentioned insufficient demand as the primary reason for quitting (Table 3). Nearly as many, 42 percent, mentioned supply problems. Managers of one-third of the firms that had discontinued goat meat sales said that cheaper substitutes, primarily mutton, had reduced the demand for goat meat. The manager of one firm indicated that he discontinued goat meat because he preferred to handle fresh goat meat, but the only product that was consistently available to him was frozen carcasses.

Product Form

Estimated goat carcass weights handled by the meat wholesalers in the study areas ranged from 25 to 45 pounds and averaged 36.4 pounds. Ninety-three percent was purchased in whole carcass form (Table 4). Four percent of the total volume was purchased in the form of live animals and saddles (i.e., the hind quarters and loin section of the carcass) constituted about three percent.

Table 2.--Proportion of meat wholesalers selling goat meat, by market area.

Market Area	Currently Selling Goat		Previously Sold		Never Sold		Totals	
	(Number)	(Percent)	(Number)	(Percent)	(Number)	(Percent)	(Number)	(Percent)
Miami	13	18	6	8	52	73	71	100
Ft. Lauderdale	2	5	4	11	32	84	38	100
Tampa	<u>9</u>	<u>16</u>	<u>2</u>	<u>4</u>	<u>44</u>	<u>80</u>	<u>55</u>	<u>100</u>
Totals	24	15	12	7	128	78	164	100

Table 3.--Past sellers' reasons for quitting.

Reason	Number	Percent
Insufficient Demand	6	50
Supply Problems	5	42
Cheaper Substitutes ^a	4	33
Product Form	1	8

^aAll four respondents said mutton was much cheaper and felt that buyers commonly substituted mutton for goat.

Table 4.--Product forms usually bought by wholesalers.

Form	Percent	Pounds
Whole Carcasses	93	782,528
Live Animals	4	36,160
Saddles	<u>3</u>	<u>21,625</u>
Total	100	840,313

Over half the total volume was cut into primals before resale. Forty-one percent of the volume was resold in the whole carcass form (Table 5). Saddles constituted less than three percent of volume, and about three percent was sold in cubes or diced. About one-half of one percent was sold as half carcasses. Ninety-three percent of the wholesalers' sales were comprised of frozen meat (Table 6). Only seven percent of the total volume was sold fresh.

Table 5.--Product forms sold by wholesalers.

Form	Percent	Pounds
Primals	53.1	442,466
Whole	41.2	343,252
Diced	2.6	21,275
Saddles	2.6	21,625
Half	<u>0.5</u>	<u>3,900</u>
Total	100.0	832,518

Table 6.--Proportions of goat meat sold frozen versus fresh, by wholesalers.

Product Form	Pounds	Percent
Frozen	782,760	93
Fresh	<u>55,438</u>	<u>7</u>
Total	838,198	100

Wholesale Volume

Annual goat meat sales volume estimates were obtained from 23 of the firms currently selling goat meat. Firms were classified as large,

medium or small based upon their annual goat meat sales (Table 7). Firms with goat meat sales in excess of 100,000 pounds were defined as large. Medium-size firms were defined as those selling from 10,000 to 99,999 pounds per year. Firms selling less than 10,000 pounds per year constituted the small category.

Table 7.--Number of wholesale firms selling goat meat, by firm size and market area.

Market Area	Size ^a			Total
	Small	Medium	Large	
Miami	7	2	3	12 ^b
Tampa	5	3	1	9
Ft. Lauderdale	<u>2</u>	<u>0</u>	<u>0</u>	<u>2</u>
Total ^b	14	5	4	23 ^b

^aSize categories were based upon annual sales volume as follows: small (less than 10,000 pounds), medium (10,000 to 99,999 pounds) and large (more than 100,000 pounds).

^bOne firm in Miami did not report volume.

Combined goat meat sales by 20 wholesalers was approximately 842,500 pounds for 1986 (Table 8). Reported volume totals do not include wholesalers buying from other local wholesalers to avoid double counting. Three firms in the large category represented only 15 percent of the firms handling goat meat. However, they accounted for 82 percent of the total product volume. Four medium-size firms represented 20 percent of the firms and 11 percent of the product volume. The 13 firms in the small category comprised 65 percent of the firms handling goat meat, but accounted for only seven percent of the annual product volume.

