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U.S. TROUT MARKETS:

A Survey of Wholesale and Retail Distributors of Fresh Water Farm-Raised Rainbow Trout

By

Gary McCain and Joseph F. Guenthner

A.E. Research Series No. 91-3
March 1991

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INTRODUCTION

The commercial trout industry is the oldest United States domestic aquaculture industry. In spite of technological advancements in genetic selection, disease treatment, harvesting and processing, market growth and development have been quite slow. Estimates of production and sales in recent years indicate negligible or perhaps even negative growth. While significant progress has been made in aquaculture production technology, very little comprehensive study or planning has been attempted in marketing trout.

The U. S. trout industry primarily consists of small, family owned and operated businesses located in 45 of the 50 states. Individual businesses, in general, are not capable of conducting marketing research in national, or even regional, markets at the level necessary to develop useful strategies to expand industry sales.

In 1983 a consumer research study was conducted which identified attitudes towards trout held by consumers who were already trout eaters. No research has been done regarding the attitudes of intermediaries toward trout as a part of their product lines. Very little is understood about how distributors make their decisions regarding which products and what quantities will be purchased, what product forms are preferred and how the forms are determined, and what process is used to introduce change. This information is generally considered essential to develop a marketing plan. In order to implement strategies utilizing the results of the consumer analysis, it is necessary to understand the way the middlemen (wholesalers and retailers) operate and make decisions regarding trout.

OBJECTIVES

The objective of this research is to provide information to aid the U.S. trout industry in understanding intermediaries perceptions of trout as a product line. It also describes trout distributor perceptions of their marketing relationships with trout suppliers. Understanding these relationships can help improve cooperation between production and distribution components of trout sales. With this information trout producers and processors can improve strategies for product development, packaging, sales, promotion, distribution, and preparation to expand the total trout market.

Seafood wholesalers are usually the first, primary, and sometimes the only customer for a trout processor. Seafood wholesalers were asked about retailers' needs, and attitudes that influence their purchase and sale of trout.

Retailers provide the direct contact with consumers who prepare and/or consume trout. Meat department and seafood store managers have direct contact with consumers and make the fish order decisions. Interviews with retailers addressed their perceptions of trout's attractiveness to consumers and asked about their needs, methods, and attitudes that influence their purchase and sale of trout. Meat department and seafood store managers have direct contact with consumers and make the fish order decisions.

Wholesalers and retailers were asked questions to determine whether their knowledge of consumer attitudes toward trout is consistent with earlier research and if there is an educational need to inform them of consumer preferences.

METHODOLOGY

This research study was conducted in several phases. The first phase was to determine the scope of the study to best meet the needs of the trout industry. A research literature review was conducted and meetings were held with trout industry leaders to build upon past research. Although there are reports and research findings on aquaculture products, most have no relevance to the trout industry. There is one research paper about consumer attitudes toward trout (Block 1984). Some of the results regarding consumer wants were adapted to the distributor's perspective for this study. A report on salmon markets (Herrmann, Lin, and

Mittelhammer 1990) included seafood distributor questions about salmon which were similar to the objectives of this study. A number of those questions were adapted to determine the same information regarding trout.

Visits were made to leading trout processors in Idaho which represent over 80% of the commercial rainbow trout production in the United States. Discussions regarding the past research findings and the industry information needs resulted in the decision to focus the study on distributors, wholesalers, and retailers. Future research addressing similar issues in the restaurant/food service industry was also recommended.

The second phase of the study identified specific issues and questions for surveys. In addition to the information generated in the first phase, additional interviews were conducted with wholesalers and managers of retail meat and seafood stores. On-site interviews were held with local distributors and retailers, telephone interviews were made to a few out of state retail meat department supervisors, and interviews were made with wholesale exhibitors at the Seafare trade show in Long Beach, California in February 1990.

Questions were developed for two matched surveys, one directed towards seafood wholesalers and distributors, and the other directed towards retail meat and seafood managers. Draft copies of the two surveys were sent to leading trout processors, the local wholesale and retail interviewees, and members of the board of directors of the U.S. Trout Farmers Association for evaluation and comments. Copies of the draft surveys were also presented to all who attended the initial meeting of the Idaho Aquaculture Association meeting where they were discussed and written comments were solicited. An additional review was made by faculty of the University of Idaho associated with the Department of Agricultural Economics and the Idaho Department of Agriculture staff. Following the analysis of contributions from these groups, two final survey instruments were prepared for mailing.

The Samples

The sample of wholesalers and distributors was taken from a commercial mailing list of all firms with a Standard Industrial Classification for seafood wholesaling. Additional listings were solicited from trout producers who contributed to the instrument design. A post card reminder was sent two weeks later. Of the 2116 firms surveyed, 123 were returned for a response rate of just less than 6%. Of those returned five were retailers so their responses were converted to retail questionnaires for the retail part of the study. Eighteen either left the questionnaire blank or answered so few of the questions they were useless. One hundred were useable.

The sample of retailers was taken from a mailing list prepared for Chain Store Guide, a leading publication in the retail food industry. The list included the names of the individuals who were responsible for the management of seafood products where possible. Of 1496 questionnaires mailed, 58 were returned for a response rate of 4%. Five were returned blank or answered so few of the questions they were useless. The five retail respondents from the wholesale survey were added to the 53 useable responses to provide 58 surveys for analysis.

SECTION I

SURVEY RESULTS FROM SEAFOOD WHOLESALERS WHO DISTRIBUTE FRESH WATER, FARM-RAISED RAINBOW TROUT

Of the one hundred distribution firms who completed analyzable surveys, 74 handle fresh water, farm-raised rainbow trout as part of their product line; 26 said they never sell trout. Since many of those who returned unusable surveys indicate they do not handle trout it may be surmised that a greater proportion of the non-respondents do not carry trout. This section will analyze the attitudes of those distributors who sell rainbow trout at least some time. There are several categories of institutions who perform wholesale functions in the seafood industry: brokers, distributors, and wholesalers. Although their functions differ in some respects, for the purposes of this study, they are treated as a single group performing the middleman function of selling to institutions rather than consumers. Over half (56.8%) of the distributors who handle fresh water, farm-raised rainbow trout indicate that they always sell trout, 21.6% sell trout frequently, and 21.6% sell trout infrequently.

