

WI AQUAPONICS MULTI-AGENCY SUPPORT GROUP

January 19, 2016

WISLINE Call Facilitator – WDNR Chris Lilek
Meeting Minutes

Participants: Chris Lilek – DNR Sustainable Business Section, Greg Lawless - Food System Development Program at UW Extension, Brad Niemcek - Manager Kickapoo Culinary Center, Bill West - Owner Blue Iris Fish Farm, Jake Zimmerman – DNR Wastewater Program, Will Erikson – DNR Sustainable Business Section

The purpose of this call was to continue our discussion how Federal, State and County regulatory, funding & technical assistance staff can support aquaponic farming in Wisconsin. The next conference call is scheduled for **Tuesday, April 19, 2016 from 10am – 11am.**

AGENDA

Shared-Use Incubator Kitchen - Kickapoo Culinary Center

Brad Niemcek manages the Kickapoo Culinary Center. He will share with us how the kitchen is used; including the time rented by a Trout fish farmer for processing their fish for sale!

<http://fyi.uwex.edu/foodbin/the-food-bin-network/kickapoo-kitchen/>

Brad let us know that the Center is located in Gays Mills, Wisconsin in Crawford, County. There is not a major City nearby and Gays Mills has a small population of 485 people. The 2400 square foot Center is not only a Commercial Kitchen that is licensed and outfitted for more than one food processor to use the kitchen, but the Center is also houses the Village Library, Village Offices, Village Board Room and a 3000 square foot Event Space.

The event space has hosted Art Festivals dinners (providing 160 meals this past autumn), weddings, graduations, anniversaries and group canning activities (10 folks just canned tomato sauce and stew).

The Center also provides business planning assistance through Brad's services as the Center manager. Many people know what they want to make and sell, but need help in business planning and marketing.

The Center has 5 – 6 regular clients: Fish Farmer (Trout & Atlantic salmon), Frozen French Bakery Items, American Hazelnut Processors, Herbal Tea, Saltwater Carmel and Goat Milk Products.

Brad has personal experience with food processing. He has been a beekeeper for 14 years. He researched what licensing it would take to make whipped and flavored honeys. The equipment and licensing needed for value added honeys was cost prohibited, unless he did it in a Commercial Kitchen.

Food processors that would like to rent time at the Center need to have: insurance, a business plan, training in food sanitation, and a plan for their future success. Brad can help the applicant obtain all these items.

Bill asked Brad several questions:

1. Does the entire facility need to close down between meat and fish processing? Brad said this does not happen, because there is no meat processed at the Kickapoo Culinary Center.
2. Do all the food processors have to put "Item processed in facility that processes Fish" on their labels? Brad said "No".

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3. Do you know of a Commercial Kitchen contact in the Green Bay Area? Brad said that Bill could send him an email and he would send Bill Elizabeth Slade's - Brown County Culinary Kitchen contact information. <http://bcculinarykitchen.org/how-to-get-started>
4. How does the Fish Farm process his fish? Brad said that the farmer leaves the heads on, guts and cleans the fish and places the fish in a plastic bag on ice and takes them to the restaurant. Brad said that the last Wednesday the fish farmer had 27 large fish to gut and clean.

Pond-side Tank Systems & Applicability for CSA Farms

Bill West operates Blue Iris Fish Farm in Black Creek, Wisconsin. He will share with us how his uniquely designed pond-side fish tank system is ideally suited for a CSA application.

<http://www.somethingspecialwi.com/wisconsinustainableaquacultureproducts.html>

Bill has been researching aquaculture options for 20 years. He has done research for indoor and outdoor fish farming. He has seen many wasted dollars spent on recirculating and aquaponics systems in the past couple decades.

He started out with pond fish farming and experienced challenges with: DNR regulations, maintenance costs, predation, parasites and fish feed – species matching.

Two helpful research studies that he led with grant monies are: SARE Program FNC 08-731 “Study to Reduce Parasitic Infestations of Yellow Perch in Flow-Through Outdoor Grow-out Systems”

<http://mysare.sare.org/mySARE/ProjectReport.aspx?do=viewRept&pn=FNC08-731&y=2010&t=1> and Wisconsin ADD Grant <http://datcp.wi.gov/uploads/Business/pdf/2009List.pdf>

Currently, Bill raises 10,000 perch each year using 1/4 acre pond (for water exchange) and six 1000 gallon tanks. Bill has found that 1 tank change per hour ensures that the fish stay parasite free. He does not aerate the tanks other than the water exchange.

The fish are introduced to the grow-out tanks as 4 inch fingerlings in May each year. They are all feed trained with correct species feed of good quality. His pumps run at less than 70 gallons per minute. The fish grow at approximately 1 inch per month and are table ready by September each year.

Note: Bill pointed out the many high school aquaculture and aquaponics systems are struggling, because they do not have access to good feed. Poor, mismatched feed causes the bio filter systems to clog up and operate poorly.

His tank operation allows the fish to be parasite free, predator free and no weed control necessary. He is getting 50% yield with the tank near pond system, whereas the pond only system only yielded about 45%.

He is getting approximately \$12- \$13 a pound for the perch, which is the same as current wild caught perch prices but gets about 5% more yield per fish than wild caught.

Bill also has been increasing the profits from his system by:

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- Producing a fertilizer out of the fish wastes and water solids;
- Using a drop tank to collect nutrient solids for fertilizer for Hoop House;
- Using liquid nutrients for aquaponic grow beds; and
- Using sand & gravel beds to filter the water and return the water to the pond where it originated.

A single tank would allow 5 to 10 families to receive fish shares in a Community Supported Agriculture farm. If the families wanted the fish to be filleted or frozen, additional cost would be needed.

The cost of buying and constructing this system would be less than \$10,000 for a one to two tank system.

Greg asked Bill if the system could be profitable for fish. Bill answered that if a high quality fish were raised such as perch, trout, blue gill or saugeye the system would be profitable for fish yields. Bill advised that a better way Tilapia fish could be profitable is by smoking or making smoked pate out of the fish.

Highlights from Call Participants

What are YOU doing this winter?

A couple very important winter events occurring for the aquaculture/aquaponics industry include:

Bill West will be speaking in north Appleton, Wisconsin on February 20, 2016 at the Answers to Energy Expo for the aquaculture/aquaponics industry.

Joint WAA and North Central Regional Aquaculture Conference (March 12 – 13, 2016)

The North Central Regional Aquaculture Center (NCRAC), the Wisconsin Aquaculture Association and surrounding states aquaculture associations are in the process of planning for the 2016 North Central Regional Aquaculture Conference which is scheduled to take place March 12-13, 2016 in Milwaukee, Wisconsin at the Crown Plaza Milwaukee Airport. http://www.wisconsinaquaculture.com/Events_Details.cfm?RID=112

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