

RESEARCH/PD ANNUAL REPORT - PROGRESS REPORT

2015 annual report - progress

Stanford Goto

Keta Project

R/SFA/PD-1

Submitted On: 04/28/2016 01:23:59 AM

METRICS & MEASURES

Metric/Measure	Value	Note
Acres of coastal habitat		
Fishermen and seafood industry personnel		
Communities - economic and environmental development		
Stakeholders - sustainable approaches		
Informal education programs		
Stakeholders who receive information		
Volunteer hours		
P-12 students reached		
P-12 educators		

REQUESTED INFORMATION

Publications

No **Publications** information reported

Students Supported

Vivian Dang (New Student)
vdang88@gmail.com
Western Washington University, College of Business and Economics

Field of Study: Business
Advisor: Stephen Senge
Degree Type: MBA
Degree Year: 2016

Student Project Title:

Involvement With Sea Grant This Period (capstone, fellow, intern, etc.): research assistar

Post-Graduation Plans (employer, grad school, etc.):

Was this thesis/dissertation supported by Sea Grant?: No

Thesis / Dissertation:

New or Continuing?: New

Degree awarded this reporting period?: No

Financially supported?: Yes

Joseph Anderson (New Student)

ander616@students.wvu.edu

Western Washington University, Health and Community Studies

Field of Study: Adult and Higher Education

Advisor: Stan Goto

Degree Type: MS

Degree Year: 2016

Student Project Title:

Involvement With Sea Grant This Period (capstone, fellow, intern, etc.): research assistar

Post-Graduation Plans (employer, grad school, etc.): Applying for doctoral program

Was this thesis/dissertation supported by Sea Grant?: No

Thesis / Dissertation:

New or Continuing?: New

Degree awarded this reporting period?: No

Financially supported?: Yes

Melina Zahalka (New Student)

melinazahalka@gmail.com

Western Washington University, Health and Community Studies

Field of Study: Adult and Higher Education

Advisor: Stan Goto

Degree Type: MS

Degree Year: 2015

Student Project Title:

Involvement With Sea Grant This Period (capstone, fellow, intern, etc.): research assistar

Post-Graduation Plans (employer, grad school, etc.): Applying for doctoral program

Was this thesis/dissertation supported by Sea Grant?: No

Thesis / Dissertation:

New or Continuing?: New

Degree awarded this reporting period?: Yes

Financially supported?: Yes

Narratives

Keta Project Interim Report

Uploaded File: [Sea_Grant_Interim_Report_04_25_16_Edit_2_0.pdf](#)

Partners This Period

Puget Sound Salmon Commission

Types: Industry/Business

Scale: REGIONAL

Notes:

STANDARD QUESTIONS

Impacts and Accomplishments

(1)

Type	accomplishment
Title	Washington Sea Grant investigators use a new Amazon service to collect information on seafood consumers' purchasing behaviors
Relevance	Seafood retailers in the Pacific Northwest lack up-to-date research on salmon-buying trends. Existing studies generally are not specific to Washington and Oregon, and they typically do not differentiate among salmon species. In addition, information on consumer pricing perceptions is very limited. Better consumer data would assist local seafood retailers to make informed decisions about selling salmon products that are not well established in the marketplace.
Response	A Washington Sea Grant-supported study focused on consumer perceptions of keta (chum) and pink salmon, as well as consumer attitudes toward local fishermen and sustainable fishing. Researchers developed a survey for seafood consumers that was pilot tested at an independent grocery store and a specialty seafood outlet in Washington. Consulting with WSG staff and the Puget Sound Salmon Commission, researchers evaluated the initial results and revised the survey to include price-point questions. The final survey instrument was administered electronically through Amazon's Mechanical Turk, an online service that provides access to a scalable, low-cost workforce. The survey was distributed in Washington and Oregon, with a national sample collected for comparison purposes.
Results	Researchers currently are evaluating the 600 combined Washington and Oregon responses. Because the national sample was relatively small and geographically uneven, the team chose not to expand it. They concluded that Mechanical Turk was a useful tool for surveying consumers and learned that point-of-sales surveys were less efficient.

Recap	Washington Sea Grant-funded researchers employed innovative ways to gather information on consumers salmon-related perceptions to assist the industry in their marketing efforts.
Comments	
Primary Focus Area	Sustainable Fisheries and Aquaculture
Secondary Focus Areas	
Goals	
Partners	Puget Sound Salmon Commission Western Washington University
PI Draft	

Tools, Technologies, Information Services / Sea Grant Products

(1)

Description	Survey instrument - purchasing behaviors among seafood consumers.
Developed (in the reporting period)?	Yes
Used (in the reporting period)?	Yes
Used for EBM?	No
ELWD product?	No
Number of managers	0
Description/Names of managers	
Reported in previous year?	