Wholesale Seafood Marketing Practices

A set of questions was asked to identify the level of marketing support functions distributors provide to their customers. Each question asked them to indicate the frequency for which they do each of the services.

Research Support.

1. Do you conduct surveys of retailers' consumers?

	%
Always	2.7
Frequently	6.8
Infrequently	14.9
Never	75.7

2. Do you conduct surveys of restaurants' consumers?

	%
Always	5.5
Frequently	5.5
Infrequently	26.0
Never	63.0

The level of research support that distributors provide is one indicator of how well informed the market is regarding a line of products. The size and/or diversity of product offerings at retail level stores and restaurants makes it very unlikely that research is conducted addressing consumers' attitudes and preferences toward trout consumption.

The current distributor involvement in research is very low. Fewer than 10% provide regular (frequent or always) research help to retailers and only 11% to restaurants. The vast majority of distributors never provide market research assistance.

Advertising and Promotion Support.

3. Do you do demonstrations for retailers?

	%
Always	2.7
Frequently	8.1
Infrequently	36.5
Never	52.7

4. Do you help retailers prepare specials advertising?

	%
Always	9.5
Frequently	17.6
Infrequently	23.0
Never	50.0

5. Do you initiate specific product promotions?

	%
Always	9.5
Frequently	24.3
Infrequently	39.2
Never	27.0

Many food companies actively participate in the promotion of their products in cooperative programs with the institutions in their distribution channel. This allows them to achieve a differential advantage over competitors at their consumer level.

Few seafood distributors (11%) regularly do demonstrations for retailers. Over half (52.7%) say they never do. Approximately a fourth regularly do assist retailers prepare advertising for specials, but half never help. There is a greater level of distributors initiating specific product promotions to assist their customers to reach consumers, but only 33.8% do it on a regular basis.

With such a low level of promotional support being provided by distributors it seems reasonable to conclude that distributors have little incentive to incur these expenses on their own initiative.

Supplier Promotion Support.

6. Do you work with trout processors to develop promotions?

	%
Always	2.7
Frequently	10.8
Infrequently	14.9
Never	71.6

7. Do you work with other suppliers to develop promotions?

	%
Always	8.1
Frequently	24.3
Infrequently	29.7
Never	37.8

One incentive for distributors to cooperate in promotional activities with customers is for suppliers to be involved. Only 13.5% of the distributors work with trout processors to develop promotions on a regular basis. Trout processors never work on promotions with 71.6% of trout selling distributors. This may be compared with the experience of the same distributors with their other suppliers. Help to develop promotions is provided regularly by 32.4% of other suppliers and only 37.8% never receive help. The trout industry is substantially less supportive of promotional activities than are other seafood suppliers.

Rainbow Trout Market Factors

Each respondent was asked to indicate the level of agreement with a number of statements which evaluate attitudes toward the market factors that influence the sale of rainbow trout. Areas covered include demand, general product attributes, supplier policies, advertising support, retail and restaurant response, consumer response, and attitudes toward red meated trout.

Demand.

1. I sell substantially more trout now than a year ago.

	%
Strongly Agree	9.9
Agree	23.9
Neither	36.6
Disagree	21.1
Strongly Disagree	8.5

There appears to be divergent experiences with trout sales in the past. Growth was experienced by 33.8% as indicated by agreement, no change by 36.6%, and disagreement may be interpreted as 29.6% experiencing a decline in trout sales.

2. The supply of trout is stable through the year.

	%
Strongly Agree	29.6
Agree	49.3
Neither	14.1
Disagree	7.0
Strongly Disagree	0.0

There is agreement that the supply of trout is stable. This would appear to be one of the most positive attributes seen by distributors about the trout industry.

3. I order about the same amount of trout every month.

	%
Strongly Agree	9.9
Agree	53.5
Neither	9.9
Disagree	21.1
Strongly Disagree	5.6

Although only 9.9 strongly agree, a total of 64.4% do agree that they order approximately the same amount of trout on a monthly basis. This would indicate that they have a relatively stable demand from their clientele. Customers for the 26.7% who disagree may be using trout for special promotions or occasional product line variety.

4. The price of trout is stable through the year.

	%
Strongly Agree	18.8
Agree	62.3
Neither	15.9
Disagree	2.9
Strongly Disagree	0.0

There is strong agreement that trout price levels are stable. Only 2.9% disagree and no one strongly disagrees.

5. Retail demand for trout will grow in the immediate future.

	%
Strongly Agree	10.1
Agree	13.0
Neither	60.9
Disagree	11.6
Strongly Disagree	4.3

Over half the distributors do not see any change in the future demand for trout in retail stores. A few more anticipate growth (23.1%) than do not (15.9%).

6. Food service demand for trout will grow in the immediate future.

	%
Strongly Agree	4.3
Agree	25.7
Neither	48.6
Disagree	18.6
Strongly Disagree	2.9

There is more agreement that demand for trout will grow in restaurants than in retail stores. Less than half see no change (48.6%). Of those who anticipate change, more agree that there will be growth than disagree (30% compared to 21.5%).

7. Trout is generally a high priced product.

	%
Strongly Agree	0.0
Agree	14.1
Neither	26.8
Disagree	53.5
Strongly Disagree	5.6

One factor which affects the demand for any product is the perception of price. Only 14.1% believe trout is a high priced product. In general there is disagreement (59.1%) with the perception of high prices.

General Product Attributes.

