

AQUACULTURE: NCRAC AND MARKETMAKER™ COLLABORATION

Chairperson: Joseph E. Morris, Iowa State University

Extension Liaison: Richard D. Clayton, Iowa State University

Funding Request: \$23,565

Duration: 1 year (September 1, 2010 – August 31, 2011)

Objectives:

1. Conduct a survey of all North Central Region (NCR) aquaculture producers for data that will be assimilated into the MarketMaker™ system.
2. Undertake outreach activities to educate and register NCR producers into the MarketMaker™ system.
3. Develop a “how to” tutorial case study tool that will instruct NCR producers on how to conduct market research using the MarketMaker™ system.

Proposed Budgets:

Institution	Principal Investigators	Objec- tives	Year 1	Total
Iowa State University	Joseph E. Morris & Daniel J. Burden	1-3	\$23,565	\$23,565

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JUSTIFICATION

With respect to production coordination, marketing outreach and production demographics, North Central Region (NCR) aquaculture producers are an underserved producer group. This project will increase producer visibility, enabling producers to create easily executed market evaluations and customer-contact strategies. These goals will be achieved by utilizing the rapidly growing Web-based marketing tool MarketMaker™. MarketMaker™ is a national partnership of land grant institutions and State Departments of Agriculture dedicated to the development of a comprehensive interactive data base of food industry marketing and business data. It is currently one of the most extensive collections of searchable food industry related data in the country. All the information can be mapped and queried by the user. The site was created in 2004 by a team from University of Illinois Extension with the intention of building an electronic infrastructure that would more easily connect food producing farmers with economically viable new markets. The site would also serve as an aid in the development of quality driven food supply chains. Through the development of aquaculture-specific training materials, instructors will be able to demonstrate the capabilities of MarketMaker™ as a research and marketing tool to NCRAC producers. It will also serve as a tool for professionals from Iowa State University's (ISU's) Extension Value-added Agriculture Program (VAAP) and the North Central Regional Aquaculture Center (NCRAC) to develop appropriate strategies to assist the overall industry, as well as more targeted plans for specific producers, regions, or production-system segments.

RELATED CURRENT AND PREVIOUS WORK

Market Maker™ is a computer-based multi-state agricultural-producer and agriculture-product buyer assistance tool developed by the University of Illinois Extension Service and currently co-coordinated with the ISU Extension VAAP with a portal in the national U.S. Department of Agriculture (USDA)-funded Agricultural Marketing Resource Center (AgMRC.org) maintained by the ISU Extension VAAP. Market Maker™ is a coordinated GPS-mapping and product-sales-data system that allows producers, buyers, distributors, and end-users to find one another, as well as to conduct pre-venture market research, identify potential customers, as well as potential competitors and cooperators. It is an intuitive and highly-visual map-type environment where detailed content information is only a mouse-button or keyboard click away.

Currently, Market Maker™ is one of the most innovative and extensive collections of searchable food-industry-related data in the country. The site continues to grow and adapt to meet the needs of all sectors of agriculture including aquaculture. Market Maker™ provides producers with the ability to identify processors, wholesalers, and retailers of fish and fish products, and buyers with the ability to query nearly two-dozen types of fish and fish products by an almost unlimited number of product attributes. As a result of recent discussions with several east coast and southern states that have recently joined or are interested in joining the Market Maker™ network, the site is being updated to give higher visibility and easier access to both aquaculture producers and products (processors and retailers).

May 2009 Market-Maker™ Statistics

- 13 states/regions participating:
 - Eight NCRAC states already included: Illinois, Indiana, Iowa, Michigan, Ohio, Nebraska, North Dakota, and South Dakota
 - Other states include: Colorado, Georgia, Kentucky, New York, Mississippi, South Carolina, and the District of Columbia,
 - States in process of joining: Arkansas, Florida
- Hits per month: 1,124,915
- Number of Users: 35,167
- Number of Producers: 5932
- Number of included business data sets: 331,376

NCRAC is one of the five Regional Aquaculture Centers established by Congress and administrated by the USDA National Institute of Food and Agriculture (USDA-NIFA) to promote a well developed and sustainable aquaculture industry in the United States. NCRAC is an administrative unit that serves a twelve-state region: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North

Dakota, Ohio, South Dakota, and Wisconsin. Some of the producers from states served by NCRAC have a presence in Market-Maker™, many do not. It is the intent of this proposal to update NCRAC producer information, collate it with existing Market-Maker™ profiles, and then provide easily accessible portals to those producers through various sites: Market Maker's™ Illinois (master site), USDA-ISU's AgMRC, Market Maker's™ various state portals, and through a portal that will be constructed for USDA-NCRAC. When completed, the data will reside within the Market-Maker™ system, but be accessible to any producer or aquaculture-product consumer through Market Maker™ or NCRAC.

