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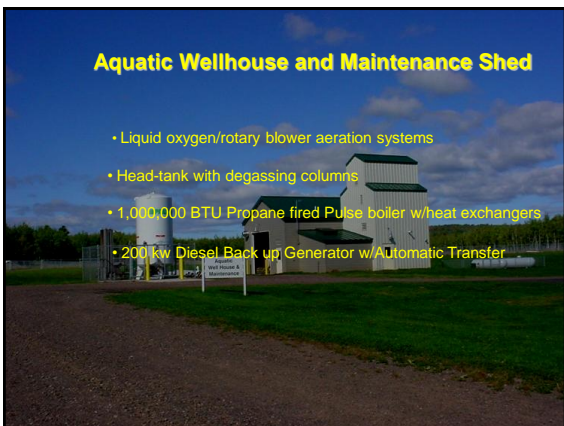
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### Aquatic Barn Systems

- 3 – Commercial Scale Recirculating Aquaculture Systems (RAS)
- Heated and Cold Degassed Water Supply
- Oxygen and Aeration Supply System
- Bell Jar and Heath Tray Incubation Systems
- Water Quality Lab
- Various Flo-Thru and Experimental Tanks

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### Walleye Project

Project Years: 2005-ongoing

**Goals/Objectives:**

The overall goal of this cooperative research project is to develop and demonstrate techniques for the commercial production of egg, fry, fingerling, and extended growth walleye.

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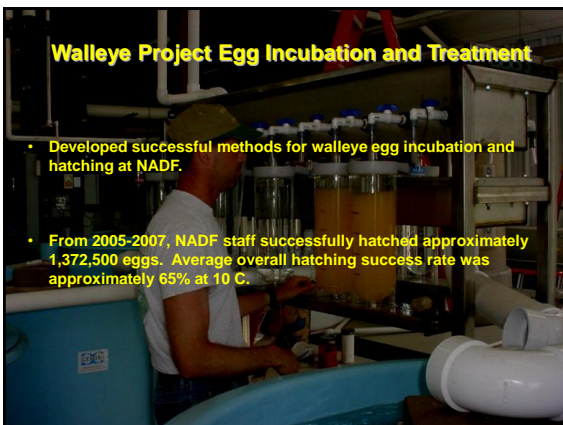
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### Walleye Project Egg Incubation and Treatment

- Developed successful methods for walleye egg incubation and hatching at NADF.
- From 2005-2007, NADF staff successfully hatched approximately 1,372,500 eggs. Average overall hatching success rate was approximately 65% at 10 C.

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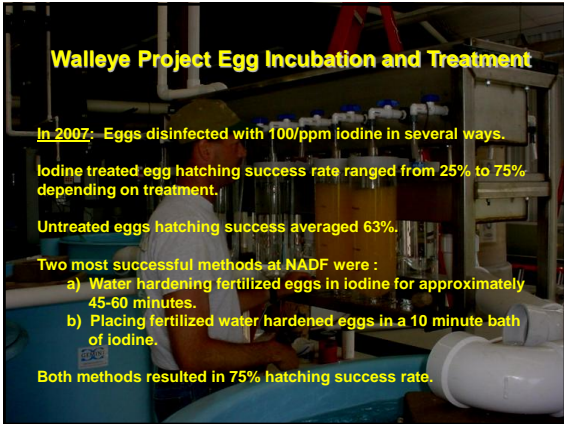
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**Walleye Project Egg Incubation and Treatment**

In 2007: Eggs disinfected with 100/ppm iodine in several ways.

Iodine treated egg hatching success rate ranged from 25% to 75% depending on treatment.

Untreated eggs hatching success averaged 63%.

Two most successful methods at NADF were :

- Water hardening fertilized eggs in iodine for approximately 45-60 minutes.
- Placing fertilized water hardened eggs in a 10 minute bath of iodine.

Both methods resulted in 75% hatching success rate.