1. Trout has a unique flavor.

	%
Strongly Agree	7.0
Agree	50.7
Neither	26.8
Disagree	9.9
Strongly Disagree	5.6

A majority (57.7%) does agree that trout has a unique flavor,and only 15.5 disagree. This would be one of the product attributes a marketing program could use to attract customers and increase demand for trout.

2. Trout suppliers provide a consistently high level of quality.

	%
Strongly Agree	21.1
Agree	57.7
Neither	9.9
Disagree	8.5
Strongly Disagree	2.8

Trout suppliers are seen as providing a consistently high quality product. The 78.8% agreement with this statement indicates a high level of confidence in the ability of the industry to perform the production functions of trout marketing. The 11.3% who disagree indicates that there is a portion of the market that has had negative experiences with trout and will need to be convinced to become strong supporters.

3. Trout maintains its freshness well through distribution.

	%
Strongly Agree	16.9
Agree	52.1
Neither	19.7
Disagree	9.9
Strongly Disagree	1.4

Again the image of the product is good. A similar 11.3% have negative attitudes towards freshness which is a significant quality attribute.

4. I buy whole trout and process further myself.

	%
Strongly Agree	4.2
Agree	11.3
Neither	16.9
Disagree	26.8
Strongly Disagree	40.8

In general, trout is purchased in the same form in which it is sold. Only 15.5% appear to do any value added functions. Any preparation of portions is apparently done by either processors or by food preparers in homes and restaurants.

5. Trout processing should have mandatory government food inspections.

	%
Strongly Agree	18.3
Agree	31.0
Neither	29.6
Disagree	14.1
Strongly Disagree	7.0

More distributors favor (49.3%) mandatory inspections than do not (21.1%). A middle group (29.6%) neither agree nor disagree. The presence of some form of government inspection approval would be a competitive advantage for a supplier.

6. Removal of pin bones is an important product option.

	%
Strongly Agree	35.2
Agree	38.0
Neither	21.1
Disagree	4.2
Strongly Disagree	1.4

With 73.2% agreeing that pin bone removal is an important product option and only 5.6% disagreeing, it would appear that the availability of this option could substantially enhance the competitive strength of suppliers who can deliver such a finished product.

Distributor Policies.

1. All trout suppliers provide the same quality.

	%
Strongly Agree	0.0
Agree	11.3
Neither	23.9
Disagree	43.7
Strongly Disagree	21.1

2. All trout suppliers provide the same level of service.

	%
Strongly Agree	0.0
Agree	7.0
Neither	28.2
Disagree	38.0
Strongly disagree	26.8

3. I buy from more than one supplier.

	%
Strongly Agree	7.4
Agree	48.5
Neither	17.6
Disagree	14.7
Strongly Disagree	11.8

A major proportion of distributors see a difference between suppliers as evidenced with the 64.8% disagreement that there is the same quality and service provided by all suppliers. The majority (55.9%) buy from more than one supplier and 26.5% say they do not. This indicates that distributors are aware of differences and willing to shift purchases from one supplier to another to buy what they feel will best meet their needs. Competitive marketing strategies and tactics in the trout industry to better address distributors' market could result in shifts of market share.

Advertising Support.

1. The trout industry provides good advertising support.

	%
Strongly Agree	1.4
Agree	15.5
Neither	46.5
Disagree	21.1
Strongly Disagree	15.5

The overall perception of trout industry advertising support is not very good. only 16.9% agree that it is good while 36.6% disagree. The other questions in this section evaluate attitudes toward specific support practices.

2. Trout suppliers make fewer deals to help their sales than other suppliers.

	%
Strongly Agree	14.1
Agree	28.2
Neither	45.1
Disagree	8.5
Strongly Disagree	4.2

This statement directly compares trout suppliers with others. More agree (42.3%) that trout suppliers make fewer deals than competitors. Only 12.7% disagree. Apparently trout suppliers are less aggressive in stimulating sales with deals than their competitors.

3. Trout suppliers provide useful sales support materials (pamphlets, recipes, etc.).

	%
Strongly Agree	4.3
Agree	15.9
Neither	36.2
Disagree	30.4
Strongly Disagree	13.0

Sales support materials such as pamphlets, recipes, posters, and table displays are just a few of the variety of support materials which are provided by many food product producers to attract attention and stimulate point of sale purchases. Only a small minority (20.1%) of distributors agree that trout suppliers provide useful materials of this type. The 43.4% who disagree indicates that there is a less than satisfactory level of support material available to push the sale of trout.

4. More point of sale materials are needed from trout suppliers.

	%
Strongly Agree	15.7
Agree	48.6
Neither	28.6
Disagree	5.7
Strongly Disagree	1.4

This question distinguishes between the availability of support materials and the desire to have them. A strong majority (64.3%) does want more compared with 7.1% who do not. This shows a potential for market enhancement.

<u>Retail and Restaurant Response</u>.

1. Trout makes an attractive entre for a restaurant.

	%
Strongly Agree	18.8
Agree	72.5
Neither	5.8
Disagree	2.9
Strongly Disagree	0.0

2. Trout is attractive in a retail fish display.

	%
Strongly Agree	24.6
Agree	60.9
Neither	11.6
Disagree	2.9
Strongly Disagree	0.0

These two questions show that trout is seen as attractive in both restaurants (91.3%) and retail stores (85.5%). Only 2.9% disagree in both cases. This strong image can serve as the foundation to a marketing program.

3. Trout is harder to prepare in restaurants than other fish.

	%
Strongly Agree	0.0
Agree	4.3
Neither	23.2
Disagree	59.4
Strongly disagree	13.0

4. Trout is harder for retail consumers to prepare than other fish.

	%
Strongly Agree	1.5
Agree	11.8
Neither	14.7
Disagree	64.7
Strongly Disagree	7.4

These two questions were included to address the concern expressed by some in the prestudy that trout was at a competitive disadvantage because it is hard to prepare. If this is the case, distributors are not aware of the problem. A high percentage disagrees regarding both restaurants (72.4%) and retail (72.1%). Only 4.3% agree for restaurants. In general distributors believe cooks can handle trout in the form they order with little problem. There are some who believe retail consumers do have a more difficult time preparing trout than other fish (13.3%).