In addition to the proposed project it is anticipated that components contained within will be complementary to the on-going Sea Grant project that seeks to develop an aquaculture awareness program for the United States. In the later project, the recently developed template for fish and seafood will be incorporated into the next version of Market-Maker™. This project is designed to focus more on aquaculture producers and their marketing efforts for the NCR. In addition, an on-going dialogue with all state programs that have incorporated Market-Maker™ in their programs will be maintained.

ANTICIPATED BENEFITS

This project will result in producer to consumer value-chain visibility that will immediately begin to address all of the five stated goals of the NCRAC program:

- Develop transferable (marketing/outreach)* technology to enable producers to be profitable;
- Disseminate relevant educational materials to achieve profitable margins of operation (through increased market exposure, visibility, outreach and delivery efficiency);
- Engage in research (cooperative market-research and outreach initiative that incorporates detailed industry value-chain data) partnerships between industry, universities, and public agencies;
- Deliver demonstrations and regular aquaculture extension programs (with respect to Market-Maker™ training and communication skills); and
- Foster open dialogue and networking throughout the NCR aquaculture community.

** Information in parenthesis qualifies the goal with respect to this proposed project.*

OBJECTIVES

1. Conduct a survey of all NCR aquaculture producers for data that will be assimilated into the MarketMaker™ system.
2. Undertake outreach activities to educate and register NCR producers into the MarketMaker™ system.
3. Develop a "how to" tutorial case study tool that will instruct NCR producers on how to conduct market research using the MarketMaker™ system.

PROCEDURES

Aquaculture Producer Data Component (Objective 1)

The first step in this project will be to contact all producers served by NCRAC by electronic or paper survey and follow-up all non-response or ambiguous survey responses with telephone inquiries. This will be tasked to NCRAC student workers. As the data set is assembled, it will be entered into the Market-Maker™ system via ISU's Extension VAAP student workers under the supervision of a Market-Maker™ staff specialist. Upon immediate completion of data collection and assimilation, USDA-AgMRC will nationally release newsletter and AgMRC profiles and press releases about the project to explain its impact and utility. Additionally, an electronic or paper description of the capabilities of the Market-Maker™ system will be provided to all participating producers.

NCRAC Market Maker Presence (Objective 2)

It is necessary for NRAC to participate as a Market-Maker™ sponsor. This would create a means by which producers from states not participating in the Market-Maker™ consortia would be visible and could be queried. For example, currently Minnesota is not part of the consortium. If a query for trout farms were entered, there would be no GPS-map view of results; however, there would be a text listing for the producers as a result of their NRAC affiliation.

Outreach Component (Objective 3)

A producer-outreach component of this project will be to develop a “how to” tutorial case study tool. This will instruct producers in the fundamentals of visualizing “their position on the landscape” and how to conduct local, regional, or specialized-market market-research using the Market Maker™ system. This tutorial will take the user through an introduction to Market Maker™ and how it uses coordinated GPS and product-sales-data. The producer will then interactively learn how to search for potential customers, competitors, and cooperators. The tutorial will cover ways in which to build potential customer call/contact lists, how to efficiently and systematically reach out to these potential customers, and how to manage contact lists. A final and often overlooked aspect of producer-to-customer outreach is personal-contact etiquette. The tutorial will include suggested templates for “cold-call” E-mail and telephone contacts, suggested techniques for friendly and effective verbal communication, and a discussion of effective and novel approaches to increase sales. A final section will cover post-contact follow-up communications. “Train-the-trainer” sessions will be conducted by ISU’s Extension VAAP staff to familiarize NCRAC outreach staff with the tutorial tools and how to present them to NCRAC clients. NCRAC will then disseminate these materials to their clients through site visits or regional meetings.

FACILITIES

The ISU VAAP provides unbiased, science-based information to help establish or expand agricultural-related businesses in Iowa. Whether it's a new start-up, or an established business wanting to expand, the VAAP works directly with the owners of the business.

