

Paddlefish Tasting by Lexington and Louisville Chefs

Extension number 2001-15D

November 2001

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Introduction

The paddlefish is one of the largest fish in the United States; full grown, it can weigh over 200 pounds. It is a filter feeder that consumes zooplankton from the water. Paddlefish have been used for years for their roe or eggs, which are used to make high value caviar. More recently, paddlefish have been raised through reservoir ranching and polyculture with catfish.

The University of Kentucky Department of Agricultural Economics and the Kentucky State University Aquaculture Department have been working on the production and marketing aspects of this unique fish. This joint project commenced in 1999 and is still ongoing. As concerns about the future of Kentucky's tobacco production industry mount, numerous alternative enterprises are being explored. Paddlefish production has the potential to be profitable for Kentucky farmers if adequate markets exist. The goal of this study was to evaluate the potential of the foodservice market for paddlefish.

Methodology

Fresh paddlefish was delivered to chefs in Lexington and Louisville as part of this joint project between the University of Kentucky and Kentucky State University. Kentucky chefs were targeted in order to evaluate the potential of the Kentucky foodservice market. Paddlefish was delivered to 22 restaurant establishments in the two cities. In total, 9 responses were received from chefs in Lexington and 9 were received from chefs in Louisville.

Each chef was asked to prepare the fish as they wished and respond to a questionnaire about the experience. Chefs were asked questions about how they prepared the product, how satisfied they were with the quality, how they would suggest promoting it, and what level of volume they would purchase if paddlefish were available to them. Results of this survey are summarized in the following section.

Results

Among the 18 responding chefs, the fish was prepared in ten distinctly different ways (baked, sautéed, fried, smoked, grilled, broiled, pan seared, poached, roasted, and hot smoked). Only 41% of the chefs had prior experience with Paddlefish. On average, Lexington chefs had more experience than chefs in Louisville.

% of Chefs with prior paddlefish experience

Lexington	44.4%
Louisville	37.5%
Overall	41.2%

A Likert scale was used to evaluate attributes of the paddlefish meat; 1 was considered extremely undesirable while a 6 was considered to be exceptional. Chefs were asked to rate the product they received based on six attributes. The most favorable attribute was freshness, followed by appearance and then cooking ease. Texture was considered the least desirable trait of the six. Lexington chefs scored paddlefish slightly lower than did Louisville chefs. Results from these questions are summarized below.

Average response from Chefs (1-6)

	Flavor	Texture	Moistness	Freshness	Appearance	Cooking Ease
Lexington Chefs	3.78	3.33	4.00	4.44	4.00	4.11
Louisville Chefs	3.75	3.94	4.06	5.13	4.75	4.5
Average	3.76	3.62	4.03	4.76	4.35	4.29

Respondents were asked to name their “Gold Standard” seafood product; responses to this question were quite varied. Halibut, Sea Bass, salmon, and Dover Sole were echoed by more than one respondent. Chefs were then asked to compare the quality of the paddlefish they sampled to that of their gold standard. Three chefs indicated that the paddlefish was “much inferior”, 11 indicated that paddlefish was “slightly inferior”, and two indicated that paddlefish was “about equal” to their gold standard. None indicated that paddlefish was superior to their gold standard.

Number of Respondents by category

	Much inferior	Slightly inferior	About equal	Superior
Lexington	1	5	1	0
Louisville	2	6	1	0
Overall	3	11	2	0

After being asked to compare the quality of paddlefish to their gold standard seafood product, chefs were asked how paddlefish should be priced in comparison with that product. Most indicated that paddlefish should be priced at 50-75% the price of their gold standard. These responses are also summarized below.

Number of Respondents by category

	50%	75%	Same price	Would pay premium
Lexington	4	2	0	1
Louisville	6	3	0	0
Overall	10	5	0	1

When asked what the most dominant positive characteristic of paddlefish was, texture was the most common response. Also mentioned were freshness, appearance, locally produced, and the ability of paddlefish to take on the flavor of sauces. When asked about the most negative characteristic of paddlefish, the most common response was the taste. Also mentioned were name, texture, and an inability to stand alone.

Chefs were also asked if the fact that paddlefish was “locally produced” was an attribute that would be important to consumer acceptance. Only one respondent answered “no” to this question. Most chefs felt that paddlefish would be an occasional special on their menu, although two chefs indicated that paddlefish should be a regular menu item.

In total, 12 of the 18 chefs gave responses that could be used to determine yearly use of the product. These figures were totaled, to determine that the 12 chefs would purchase nearly 5000 pounds of paddlefish per year. This converts to around 20,000 pounds of live fish or roughly 2,500 fish weighing 8 pounds. It was generally thought that there would be high and low demand seasons for paddlefish, with summer being the strongest market.

All respondents indicated that the chef was involved in the purchasing process. Fourteen chefs indicated that they always made purchasing decisions, while 3 indicated that they made purchasing decisions with others involved. Bluefin seafood was the most common supplier by far, with Mid-west a distant second. Other suppliers mentioned were Sysco, Alliant, and Critfeild.

When asked about their relationship with these vendors, 69% indicated that vendors influence their menu somewhat by their offerings. Additionally, all respondents indicated that they could influence their vendors to carry certain items.

	Vendors influence their menu	Influence vendors to carry certain items
Lexington	66.7%	100%
Louisville	71.4%	100%
Overall	69.2%	100%

When asked about the form they preferred to receive paddlefish there was a strong preference for fresh over frozen. Chefs also revealed a strong preference for filets over steaks. Five respondents were receptive to pre-portioned products between 6 and 8 pounds per portion (see table below).

	Fresh	Frozen	Fillets	Steaks	Pre-portioned
Lexington	8	1	9	1	2
Louisville	9	0	6	1	3
Overall	17	1	15	2	5

Conclusions and Implications

Based on responses from chefs, it appears that further study of the foodservice market for paddlefish is warranted. Responses were quite positive and most chefs showed interest in having paddlefish on their menu at least for occasional specials. Each chef indicated that they could influence their vendors to carry new products. If significant interest exists from chefs, it seems logical that a purveyor could be located to distribute the product.

When chefs were asked what preparation style that paddlefish was best suited for, there were 8 different responses. When asked what seafood product was most similar to paddlefish, 9 different responses were given. These responses suggest that paddlefish is versatile and unique, two attributes that are very important when trying to differentiate a product. These attributes of versatility and uniqueness will be evaluated in further study and considered in the development of suggested marketing strategies.

Based on these responses, it appears that there is potential for the marketing of Kentucky raised paddlefish. These survey results suggest a need for further study into the areas of: pricing, distribution, seasonality, and product form. We intend to share these results with distributors in the area to determine their willingness to carry paddlefish as part of their offerings.

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