5. Frozen trout is preferred to fresh by retailers.

	%
Strongly Agree	1.4
Agree	5.8
Neither	24.6
Disagree	37.7
Strongly Disagree	30.4

6. Frozen trout is preferred to fresh by restaurants.

	%
Strongly Agree	0.0
Agree	8.7
Neither	21.7
Disagree	36.2
Strongly Disagree	33.3

Perceived preferences for frozen and fresh trout are compared in these two questions. For both retail (68.1%) and restaurants (69.5%) distributors believe there is a preference for fresh. Very few believe frozen is preferred for either retail (7.2%) or restaurant (8.7%).

Consumer Response.

1. Retailers' consumers are reluctant to buy fish they can catch locally.

	%
Strongly Agree	3.0
Agree	10.4
Neither	20.9
Disagree	44.8
Strongly Disagree	20.9

2. Restaurants' consumers are reluctant to buy fish they can catch locally.

	%
Strongly Agree	1.5
Agree	5.9
Neither	17.6
Disagree	50.0
Strongly Disagree	25.0

These two questions address the concern that trout are less attractive to consumers in some geographic areas because they may be caught in local streams, ponds, or lakes. If this is, in fact, the case; most distributors are not aware of the problem. Only 13.4% see this as an issue in retail while 65.7% disagree. Even fewer see local catchability as an issue in restaurants with 75% disagreeing and 7.4% agreeing that customers are reluctant to buy fish they can catch locally.

3. Retailers' consumers prefer trout with the head removed.

	%
Strongly Agree	10.4
Agree	34.3
Neither	34.3
Disagree	20.9
Strongly Disagree	0.0

4. Restaurants' consumers prefer trout with the head removed.

	%
Strongly Agree	7.5
Agree	29.9
Neither	37.3
Disagree	23.9
Strongly Disagree	1.5

Several product attributes were identified in the prestudy and literature which were believed to inhibit consumer purchases. The first covered is this study is the perception of consumer preferences to having the head removed. For retail distributors, 44.7% agree that they prefer to have the head removed, and 20.9% do not agree. For restaurant distributors, 37.4% believe consumers want the head removed and 25.4% disagree. Having the head removed is somewhat more an issue for retail markets but the proportion disagreeing indicates that both options have their place in the market.

5. Retailers' consumers prefer boned trout.

	%
Strongly Agree	25.0
Agree	41.2
Neither	20.6
Disagree	13.2

6. Restaurants' consumers prefer boned trout.

	%
Strongly Agree	35.3
Agree	52.9
Neither	10.3
Disagree	1.5

Boned trout is seen to be preferred by a large majority for both the retail (66.2%) and restaurant (88.1%) markets. There are some who disagree (13.2%) for the retail segment but only 1.5% disagree for restaurants.

7. Consumers generally prefer the flavor of trout to other fish.

	%
Strongly Agree	1.5
Agree	13.2
Neither	58.8
Disagree	25.0
Strongly Disagree	1.5

In earlier sections of this study, trout is reported as being perceived to have a unique flavor, have a consistently high quality, and to not generally be high priced. This question is to determine if distributors believe that trout has a flavor advantage over other fish. Fewer agree (14.7%) than disagree (26.5%). The majority say they neither agree nor disagree. In general distributors believe that trout have a unique flavor, but it is not an advantage in the market.

Red Meat.

The purpose of this section is to evaluate the market response to red meated trout as compared with regular light colored trout and salmon products.

1. Red meated trout tastes better than light colored trout.

	%
Strongly Agree	0.0
Agree	10.1
Neither	66.7
Disagree	17.4
Strongly Disagree	5.8

Only 10.1% agree that red meated trout has a taste advantage. More (23.2%) disagree. Two thirds (66.7%) neither agree nor disagree. Taste is not a major product advantage for red meated trout in the opinion of distributors.

2. Red meated trout sells at a higher price than light colored trout.

	%
Strongly Agree	4.3
Agree	47.8
Neither	36.2
Disagree	11.6
Strongly Disagree	0.0

The price of red meated trout is seen as higher by over half (52.1%) of the distributors. Some (11.6%) disagree. The perception of higher price and no flavor advantage may reduce the incentive to push the sale of red meated trout, unless consumers regard color itself as an important attribute.

3. The flavor of red meated trout is preferred to salmon by most consumers.

	%
Strongly Agree	0.0
Agree	2.9
Neither	47.8
Disagree	34.8
Strongly Disagree	14.5

4. Red meated trout is readily substituted for pan sized salmon due to trout's lower price.

	%
Strongly Agree	4.3
Agree	31.9
Neither	40.6
Disagree	20.3
Strongly Disagree	2.9

5. Pan sized salmon is readily substituted for trout for most consumers.

	%
Strongly Agree	1.4
Agree	8.7
Neither	37.7
Disagree	43.5
Strongly Disagree	8.7

6. Pan sized salmon and red meated trout are readily substituted for each other in most restaurants.

	%
Strongly Agree	2.9
Agree	15.9
Neither	42.0
Disagree	31.9
Strongly Disagree	7.2

These four questions evaluate distributors' perceptions of the substitutability of red meated trout and salmon. There is disagreement (49.3%) with the statement that the flavor of red meated trout is preferred to salmon by most consumers. Only 2.9% agree.

There is both agreement (35.2%) and disagreement (23.1%) about the substitutability of red meated trout due to trout's lower cost. When there is a cost advantage to substituting red meated trout a significant portion of the wholesale market appears ready to sell trout in place of pan sized salmon.