Economic Impacts

No **Economic Impacts** information reported

Community Hazard Resilience

No **Community Hazard Resilience** information reported

Meetings, Workshops, Presentations

No **Meetings, Workshops, Presentations** information reported

Leveraged Funds

No **Leveraged Funds** information reported

Keta Project Interim Report

Project R/SFA/PD-1

Stan Goto, Principal Investigator

April 26, 2016

The Keta Project was designed to address gaps in existing research on purchasing behaviors among seafood consumers. These gaps include:

1. Undifferentiated consumer research that does not parse out consumer preferences for specific species of salmon;
2. Outdated or insufficient research on consumer perceptions of salmon pricing; and
3. Insufficient regional research that specifically addresses consumer preferences for salmon in Washington and Oregon.

Initially, the project employed four graduate students: two from the MBA program at WWU and two MEd students from Adult and Higher Education. Eventually, one of the MBA students left the project.

In consultation with the Puget Sound Salmon Commission (PSSC), the investigators developed an initial electronic survey instrument to be distributed to seafood consumers. This instrument addressed gap No. 1 above by including questions concerning the purchasing trends of keta (chum) salmon and pink salmon (two species of interest to PSSC). The investigators also developed point-of-sale items and informed consent materials per IRB requirements.

These items were pilot tested at an independent grocery store (two locations) and a seafood specialty retailer in Bellingham, Washington. At each retail outlet, point-of-sale materials were posted at the seafood counter. A display encouraged retail shoppers to take an electronic survey. A similar call for research participation was included in the grocery store's monthly newsletter. These efforts produced 138 survey responses.

The investigators solicited input from Washington Sea Grant representative, Pete Granger, who noted the importance of price point data. To address this concern (see gap No. 2), the investigators added questions to examine how much consumers were willing to pay for certain premium attributes (e.g., sustainably caught, locally sourced) of salmon products. Further refinements to the survey instrument were suggested by students and faculty in the MBA program at WWU.

A Mechanical Turk (MTurk) account was established with Amazon.com to solicit participation from paid survey takers. Several small trials were conducted (A) to test the link with the revised electronic survey and (B) to determine an appropriate financial incentive that would yield a sufficient sample size. A customized version of the survey was then administered to each of the following states: Washington, Oregon, and California. Additionally, a generic version was administered to all other states. Table One indicates the number of responses collected.

Table One: Survey Response Rates

	<i>Target Sample</i>	<i>Actual Sample Obtained</i>
West Coast (WA, OR, CA)	500	599 total (Including 165 WA MTurk, 138 WA point-of-sale, 86 OR, 210 CA)
United States (minus WA, OR, CA)	800	311

The original Washington Sea Grant proposal indicated that the survey would be administered through social media as part of a multi-pronged data collection strategy. This method was pilot tested via the grocery newsletter. However, the investigators have not pursued further distribution via social media because the target sample size for the West Coast was met.

The national sample is small and not geographically representative. Responses are unevenly distributed by region and skewed toward certain demographics (e.g., young, lower income). This is due in part to the nature of the MTurk worker pool and the structure of the MTurk interface. While it would be possible to administer the national survey again on MTurk, the investigators do not recommend this action for these reasons:

- The survey would unavoidably be administered to the same potential pool of survey takers, increasing the likelihood of duplicate submissions.
- Previous administrations of this survey on MTurk suggest that response rates top out at about 300 when a \$1.50 incentive is offered. To add 500 more responses to the national sample, the incentive would need to be increased substantially, perhaps to \$2.00 or more. This would be in addition to the \$180 MTurk service fee per 300 responses. The total cost would exceed the \$473 remaining in the data collection budget.
- The uneven geographic distribution of the national sample suggests that large parts of the country don't know or care enough about salmon consumption to respond to a salmon buying survey. This would make it exceedingly difficult to obtain a representative sample from all states.

The third challenge detailed in the list above (uneven interest in salmon consumption across the country) would be an issue in any attempt to collect additional national data via social media or other means. Therefore, the investigators believe it would impractical to seek a larger and more geographically representative sample at the national level. The current national sample of 311 will be

analyzed with a prominent caveat that this is not representative of the nation as a whole. This approach is justified because the national analysis is not the main focus of this study.

The investigators believe that the West Coast sample is sufficiently large and demographically representative to warrant moving on to the analysis phase. The target sample of 500 was exceeded by nearly 100. Data from Washington and Oregon will be combined into one Pacific Northwest dataset as requested by the PSSC. Data from California will be analyzed as a discrete dataset. For each dataset, the investigators will test a set of correlations based on an initial analysis of the pilot data. The correlational analysis will be supplemented with a qualitative analysis of the short-answer data included in the survey instrument. The demographic data will be juxtaposed with US Census data to verify the extent to which the sample is representative of the regional population. The investigators will produce a report that includes a literature review and a discussion of findings.