Table 8.--Annual goat meat sales, by volume categories.^a

Volume Category	Firms		Volume		
	(Number)	(Percent)	Average Per Firm	Total Per Category	Percent of Total
Small (<10,000 lbs.)	13	65	4,410	57,330	7
Medium (10,000-99,999 lbs.)	4	20	23,155	92,620	11
Large (100,000+ lbs.)	<u>3</u>	<u>15</u>	<u>230,833</u>	<u>692,499</u>	<u>82</u>
Total	20	100	--	842,449	100

^aDoes not include brokers or firms which purchase all of their goat meat from other local firms.

On the average, large firms each sold about 230,800 pounds of goat meat in 1986, or about 4,400 pounds per week (Table 8). In contrast, the medium-size firms averaged only 23,150 pounds per year, or 445 pounds per week and the small firms averaged slightly over 4,400 pounds per year, or only 65 pounds per week. These figures indicate that goat meat sales in the study areas are concentrated in the hands of very few large volume firms. Further, most of the large firms are located in the Miami area.

Wholesale Prices

Prices paid for goat meat by wholesalers varied considerably. The largest variation occurred among small firms. Small wholesalers reported prices ranging from \$0.64 to \$2.00 per pound, compared with \$0.95 to \$1.50 by medium-size firms and \$0.90 to \$1.00 by large firms (Table 9).

Table 9.--Wholesalers' purchase and re-sale prices for goat meat, by firm size.

Market Level	Average Purchase Price	Purchase Price Range	Average Sale Price	Sale Price Range	Average Mark-Up ^a	N
	(-----Dollars Per Pound-----) (Percent) (Number)					
Wholesale:						
Small	1.06	.64 - 2.00	1.61	.76 - 4.50	34	13
Medium	1.19	.95 - 1.50	1.64	1.15 - 2.19	27	4
Large	.96	.90 - 1.00	1.07	.96 - 1.14	10	3

^aMark-up is expressed as the percent of sale price.

The weighted average purchase price for all firms was slightly under \$0.95 per pound.

Prices received by wholesalers for goat meat were also highly variable. Sale prices ranged from \$0.76 to \$4.50 per pound for the small firms, \$1.15 to \$2.19 for the medium-size firms, and \$0.96 to \$1.14 for large-size firms. The higher prices reported by small- and medium-size firms were for small quantities that were sold directly to consumers (in effect, retail). Overall, the weighted average sale price was just under \$1.09 per pound. Thus, the weighted average mark-up was 15 percent for all wholesale firms.

Origin of Supply

On a total volume basis, about 94.5 percent of the goat meat received was from out of state, with just under four percent being obtained within Florida (Table 10). Slightly less than two percent was imported.

Table 10.--Origin of wholesale goat meat supplies.

Origin	Volume	
	(Pounds)	(Percent)
Other States	775,179	94.5
Florida	31,095	3.8
Imports	<u>14,113</u>	<u>1.7</u>
Total ^a	820,387	100.0

^aThe total does not include the combined volume of 22,062 pounds for respondents that either did not know the origin of goat meat supplies or did not answer this question.

Ten of the firms receive their supplies of goat meat exclusively from other states, while two firms buy exclusively within Florida and two exclusively from foreign sources (Table 11). Three firms received supplies through various combinations of in-state, out-of-state and foreign sources. Three bought exclusively from other local wholesalers.

Table 11.--Wholesale supply sources.

Source	Number
Other states	10
Florida	2
Foreign countries	2
Florida and other states	1
Other states and foreign countries	1
Florida, foreign countries and other states	1
Local wholesalers	3
No answer or did not know	<u>4</u>
Total	24

Texas was the most frequently cited out-of-state source, mentioned by seven firms (Table 12). Iowa was mentioned twice, while New Mexico, Colorado, Illinois, Georgia and a vague "mid-west" source were each identified once. New Zealand was identified twice as a foreign source, while Australia and Jamaica were each identified once.

Table 12.--Out-of-state sources of goat meat as reported by wholesalers.

