

# The IAAI Looks into Seafood Processing

## By Amy Stinton

When you step back and look at food fish and shrimp production in Indiana there is a missing piece in our farm to plate production chain. This does not affect business' that sell a live product but it applies to everyone else. The missing piece is processing. Last year Purdue hosted an Aquaculture Industry Tour for Culinary Professional. This event gave culinary professionals the chance to visit several facilities and see how fish and shrimp are raised in our region. One valuable thing that came out of the event was the time farmers and chefs had to talk about their needs. The take home was that most chefs are looking for processed seafood. The fact is we are in a place where we need processing to grow as a food fish industry and a potential processor needs volume to be able to offer the service to farmers.

After the Aquaculture Industry Tour for Culinary Professionals the IAAI assembled a marketing committee to look into issues such as this. During the first couple of meetings, chaired by Mike Searcy, the team came up with a short list of objectives with processing on the top of the list. One of the first items that was addressed was to check into past work on the topic, such as has a feasibility study already been done. The answer to that question was no. Another item was to check into what and where services are currently available and potential processors. There are some processing facilities but they are typically located in the great lakes region or in neighboring states. For example Kentucky has a mobile processing unit. Would a mobile processing unit modeled after Kentucky's be a good fit for Indiana? There is a centrally located meat processor in Indiana. Is there a potential for seafood processing to be added to already existing butchering facilities? Committee members met with This Old Farm to see if they would be interesting in adding seafood processing to the list of services they currently offer. They need to know what individuals processing needs are and projected volumes to see if it would be a good business decision to add seafood-processing services. That meeting reinforced the idea that the committee needed to assess the industries needs before we could continue talks with potential processors. This brings us to a third objective. The creation of a survey to determine what the industries needs are. Many of you may have received an invitation to participate in the IAAI Processing Survey through an email campaign or at the 2016 Spring Meeting in Seymour. I would like to take a second to thank everyone that took the time to complete a survey. Your participation was valuable and greatly appreciated. Thank you!

There is a lot of talk right now about Kentucky's mobile processing unit so that was a logical possibility to look into. Kentucky has been running a mobile processing unit for years and they are open to sharing their experience. As a marketing committee member we had the opportunity to go visit the mobile processing unit and as an industry we had the opportunity to hear Dr. Angela Caporelli speak and ask her questions during a panel discussion at the IAAI's 2106 Spring Meeting. Collectively we learned a lot about this potential avenue.

The Kentucky State University mobile processing unit is set up to process multiple species of livestock, which includes fish and shrimp but is not limited to aquatic products. This makes the unit more versatile. The mobile processor carries the HACCP certifications needed for every species that is processed. The farmers renting the space must be trained and comply with the appropriate HACCP plan. Training is provided.

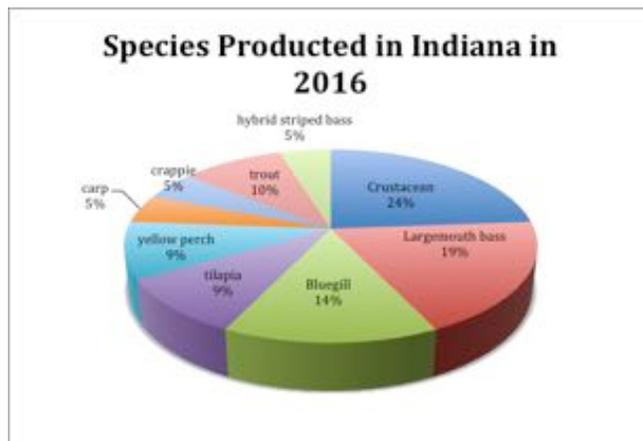
When processing aquatic species the unit can be parked right next to a pond or production building. That is convenient. The unit also does not have discharge regulators attached to it when processing aquatic species. You are allowed to discharge water where it sits just like a cleaning station at a state park or recreational area.

The mobile processing unit is a great idea but the financial feasibility of one for Indiana comes in to question. Kentucky's unit is subsidized. It does not look like a mobile unit modeled after Kentucky unit would be financially feasible in the private sector. Without the subsidies the unit would be more expensive to run. The committee concluded that a brick and mortar processing facility would be a better fit for Indiana's private sector.

Now with that said there appears to be interest in a mobile processing unit. The IAAI Processing Survey included one specific question on mobile processing. Of the people surveyed, 57% responded that they would be interested in a mobile processing unit you could rent or be a part owner in. Of current farmers in this sub-group, 83% are interested in renting or co-owning a mobile processing unit and 100% of prospective farmers who plan to be up and operating within the next 5 years are interested.

Now I have been told that you are lucky if you get 1 in every 100 survey's returned. If that is truly the case we can consider ourselves lucky with 14% of surveys returned. The survey was provided to 100 people, 27 at the 2016 Spring Meeting and 73 through an email campaign. The majority of people who completed the survey are currently producing fish or shrimp, and 3 out of every 4 respondents are currently farming aquatic species.