There is less agreement (10.1%) that pan sized salmon is readily substituted for trout for most consumers where 52.2% disagree. There is a little more agreement (18.8%) that pan sized trout and red meated salmon are readily substituted for each other in most restaurants. Even so, 39.1% disagree. The overall perception is that red meated trout and pan sized salmon are not good substitutes for consumers. The difference in the price effect may be in the distributors' perception of consumers' ability to discern the difference.

Decision Criteria

Two sets of responses were asked for in this section to evaluate the importance distributors place on a number of specific attributes as they make trout buying decisions. The numbers in the table represents the proportion who marked each importance level.

	Percentages				
	Very Important				Not Important
	1	2	3	4	5
a. Competitive price	61	29	8	3	0
b. Consistent price	52	35	8	5	2
c. Retail advertising decisions	11	24	21	23	21
d. Customer requests	32	37	15	11	5
e. Advertising support	13	30	31	13	14
f. Sales support	16	24	35	14	11
g. Shelf life	65	27	3	5	0
h. Consistent supply	71	23	2	5	0
i. Consistent quality	80	15	0	5	0
j. Taste	63	25	8	5	0
k. Color	50	36	8	6	0
l. Appearance	72	22	3	3	0
m. Texture	59	33	5	3	0
n. Delivery time	66	27	3	3	2

*Rows may not total 100% due to rounding.

Most respondents marked "1" for "very important" on many attributes. As may be seen by the few answers on "5" very few of the attributes are "not important." Closer examination of the numbers shows that consistent quality, appearance, and consistent supply are heavily rated as "very important." The least important attributes are retail advertising decisions, sales support, advertising support, and, only somewhat more important, customer requests. The highly rated attributes concern product quality, and the lower rated attributes relate to marketing activities.

The high response to "very important" was expected since most people believe if a product attribute is important at all, it is very important. To distinguish among the many very important attributes respondents were asked to identify the three most important attributes from the list. The last column in the table is the total percentage of respondents who mentioned each attribute most, second most, or third most important.

	Most Important %	2nd Most Important %	3rd Most Important %	Total Mention %
a. Competitive price	16	22	11	49
b. Consistent price	5	14	7	26
c. Retail advertising decisions	0	0	1	1
d. Customer requests	5	1	3	9
e. Advertising support	1	0	3	4
f. Sales support	0	1	0	1
g. Shelf life	3	7	7	17
h. Consistent supply	0	11	24	35
i. Consistent quality	43	18	8	69
j. Taste	1	4	0	5
k. Color	1	0	3	4
l. Appearance	4	5	10	19
m. Texture	0	0	0	0
n. Delivery time	5	1	5	11

*Columns may not total 100% due to rounding and non-response to the question.

The overwhelmingly most important attribute is consistent quality. Competitive price is the second most frequently mentioned "most important" concern. Consistent supply and consistent price both were "most important" more often than appearance, which is more highly rated in the previous table. This may be interpreted to mean that there is a strong tendency to say appearance is very important but other issues are more important.

SECTION II

SURVEY RESULTS FROM SEAFOOD RETAILERS WHO DISTRIBUTE FRESH WATER, FARM-RAISED RAINBOW TROUT

Of the 58 retailers who completed analyzable surveys, 43 handle fresh water, farm-raised rainbow trout as part of their product line; 15 said they never sell trout. Since many of those who returned unusable surveys indicate they do not handle trout it may be surmised that a greater proportion of the non-respondents do not carry trout. This section will analyze the attitudes of those retailers who sell rainbow trout at least some time. There are several categories of retailers included in this survey: specialty fish markets, seafood departments in groceries, and grocery meat departments which carry fish as part of their product line. Under half (41.9%) of the retailers who handle fresh water, farm-raised rainbow trout indicate that they always sell trout, 25.6% sell trout frequently, and 32.6% sell trout infrequently.

The questions in this section were designed to analyze the retailers' attitudes toward the same marketing issues that were covered in Section I from the distributors point of view.

Retail Seafood Marketing Practices

A set of questions was asked to identify the level of marketing support functions retailers receive from distributors, and, in some cases, how much customers want them. Each question asked them to indicate the frequency for which each of the services is wanted or received.

Research Support.

1. Your suppliers provide consumer survey information to you.

	%
Always	2.4
Frequently	19.0
Infrequently	54.8
Never	23.8

In Section I over 75% of the distributors said they never conducted surveys of retailers' consumers. The retail sample shows that only 23.8 never receive consumer survey information from their suppliers. This may mean that they more often patronize those who provide research service, or that they receive research support from suppliers of products other than seafood. In either case there is a higher retail use of research than the distributor respondents provide. Even so, the majority (54.8) receive information infrequently and only 21.4% get regular consumer research information from suppliers.

2. You conduct surveys of your consumers.

	%
Always	2.4
Frequently	26.2
Infrequently	40.5
Never	31.0

More retailers frequently conduct their own research (28.6%) than receive it from their suppliers. On the other hand, more retailers never conduct their own research (31%) than never receive research from their distributors (23.8%).

The overall consumer research activity is relatively low and most retailers are not well informed about their markets. What retail research is done is spread over their entire product line. If information about consumer preferences for trout or about uses of trout is going to reach most retail buyers it appears it will be unlikely to reach them from the efforts of either the distributors or the retailers. This leaves the responsibility to the trout industry itself.

Advertising and Promotion Support.

1. Your suppliers do in-store demonstrations for you.

	%
Frequently	7.1
Infrequently	45.2
Never	47.6

The low number of retailers with demonstrations by suppliers is direct confirmation of the low level reported by the distributors.

2. Your suppliers help you prepare specials advertising.

	%
Always	17.5
Frequently	35.0
Infrequently	35.0
Never	12.5

A higher proportion of retailers (52.5%) are receiving regular help preparing specials advertising than the distributors report giving (27.1%). Only 12.5% never receive help compared to 50% of the distributors who say they offer no help. Seafood distributors provide less help than retailers receive from other suppliers.