State/Area	Number
Domestic:	
Texas	7
Iowa	2
New Mexico	1
Colorado	1
Illinois	1
Georgia	1
Midwest	1
Foreign:	
New Zealand	2
Australia	1
Jamaica	1

Distribution Channels

Approximately 52 percent of the goat meat volume reported by the firms in this study went to retail grocers. About one-third was sold to restaurants, and ten percent went to varied foodservice operations including ships, labor camps, and jobbers that also serve the foodservice trade. The remaining six percent went to individuals (Table 13).

Marketing Problems

Firms currently selling goat meat were questioned about marketing problems. Seventy percent of those responding experienced at least one marketing problem (Table 14). Half the respondents indicated problems with limited or unavailable supplies. Complaints of limited supplies came predominantly from large- and medium-size firms. Three mentioned limited demand. Oversupply, fatty carcasses, high price, and lack of fresh product (as opposed to frozen) were factors mentioned by other firms.

Table 13.--Wholesale distribution of goat meat.

Size	Outlet				Total					
	Grocery	Restaurants	Individuals	Other ^a						
	(Percent)	(Pounds)	(Percent)	(Pounds)	(Percent)	(Pounds)	(Percent) ^b	(Pounds)		
Small	45	19,950	39	17,484	16	7,258	0	0	100	44,692
Medium	60	35,120	14	13,000	26	24,500	0	0	100	92,620
Large	51	353,125	34	237,975	2	14,400	13	87,000	100	692,500
Total	52	428,195	32	268,459	6	46,158	10	87,000	100	829,812

^aOther includes ship lines, institutions, farm labor camps, and jobbers that serve a wide variety of foodservice outlets.

^bPercent totals may not sum to 100 due to rounding.

Table 14.--Problems associated with goat meat, as reported by wholesalers.

Problem	Number	Percent
Supply Problems:		
Product frequently unavailable, limited supplies	10	50
Oversupply	1	5
Other Problems:		
Limited demand	3	15
Fatty carcasses	1	5
Product too expensive	1	5
Frozen competes with fresh	1	5
No Problems	<u>6</u>	<u>30</u>
	a	b

^aPercentages are based upon 20 respondents.

^bColumns are not summed because of multiple responses.

Ethnic Origin of Consumers

Wholesalers selling goat meat were asked for their opinions as to the ethnic origin of goat meat consumers. Haitians were mentioned by 13 of 22 firms responding to the question as being important consumers of goat meat (Table 15). Jamaicans and other Caribbean islanders were mentioned by eight and four firms, respectively. Asians were thought to be significant consumers of goat meat by six firms. Only three firms responding to this question mentioned Cubans as important goat meat consumers. Mexicans and other Latins were cited by three and five firms,

respectively. Other ethnic groups mentioned included American blacks and Greeks, each mentioned by three firms.

Table 15.--Ethnic origin of goat meat consumers, as perceived by sellers.

Ethnic Group	Number	Percent ^a
Caribbean:		
Haitian	13	59
Jamaican	8	36
Other	4	18
Asian Indian	6	27
Latin:		
Cuban	3	14
Mexican	3	14
Other	5	22
American Black	3	14
Greek	3	14
Other ^b	4	18

^aPercentages are based upon 22 respondents. Percentages are not summed because of multiple responses.

^bIncludes Italian, middle-eastern, and rural southerners.

Seasonality of Sales

Three-fourths of all wholesalers carrying goat meat sell it throughout the year (Table 16). These year 'round sellers include all medium- and large-size firms and 60 percent of small-size firms. Forty percent of the firms in the small-size category handle goat meat only on a seasonal basis.

Table 16.--Firms selling goat meat continuously versus seasonally.

Size	Continuously		Seasonally		Total	
	(Number)	(Percent)	(Number)	(Percent)	(Number)	(Percent)
Small	9	60	6	40	15	100
Medium	5	100	0	0	5	100
Large	4	100	0	0	4	100
Total	18	75	6	25	24	100

Although most sold goat meat year 'round, about two-thirds of all wholesalers (including all those in the large category) identified seasonal fluctuations in consumer demand. Generally, November through March was identified as the peak demand season (Table 17). This time period encompasses several important religious and non-religious holidays (i.e., Thanksgiving, Christmas and Easter) and also the peak period of seasonal farm labor.