PROJECT LEADERS

<u>State</u>	<u>Name/Institution</u>	<u>Area of Specialization</u>
Iowa	Daniel J. Burden Iowa State University	Value Added Agriculture
	Joseph E. Morris Iowa State University	Fish Culture/Pond Management

PARTICIPATING INSTITUTION AND PRINCIPAL INVESTIGATORS

Iowa State University (ISU)

Daniel J. Burden

Joseph E. Morris

PROPOSED ACTIVITIES FOR IOWA STATE UNIVERSITY

(Morris and Burden)

Major Actions for Each Objective

1. Development of producer lists.
 - a. Construction of inquiry, survey, and registration materials.
1. Individual Market Group Status and query capacity for NCRAC producers/members.
2. Outreach components consisting of data entry development of materials specific to regional aquaculture , i.e., tutorials, as well as train-the-trainer workshops and associated assessment and evaluations.

BUDGET

ORGANIZATION AND ADDRESS Department of Natural Resource Ecology and Management Iowa State University, Ames, IA 50011-3221 PROJECT DIRECTOR(S) Joseph E. Morris & Daniel J. Burden				USDA AWARD NO.				Year 1: Objectives 1-3			
				Duration Proposed Months: <u>12</u>	Duration Proposed Months: _____	Non-Federal Proposed Cost- Sharing/ Matching Funds (If required)		Non-federal Cost-Sharing/ Matching Funds Approved by CSREES (If Different)			
				Funds Requested by Proposer	Funds Approved by CSREES (If different)						
A. Salaries and Wages				CSREES FUNDED WORK MONTHS							
1. No. of Senior Personnel				Calendar	Academic	Summer					
a. ___ (Co)-PD(s)											
b. ___ Senior Associates											
2. No. of Other Personnel (Non-Faculty)				2.0			\$8,014				
a. <u>1</u> Research Associates-Postdoctorates											
b. ___ Other Professionals											
c. ___ Paraprofessionals											
d. ___ Graduate Students											
e. <u>2</u> Prebaccalaureate Students							\$1,658				
f. ___ Secretarial-Clerical											
g. ___ Technical, Shop and Other											
Total Salaries and Wages →							\$9,672				
B. Fringe Benefits (If charged as Direct Costs)							\$2,843				
C. Total Salaries, Wages, and Fringe Benefits (A plus B) →							\$12,515				
D. Nonexpendable Equipment (Attach supporting data. List items and dollar amounts for each item.)											
E. Materials and Supplies							\$ 400				
F. Travel							\$5,250				
G. Publication Costs/Page Charges											
H. Computer (ADPE) Costs											
I. Student Assistance/Support (Scholarships/fellowships, stipends/tuition, cost of education, etc. Attach list of items and dollar amounts for each item.)											
J. All Other Direct Costs (In budget narrative, list items and dollar amounts and provide supporting data for each item.)							\$5,400				
K. Total Direct Costs (C through I) →							\$23,565				
L. F&A/Indirect Costs. (If applicable, specify rate(s) and base(s) for on/off campus activity. Where both are involved, identify itemized costs in on/off campus bases.)											
M. Total Direct and F&A/Indirect Costs (J plus K) →							\$23,565				
N. Other →											
O. Total Amount of This Request →							\$23,565				
P. Carryover -- (If Applicable) Federal Funds: \$				Non-Federal funds: \$				Total \$			
Q. Cost Sharing/Matching (Breakdown of total amounts shown in line O)											
Cash (both Applicant and Third Party) →											
Non-Cash Contributions (both Applicant and Third Party) →											
NAME AND TITLE (Type or print)				SIGNATURE (required for revised budget only)				DATE			
Project Director											
Authorized Organizational Representative											
Signature (for optional use)											

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0524-0039. The time required to complete this information collection is estimated to average 1.00 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing the reviewing the collection of information.

BUDGET EXPLANATION FOR IOWA STATE UNIVERSITY

(Morris and Burden)

Objectives 1-3

- A. Salaries, Wages.** One research associate (Burden) at 0.16 FTE (\$8,014); two prebaccalaureate students @ \$12.50/hour for 132.6 hours (\$1,658).
- B. Fringe Benefits.** The fringe benefit rate for the research associate is 34.5% (\$2,765); the fringe benefit rate for prebaccalaureate students is 4.6% (\$78).
- E. Materials and Supplies.** Tutorial and training material costs (\$400).
- F. Travel.** Transportation, meals, and lodging for travel to producer and training sites to be determined (\$5,250).
- J. All Other Direct Costs.** Printing costs for initial survey (\$400); sponsorship into Market-Maker™ system (\$5,000).