3. Your suppliers initiate specific product promotions.

	%
Always	2.5
Frequently	37.5
Infrequently	47.5
Never	12.5

Suppliers for 40% of the retailers regularly initiate product promotions. Only 12.5% of retailers say this is never the case. This again is a higher proportion receiving service than the proportion of seafood suppliers offering it.

The next three questions ask about specific product promotions and their desirability.

4. You want posters promoting the products you sell.

	%
Always	36.6
Frequently	31.7
Infrequently	19.5
Never	12.2

There is a strong demand for promotional posters. Only 12.2% never want them, 68.3% want them regularly, with 36.6% wanting them always.

5. Customers request pamphlets that suppliers make available.

	%
Always	14.3
Frequently	31.0
Infrequently	35.7
Never	19.0

Retailers have a solid demand for pamphlets, although at a somewhat lesser frequency. Still, 44.3% want them regularly. Only 19% do not want them.

6. Customers request recipes for the products you carry.

	%
Always	31.0
Frequently	50.0
Infrequently	19.0

Recipes are in even greater demand then either pamphlets or posters. All (100%) want recipes at some time. A large majority want them regularly (81%).

The high demand for sales promotion material and the low frequency of supply provided indicates a potential marketing action which should be well received.

Processor Promotion Support.

1. You work with seafood and fish processors to develop promotions.

	%
Always	9.5
Frequently	33.3
Infrequently	31.0
Never	26.2

If distributors do not provide support, the processors may have to initiate the support activities. In the case of 42.8% of the retailers the processors do develop promotions regularly, and 31% receive infrequent help. Trout processors can observe the reported services received (and therefore expected) by retailers in this study to evaluate their own competitive advantage or disadvantage in the sale of their product lines.

Rainbow Trout Market Factors

Each respondent was asked to indicate the level of agreement with a number of statements which evaluate attitudes toward the market factors that influenced the sale of rainbow trout. Areas covered include demand, general product attributes, distributor policies, advertising support, consumer response, and attitudes toward red meated trout.

Demand.

1. I sell substantially more trout now than a year ago.

	%
Strongly Agree	7.3
Agree	29.3
Neither	36.6
Disagree	17.1
Strongly Disagree	9.8

As with distributors there appears to be divergent experiences with trout sales in the past. Growth was experienced by 32.8% as indicated by agreement, no change by 36.6%, and disagreement may be interpreted as 26.9% experiencing a decline in trout sales.

2. The supply of trout is stable through the year.

	%
Strongly Agree	19.0
Agree	52.4
Neither	16.7
Disagree	9.5
Strongly Disagree	2.4

There is strong agreement that the supply of trout is stable. This confirms that stable supply is one of the most positive attributes in the trout industry at both the retail and wholesale level.

3. I order about the same amount of trout every month.

	%
Strongly Agree	7.1
Agree	42.9
Neither	16.7
Disagree	26.2
Strongly Disagree	7.1

Although only 7.1% strongly agree, 50% do agree that they order about the same amount of trout each month. The pattern is not much different from the order frequencies reported by distributors. Of those who disagree 33.3% are infrequent sellers and do not make trout a consistent part of their product offering.

4. The price of trout is stable through the year.

	%
Strongly Agree	9.5
Agree	54.8
Neither	23.8
Disagree	9.5
Strongly Disagree	2.4

In general, retailers agree (64.3%) that the price is stable through the year. A greater proportion disagree (11.9%) than do distributors. This may indicate that distributors adjust prices more than processors or that retailers are more sensitive to price changes by the time they reach the store level of the channel.

5. Demand for trout will grow in the immediate future.

	%
Strongly Agree	14.6
Agree	17.1
Neither	53.7
Disagree	12.2
Strongly Disagree	2.4

Much like distributors, over half the retailers do not see any change in the future demand for trout in retail stores. Proportionately more anticipate growth (31.1%) than do not (14.6%).

7. Trout is generally a high priced product.

	%
Strongly Agree	7.1
Agree	21.4
Neither	35.7
Disagree	31.0
Strongly Disagree	4.8

While few (14.1%) distributors say trout is a high priced product, 28.5% of the retailers say it is high priced. There are 35.8% of retailers who disagree, but this is less than the 59.1% disagreement at the wholesale level. There are either two different perceptions of what is high priced, or relative price differences in seafood distribution are less than in retail seafood. Or, perhaps, trout is relatively priced higher to the retailer than it is to the distributor. Whatever the source, retailers are more likely to perceive trout as a high priced product than their distributors. A lack of congruence in pricing perception may cause reduced demand from those viewing trout as high priced.

General Product Attributes.

1. Trout has a unique flavor.

	%
Strongly Agree	4.8
Agree	64.3
Neither	23.8
Disagree	7.1
Strongly Disagree	0.0

A majority of 69.2% believe trout has a unique flavor. This is a greater proportion that for distributors (57.7%). Retailers are closer to the end user. The fact that retailers see more uniqueness than distributors indicates that at least some form that perception independent from information provided by their suppliers. Marketing image improvement efforts which depend on distributors to be advocates for trout may be diluted before reaching the intended audience.

2. Trout suppliers provide a consistently high level of quality.

	%
Strongly Agree	7.1
Agree	64.3
Neither	21.4
Disagree	2.4
Strongly Disagree	4.8

As with distributors, there is a high level of agreement (71.4%) that trout suppliers provide a consistently high level of quality. Very few disagree.

3. Trout maintains its freshness well through distribution.

	%
Strongly Agree	7.1
Agree	52.4
Neither	19.0
Disagree	16.7
Strongly Disagree	4.8

The majority (59.5%) agree that trout maintains its freshness. There may be some cause for concern at the retail level because the agreement is less than the distributors agreement (79%) and the disagreement by retailers (20.5%) exceeds disagreement by distributors (11.3%). Some of the image of freshness is lost by the time the product reaches the retailer.