One characteristic that stands out in our region is the wide variety of species people are raising. 11 different species were listing in the survey which includes; largemouth bass, marine shrimp, bluegill, crayfish, tilapia, yellow perch, carp, crappie, brook trout, brown trout, and hybrid bluegill. Not only are there multiple species being raised, but also 44%



of people are raising multiple species. This can be a challenge for a processor looking to run a high tech species specific processing line. The situation may lend itself to skilled filters.

Figure 1: 2016 IAAI Processing Survey data. Brook and brown trout are combined. Crustacean includes shrimp and red claw crayfish production.

For anyone who is thinking of starting a processing facility the big questions focus on numbers. Like how much fish is being produced? What are farmer's projections for future production? What kind of volume could a processor expect? Is there enough production to make money? Would farmers be willing to deliver their product to the facility? Is it more cost effective for me to process my own fish or pay a second party to do it for me?

Most farms in Indiana are relatively small with annual production of less than 10,000 pounds. Only 2 farms that responded are raising more than 50,000 pounds of fish annually. This is not new or surprising. Overall Indiana is known for having small-scale farms when compared to other states. While it is known that Indiana is not well represented in the United States Department of Agriculture Aquaculture census, the 2013 census reported Indiana having 7 aquaculture producers with annual sales of \$2,183,000. Compared to our neighboring states we have fewer number of reported farms but fall in the middle when it comes to value of annual sales. Now it should not be overlooked that Bell Aquaculture has skewed the 2013 sales numbers.

Table 1: Number of farms and value of products sold by state as reported in the 2013 USDA Aquaculture Census.

State	Number of Farmers	Value of Aquaculture Products sold
Indiana	7	2,183,000
Illinois	23	2,861,000
Kentucky	30	1,893,000
Michigan	32	1,529,000
Ohio	61	4,758,000

[https://www.agcensus.usda.gov/Publications/2012/Online\\_Resources/Aquaculture/Aqua.pdf](https://www.agcensus.usda.gov/Publications/2012/Online_Resources/Aquaculture/Aqua.pdf)

The survey did reveal that while most farms production is relatively low, farms are projecting growth in the next five years. The number of facilities that raise less than 10,000 pounds a year is projected to decrease while the number of farms raising between 10,000 and 30,000 pounds and more than 50,000 pounds will increase. Industry growth is good news for potential processors.

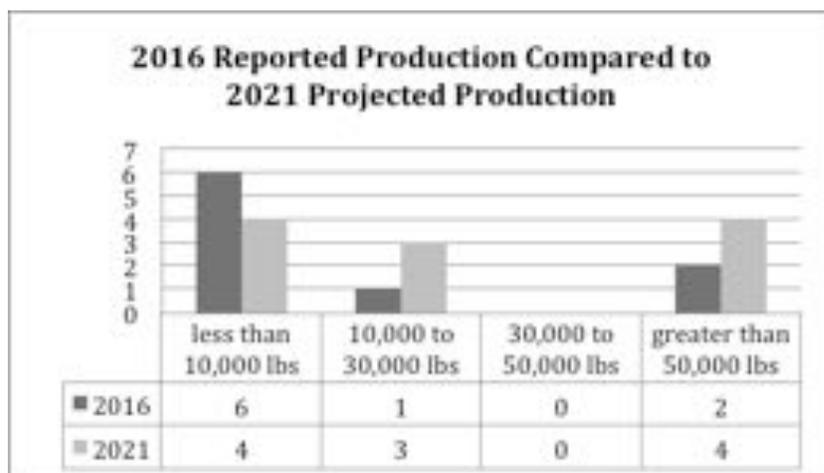


Figure 2: IAAI 2106 Processing Survey data comparing reported production in 2016 to projected production in 2021. No producers reported annual production between 30,000 and 50,000 lbs.

Indiana does not have many farms that process right now. Most farms have found niche markets selling live product for human consumption, pond stocking, baitfish, or as ornamentals. This makes sense when you think about the types of farms that are in the state. Many farms have relative low production but relative high production cost. Producers look for niche markets that will pay premium prices for their products. After all, at the end of the day it is all about the numbers.

Only 22% of survey respondents are currently processing, but there is interest in processing and value added products. The survey revealed that most farmers are not currently processing but farmers are interested and willing to both pay for processing and travel to have it done. Of respondents 42% are willing to pay for processing, 62% of people are willing to travel 100 miles for processing while 88% of respondents are willing to travel 50 miles. One challenge with Indiana is that farms are spread throughout the state. The plus is Indiana is not a huge state. At 270 miles long and 140 miles wide a centrally located facility would likely be within acceptable driving range for most Indiana farmers.

One thing that stood out about processing interests is that like species there is not a single dominant need but a range of desired products. People are interesting in filleted, packaged, frozen, whole and gutted, food linked and breaded products that are processed at weekly, monthly, bimonthly, biannually or quarterly interval. This indicates that a brick and mortar processing facility would need to have the ability to process a variety of species into a variety forms.