SCHEDULE FOR COMPLETION OF OBJECTIVES

Objective 1: Initiated in Year 1 and completed in Year 1.

Objective 2: Initiated in Year 1 and completed in Year 1.

Objective 3: Initiated in Year 1 and completed in Year 1.

LIST OF PRINCIPAL INVESTIGATORS

David J. Burton, Iowa State University
Joseph E. Morris, Iowa State University

VITA

Daniel J. Burden
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Extension Value-Added Agriculture Project
Iowa State University
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Ames, Iowa 50011

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EDUCATION

B.S. The Evergreen State College, 1981, Biology/Anthropology
M.S. Iowa State University, 1988, Entomology
CAIA (Certification in Advanced International Affairs) Texas A&M University, expected 2010

POSITIONS

Program Coordinator Special & International Projects, Extension Value-added Agriculture Project (2005-present); Program Assistant: Analyst & Content Specialist, Agricultural Marketing Resource Center (2002-present); Communications Specialist III, Center for Crops Utilization Research (1990-2004), Iowa State University.

GRANTS, PUBLICATIONS & REVIEW ACTIVITIES

Author of 40 peer-reviewed papers and presentations: 64 extension and editorial articles. From January of 2004 to date, over \$372,000 in written and received grants and contracts as primary or co-author and \$4,031,000 as contributor or ghost writer. Grant reviewer for the National Marine Fisheries Service, Saltonstall Kennedy Grant Program, National Oceanic and Atmospheric Administration (NOAA) and the Department of Commerce, National Marine Fisheries Service; reviewer for USDA-Rural Development Value-added Agriculture Producer Grant Program and feasibility reviewer for funded Iowa projects; Charter and Steering-Committee member of the Iowa Agritourism and Midwest Agroforestry Working Groups.

VITA

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EDUCATION

B.S. Iowa State University, 1979, Fisheries and Wildlife Biology
M.S. Texas A&M University, 1982, Wildlife and Fisheries Sciences
Ph.D. Mississippi State University, 1988, Fisheries and Wildlife

POSITIONS

Fisheries and Aquaculture Specialist/Associate Professor (1995-present), Specialist/Assistant Professor (1988-present), Department of Natural Resource Ecology and Management, Iowa State University and Associate Director, North Central Regional Aquaculture Center (1990-present)
Graduate Research Assistant (1986-1988), Mississippi State University
Aquaculture Manager (1982-1986), Stiles Farm Foundation
Graduate Research Assistant (1981-1982), and Research Technician I (1980-1981), Texas A&M University
Fisheries Biologist Aide (1979), Indiana Department of Natural Resources

SCIENTIFIC AND PROFESSIONAL ORGANIZATIONS

American Fisheries Society: Iowa Chapter; Education, Fish Culture, Early Life History, and Fish Management Sections
Iowa Aquaculture Association
World Aquaculture Society
Phi Kappa Phi
Sigma Xi

SELECTED PUBLICATIONS

- Mulligan, B., J. E. Morris, and R. D. Clayton. Accepted. Chironomid abundance and consumption by juvenile channel catfish in plastic-lined and earthen culture ponds. *Aquaculture Research*.
- Kaatz, S., J. E. Morris, J. B. Rudacille, and R. D. Clayton. 2009. Origin of chironomid larvae in plastic-lined culture ponds: airborne or water supply? *North American Journal of Aquaculture* 72:107-110.
- Bozwell, J. L., R. D. Clayton, and J. E. Morris. 2009. Use of hydrogen peroxide to improve golden shiner egg hatchability. *North American Journal of Aquaculture* 71:238-241.
- Clayton, R. D., and J. E. Morris. 2009. Habituation performance for two percids to formulated feed under turbid and clear water culture. *Journal of Applied Aquaculture* 21:151-159.
- Morris, J. E., and R. D. Clayton. 2009. Centrarchid aquaculture. Pages 293-311 in S.J. Cooke and D.P. Philipp, editors. *Centrarchid fishes*, Wiley-Blackwell, West Sussex, United Kingdom.
- Rosauer, D. R., J. E. Morris, and R. D. Clayton. 2009. Role of compensatory growth in walleye fingerling production. *North American Journal of Aquaculture* 71:35-38.
- Clayton, R. D., J. E. Morris, and R. C. Summerfelt. 2009. Turbidity duration on walleye larvae culture. *North American Journal of Aquaculture* 71:174-177.