4. Trout processing should have mandatory government food inspections.

	%
Strongly Agree	26.2
Agree	40.5
Neither	19.0
Disagree	14.3
Strongly Disagree	0.0

Retailers are quite supportive of the concept of mandatory food inspections. Their support level exceeds the distributors'. Retailer proximity to consumers makes their opinions important to the trout industry.

5. Removal of pin bones is an important product option.

	%
Strongly Agree	21.4
Agree	40.5
Neither	26.2
Disagree	11.9
Strongly Disagree	0.0

With 61.9% agreeing that pin bone removal is an important product option and only 11.9% disagreeing, distributor findings that the availability of the option of pin bones being removed are confirmed. This could substantially enhance the competitive strength of suppliers who can deliver such a finished product.

6. Trout is attractive in a full service case.

	%
Strongly Agree	19.5
Agree	68.3
Neither	4.9
Disagree	7.3
Strongly Disagree	0.0

7. Trout is attractive in a self-service case.

	%
Strongly Agree	9.8
Agree	43.9
Neither	22.0
Disagree	22.0
Strongly Disagree	2.4

These two questions were designed to confirm the positive perception distributors had toward the retail attractiveness of trout displays (85.5%). The positive image for full service cases is consistent (87.7%), with only 7.3% disagreeing that they are attractive. The image in the self-service case is not as positive. Although, a slight majority (53.7%) do agree that trout is attractive in the self-service case, the 24.4% who disagree indicates that there is a presentation problem in the minds of a substantial segment of the retail market.

8. I prefer frozen trout to fresh.

	%
Strongly Agree	0.0
Agree	7.1
Neither	7.1
Disagree	33.3
Strongly Disagree	52.4

Although distributors disagree that retailers prefer frozen trout (68.1), they are not as often in disagreement as the retailers (85.7%). The preference is overwhelmingly in favor of fresh. This should give a substantial market advantage to fresh and a handicap to frozen trout sales.

<u>Distributor Policies</u>.

1. I buy from more than one trout supplier.

	%
Strongly Agree	0.0
Agree	35.7
Neither	14.3
Disagree	35.7
Strongly Disagree	14.3

2. All trout suppliers provide the same quality.

	%
Strongly Agree	0.0
Agree	14.6
Neither	39.0
Disagree	36.6
Strongly Disagree	9.8

3. All trout suppliers provide the same level of service.

	%
Strongly Agree	0.0
Agree	19.5
Neither	34.1
Disagree	36.6
Strongly Disagree	9.8

Although there is a low level of agreement that trout suppliers are the same in quality (14.6%) and service (19.5); 35.7% buy from only one supplier. More buy from more than one supplier (50%), which is consistent with their disagreement with the statement that all are the same in quality (46.4%) and service (46.4%).

Advertising Support.

1. The trout industry provides good advertising support.

	%
Strongly Agree	0.0
Agree	14.3
Neither	26.2
Disagree	42.9
Strongly Disagree	16.7

Retailers are quite critical of trout industry advertising support with 59.6% disagreeing that it is good. This is higher than the 36.6% critical level of distributors. The major difference is the large number of neither responses by distributors. There is a higher level of advertising support expectations to attain "good" in the minds of retailers.

2. Fewer deals are offered to support trout sales than for other seafood and fish species.

	%
Strongly Agree	16.7
Agree	42.9
Neither	31.0
Disagree	9.5
Strongly Disagree	0.0

This statement directly compares trout suppliers with other seafood and fish suppliers. Many more agree (59.6%) that trout suppliers make fewer deals than competitors. Only 9.5% disagree. This is more critical than distributors, who were negative (42.3% agree and 12.7% disagree).

3. Trout suppliers provide useful sales support materials (pamphlets, recipes, etc.).

	%
Strongly Agree	2.4
Agree	24.4
Neither	22.0
Disagree	29.3
Strongly Disagree	22.0

Over half (51.3%) do not believe trout suppliers provide useful sales support materials. Nonetheless, 26.8% do agree. A minority is receiving good support. This may indicate that support is more a function of the individual supplier that a retailer works with. The overall image is of weak industry support.

4. More point of sale materials are needed from trout suppliers.

	%
Strongly Agree	31.0
Agree	47.6
Neither	11.9
Disagree	7.1
Strongly Disagree	2.4

Regardless of the usefulness perceived in the available materials there is strong agreement that more are needed (78.6%).

The overall analysis of retailers perception of advertising support is that retailers would strongly welcome more industry support in every form.

Consumer Response.

1. Consumers are reluctant to buy fish they can catch locally.

	%
Strongly Agree	7.1
Agree	26.2
Neither	16.7
Disagree	38.1
Strongly Disagree	11.9

More retailers disagree (50%) than agree (33.3%) that consumers are reluctant to buy fish they can catch locally. The fact that one third does agree indicates that the are enough who believe this to be a problem that in, at least, some markets this is an obstacle to regular retail stocking of quantities of trout.

2. Trout is harder for consumers to prepare than other fish.

	%
Strongly Agree	2.4
Agree	12.2
Neither	12.2
Disagree	63.4
Strongly Disagree	9.8

Similar to distributors, the majority of retailers do not perceive trout to be hard for consumers to prepare.

3. Consumers prefer trout with the head removed.

	%
Strongly Agree	23.8
Agree	23.8
Neither	28.6
Disagree	23.8
Strongly Disagree	0.0

The overall retail agreement (47.6%) and disagreement (23.8%) with the statement that consumers prefer trout with the head removed is similar to the perceptions of distributors. The one difference is that the degree of strong agreement that consumers want the head removed is higher in the retail store (23.8% compared to 10.4%). Where the feelings are strongly held, they are against the head on the trout. The segment that disagrees is large enough to indicate that there is a market for trout with the head on as well.