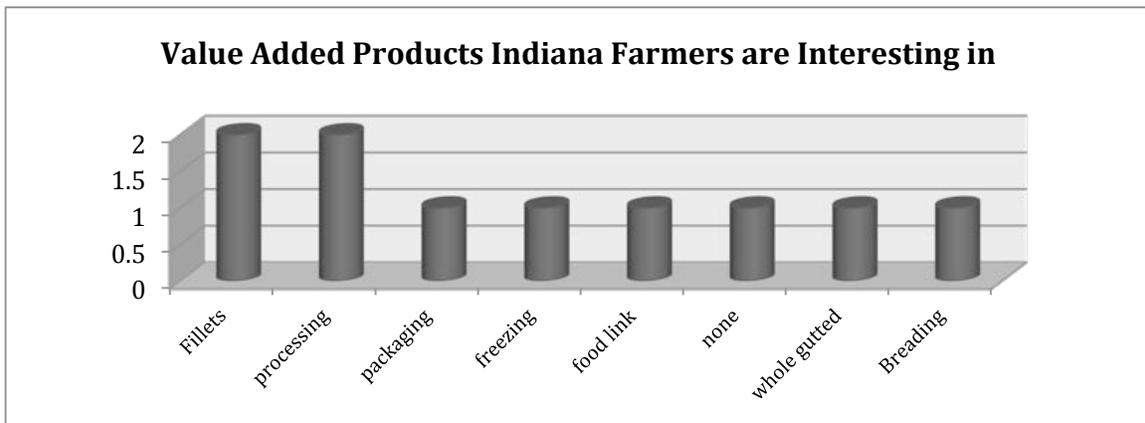


Figure 3: IAAI 2016 Processing Survey data illustrating the types of value added products producers are interested in.

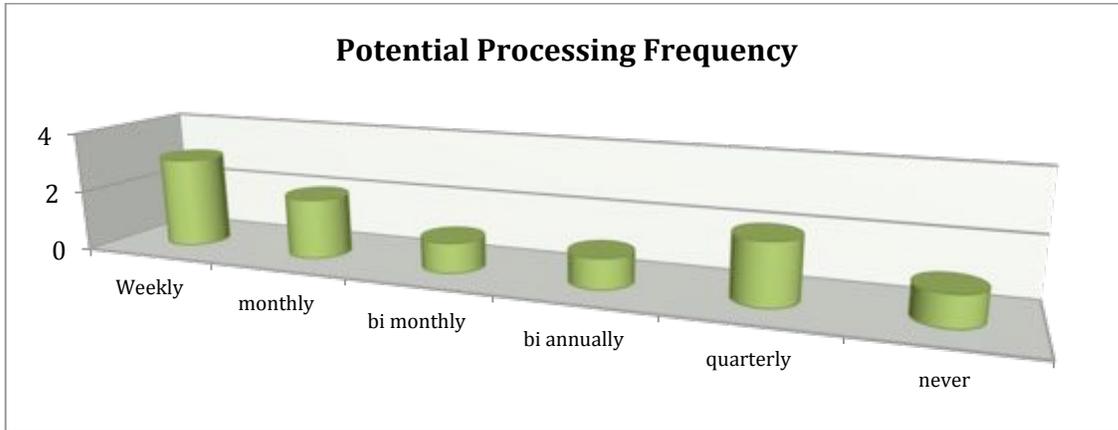


Figure 3: IAAI Processing Survey data illustrating how often farmers predict they would need processing services.

This year Indiana’s White Creek Farms of Indiana, LLC. owner and chair of the marketing committee, Mike Searcy, is one of the farmers that has asked some of these hard questions himself. In the process of working on this inquiry, Mike made the decision that the right thing for his farm was to build a permanent structure to process his own fish. White Creek Farms of Indiana, LLC. has not decided if they will offer processing to other farms but Mike is willing to share what he has learned about building a processing plant. If you are interested in building a processing unit and want to contact Mike visit <https://wcfarmsindiana.wordpress.com>.

Processing is an obstacle that has been identified by not only Indiana’s Aquaculture community but by some of our closest neighbors as well. This inquire into Indiana’s processing needs is not a complete look. It is a glimpse. It is a place to start or perhaps continue the discussion on how to grow food fish production in the region. In summary the processing survey confirmed that there are farmers currently producing food fish that are interested in processing. They are willing to travel to a facility and pay for the service. The committee looked into several options for processing which included a mobile processor. The committee concluded that a brick a mortar facility would be a better fit for Indiana farmers than a mobile processing unit modeled after Kentucky’s mobile processor. The three big questions that remain are do Indiana farmers produce enough fish at this point in time to support a processing plant, how many pounds of fish is need to support a processing plant, and who is going to provide processing to our farmers.



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