

Food-Fish Aquaculture in Minnesota
April 26-27, 2017
Notes

Host:

- University of Minnesota Sea Grant College Program

Source of Meeting Notes: *Food-Fish Aquaculture in Minnesota: Synthesis of the 26-27 April 2017 Workshop*

Workshop Videos link: <http://www.seagrant.umn.edu/aquaculture/workshop2017>

Genetics, Breeding and Broodstock:

- Need year-round availability of gametes.
- Selective breeding for fast growing fish in variety of facilities.
- Need technologies to extend the Minnesota growing season.
- Year-round egg and fry availability is crucial.
- Develop a Walleye and Walleye hybrid for the Minnesota aquaculture industry.
- Lack of broodstock for species such as Walleye and Saugeye.
- Breeding healthy, fast growing stocks.
- Concerned with early maturation of males.
- Most promising food-fish species in Minnesota: Atlantic Salmon, Rainbow Trout, Artic Char, Walleye, Saugeye, and Yellow Perch.

Fish Health:

- Disease detection and control.
- New innovative treatments.
- Biosecurity practices to reduce disease issues.
- Pathogen resistance, treatments and best management practices.
- Concerned with fungal infections.

Nutrition:

- Research on nutrition needs for each species at life stage.
- Research on true starter diet for Saugeye (Walleye-Sauger hybrid).
- Nutrition for each species and life stage.
- Sustainable aquafeeds.

Production Systems:

- To develop systems for commercial production of Walleye.
- Research on Recirculating Aquaculture Systems (RAS), biofilters, thermal regulation, energy efficiency, water conservation, waste treatment.
- Research on beneficial bacteria communities for biological filters.
- Aquaponics are of interest to stakeholders, but little research has been done to determine if it is economically viable for medium and large sized facilities.
- Need research on aquaponic systems on bacteria, biosecurity hazards, and effect of fish waste.
- Research on outdoor growing pond systems and economic viability.
- Research to determine which production systems consumers prefer.

- Interested in energy and labor efficient indoor systems.
- Most promising system for Minnesota is RAS.

Additional Priorities:

- Stakeholders are Interested in building shrimp industry in this region.
- Market study to determine purchasing needs of customers, species preference, price sensitivity, demand for local fish, and industry growth potential.
- Need technically trained and widely available workforce.
- There is a need to educate the public on the quality and safeness of farm-raised fish.
- Concerned with off-flavor.