4. Consumers prefer boned trout.

	%
Strongly Agree	21.4
Agree	26.2
Neither	35.7
Disagree	14.3
Strongly Disagree	2.4

More retailers agree that consumers prefer boned trout (47.6%). The 16.7% who disagree shows there is a smaller market for trout with the bone in.

5. Consumers generally prefer the flavor of trout to other fish.

	%
Strongly Agree	0.0
Agree	9.5
Neither	57.1
Disagree	33.3
Strongly Disagree	0.0

Retailers are less likely to agree that retail consumers prefer the flavor of trout to other fish (9.5%) than distributors (14.7%). In fact, retailers disagree stronger (33.3% compared to 26.5%). The perception that there is a natural taste advantage for trout is not held by either distributors or retailers who carry trout. To the trade, trout is just another fish in the case as far as taste is concerned.

Red Meat.

1. Red meated trout tastes better than light colored trout.

	%
Strongly Agree	7.3
Agree	24.4
Neither	61.0
Disagree	7.3

More retailers agree red meated trout has a taste advantage over regular trout (31.7%) than disagree (7.3%). This is the opposite of the perception held by distributors (10.1% agree and 23.2% disagree). Retailers see a market advantage not understood by distributors. This may indicate the market may not be well served by distributors.

2. The flavor of red meated trout is preferred to salmon by most consumers.

	%
Agree	7.3
Neither	53.7
Disagree	26.8
Strongly Disagree	12.2

Few agree (7.3%) that red meated trout has a flavor advantage over salmon by most consumers. More disagree (39%). The majority of retailers neither agree nor disagree.

3. Red meated trout sells at a higher price than light colored trout.

	%
Strongly Agree	4.8
Agree	33.3
Neither	54.8
Disagree	4.8
Strongly Disagree	2.4

While more agree (38.1%) that red meated trout sells at a higher price than disagree (7.2%), the proportions are consistent with the numbers who believe that there is a flavor advantage.

4. Red meated trout is readily substituted for pan sized salmon due to trout's lower price.

	%
Agree	26.2
Neither	42.9
Disagree	19.0
Strongly Disagree	11.9

5. Pan sized salmon is readily substituted for trout for most consumers

	%
Agree	9.5
Neither	54.8
Disagree	21.4
Strongly Disagree	14.3

Retailers are less likely to agree (26.2%) to the ready substitutability of red meated trout for pan sized salmon due to trout's lower price than are distributors (36.2%). It is unclear whether this is due to a perception of greater difference in the products or a lower probability of red meated trout selling at a lower price to or by retailers.

Retailers do not agree (35.7%) that pan sized salmon is readily substituted for trout.

Decision Criteria

Retailers also were asked to evaluate the importance they place on a number of specific attributes as they make decisions when buying trout. The numbers in the table represents the proportion who marked each importance level.

	Percentages				
	Very Important				Not Important
	1	2	3	4	5
a. Competitive price	42	26	21	7	5
b. Consistent price	33	29	31	5	2
c. Retail advertising decisions	37	21	28	9	5
d. Customer requests	40	30	16	7	7
e. Advertising support	26	33	31	2	7
f. Sales support	26	38	26	5	5
g. Shelf life	67	26	5	2	0
h. Consistent supply	51	37	9	2	0
i. Consistent quality	79	19	2	0	0
j. Taste	69	19	12	0	0
k. Color	64	26	7	0	2
l. Appearance	81	19	0	0	0
m. Texture	69	17	10	5	0
n. Delivery time	55	26	19	0	0

*Rows may not total 100% due to rounding.

The highest ranked attributes are appearance and consistent quality, much like the distributors ranking. The next closest are texture, taste, and shelf life. The same four marketing attributes ranked lowest by distributors--retail advertising decisions, customer requests, advertising support, and sales support--are the lowest ranked attributes for retailers. However, the overall importance level is higher in every case.

	Most Important %	2nd Most Important %	3rd Most Important %	Total Mention %
a. Competitive price	19	12	7	38
b. Consistent price	2	0	5	7
c. Retail advertising decisions	5	0	2	7
d. Customer requests	14	2	9	25
e. Advertising support	0	5	2	7
f. Sales support	0	2	2	4
g. Shelf life	7	5	28	40
h. Consistent supply	0	14	7	21
i. Consistent quality	44	16	5	65
j. Taste	0	9	2	11
k. Color	0	5	7	12
l. Appearance	5	21	12	38
m. Texture	0	0	2	2
n. Delivery time	0	5	2	7

*Columns may not total 100% due to rounding and non-response to the question.

As with distributors, consistent quality is the most important attribute. Although few (7%) call shelf life the most important, it is the second most frequent attribute to be one mentioned as one of the three most important. Competitive price is second most often "most important." Appearance, which is of lesser importance to distributors, ties with comeptitive prices in total mentions but is not the "most important" very often (5%). Apparently shelf life and appearance rate higher in the total decision set for retailers.

CONCLUSION

A concern of the trout industry has been the slow growth of fresh water, farm-raised rainbow trout. This research expands the knowledge of how farmed rainbow trout is perceived by both the wholesale and retail levels of distribution. Little consumer research is being conducted by or given to either level of trout sellers.

Trout is seen as a uniquely flavored product with stable quality, prices, and supply. Both wholesale distributors and retailers see different quality and service among suppliers. Neither distributors nor retailers is satisfied with the advertising support received from the trout industry and they would like to see more of every type of sales and advertising support. The perception that there is a natural taste advantage for trout is not held by either distributors or retailers who carry trout. To the trade, trout is just another fish in the case as far as taste is concerned.

Retailers see red meated trout as a better product than do distributors and are more likely to see it as a substitute for pan sized salmon. However, the overall perception is that red trout and pan salmon are not ready substitutes.

Consistent quality is the most important decision attribute when buying trout for both retailers and wholesalers. Other pricing and product quality attributes rate high. Marketing attributes rate lower but are rated somewhat higher by retailers.

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