Table 17.--Months in which wholesale demand for goat meat is greatest.

Month	Number	Percent ^a
January	10	45
February	10	45
March	13	59
April	2	9
May	0	0
June	0	0
July	1	5
August	0	0
September	1	5
October	3	14
November	9	41
December	12	55
No particular month	7	32

^aPercentages are based upon 22 responses; they are not summed because of multiple responses.

CONCLUSIONS

Total goat meat sales in the three major market areas identified in this study amounted to approximately 842,500 pounds per year. Even though these areas are thought to have the highest per capita consumption in the state, annual per capita goat meat consumption as derived from these estimated wholesale sales is still only 0.26 pounds. Given the average carcass weights of 36.4 pounds reported by firms interviewed, the commercial market in these three areas requires approximately 23,150 head of goat per year. Even if the non-commercial, direct-to-consumer sales are substantially larger than those of the commercial market, it is doubtful whether per capita consumption amounts to one pound per capita per year. In contrast, 1985 per capita consumption figures for beef, pork, chicken, fish and turkey were 106.9, 66.0, 57.4, 14.5 and 11.9 pounds, respectively. Per capita consumption of lamb and mutton amounted to 1.6 pounds (Table 18).

Based upon the total number of firms selling goat meat in the three market areas, it is obvious that distribution of goat meat is very limited. Further, when analyzing the total quantity of goat meat handled, it is clear that consumption is limited, even among ethnic populations. Also, the ethnic populations thought to be consuming significant quantities are generally on the lowest rung of the socio-economic ladder, which may make it more difficult to promote among non-ethnic populations.

Table 18.--U.S. per capita consumption of selected meat items.

Type of Meat	Per Capita Consumption (Pounds) ^a
Beef	106.9
Pork	66.0
Chicken	57.4
Fish	14.5
Turkey	11.9
Lamb/Mutton	1.6
Goat	0.26 ^b

^aCarcass weight.

^bPer capita figures for goat meat are estimates for the three market areas in Florida. This figure is probably much higher than for the U.S. as a whole.

Source: Bunch, Karen L., 1985.

Another point to consider is the low price of wholesale goat meat relative to current live prices. For example, a live goat weighing about 75 pounds will bring about \$45.00 (\$0.60 per pound) to the farmer in north Florida. Assuming a dressing percentage of 50 percent, the carcass weight will be 37.5 pounds, resulting in a carcass cost of \$1.20 per pound. If a \$10.00 per head slaughtering charge is assumed, the slaughter charge amounts to \$0.27 per pound. Thus, the total carcass cost is \$1.47 per pound, exclusive of transportation and handling charges, substantially more than wholesalers are currently paying. Working backwards from current wholesale prices of \$0.95 per pound and assuming a slaughter charge of \$0.27 per pound, the resulting carcass

cost is \$0.68 per pound. Again, assuming a 50 percent dressing percentage, the live weight value of the animal is \$0.34 per pound or approximately \$25.50 per head. The critical question is, "Can north Florida producers compete with out-of-state suppliers for the commercial market?"

Florida producers' prospects for success will be enhanced if demand and subsequently wholesale prices are increased. Market development will be the key. Mainstream consumers must be exposed to the product, and convenient product forms must be developed. A live goat, delivered via a gooseneck trailer to a street corner in Miami, is not exactly a convenience food item. Pre-cooked, or at least properly packaged, products must be developed for the consumer and for the foodservice trade. The foodservice trade and consumers will require education as to the merits of goat meat. Foodservice outlets are probably the one best method of expanding the market at relatively low cost. Because the typical middle class American consumer is basically unfamiliar with the product, foodservice outlets, particularly restaurants, can prepare the product correctly and offer a tasty alternative to conventional meat products for American consumers.

In conclusion, Florida goat producers must not lose sight of the fact that they have to compete with out-of-state suppliers. By taking an active role in market development activities, and by becoming more efficient, Florida producers can become more competitive.

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