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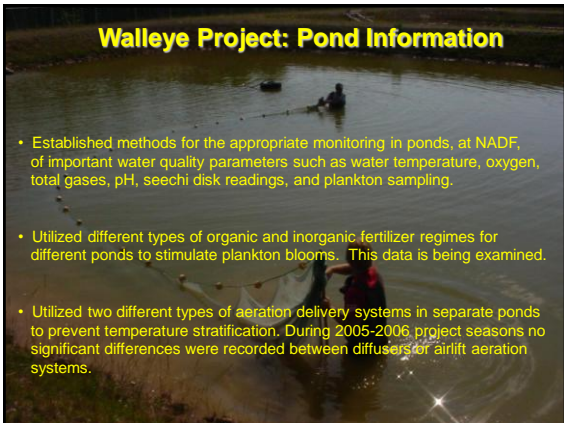
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**Walleye Project: Pond Information**

- Established methods for the appropriate monitoring in ponds, at NADF, of important water quality parameters such as water temperature, oxygen, total gases, pH, sechi disk readings, and plankton sampling.
- Utilized different types of organic and inorganic fertilizer regimes for different ponds to stimulate plankton blooms. This data is being examined.
- Utilized two different types of aeration delivery systems in separate ponds to prevent temperature stratification. During 2005-2006 project seasons no significant differences were recorded between diffusers for airlift aeration systems.

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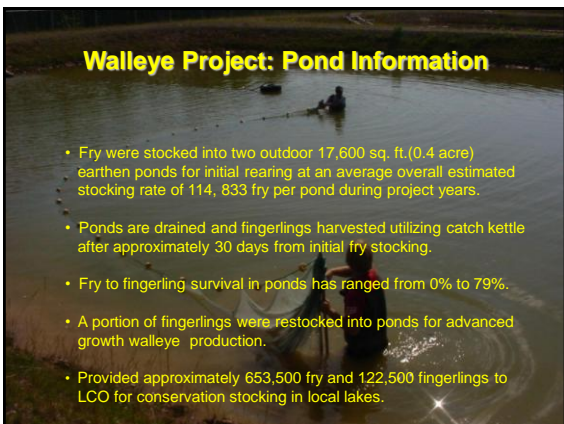
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**Walleye Project: Pond Information**

- Fry were stocked into two outdoor 17,600 sq. ft. (0.4 acre) earthen ponds for initial rearing at an average overall estimated stocking rate of 114, 833 fry per pond during project years.
- Ponds are drained and fingerlings harvested utilizing catch kettle after approximately 30 days from initial fry stocking.
- Fry to fingerling survival in ponds has ranged from 0% to 79%.
- A portion of fingerlings were restocked into ponds for advanced growth walleye production.
- Provided approximately 653,500 fry and 122,500 fingerlings to LCO for conservation stocking in local lakes.

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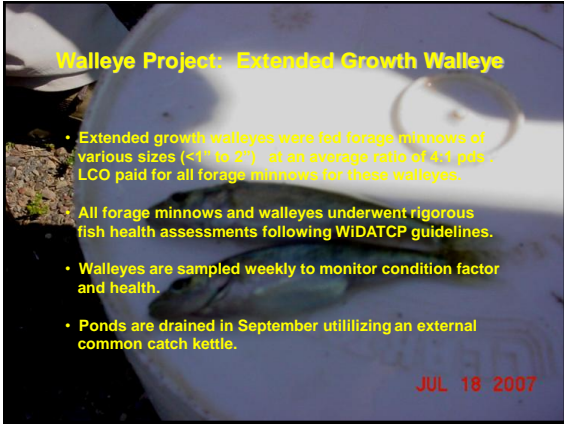
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**Walleye Project: Extended Growth Walleye**

- Extended growth walleyes were fed forage minnows of various sizes (<1" to 2") at an average ratio of 3:1 pds. LCO paid for all forage minnows for these walleyes.
- All forage minnows and walleyes underwent rigorous fish health assessments following WIDATCP guidelines.
- Walleyes are sampled weekly to monitor condition factor and health.
- Ponds are drained in September utilizing an external common catch kettle.

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**Walleye Project: Extended Growth Walleye Harvest**

- During 2005-2006 NADF successfully raised approximately 19,618 extended growth walleyes averaging 152 mm and 25 g. in 130 days in outdoor earthen ponds. LCO stocked these fish into local lakes for conservation purposes.
- Average estimated cost for these extended growth walleye was \$0.86 per fish.
- Project Partners: LCO, Red Cliff Fish Hatchery, WI baitdealers, WIDNR (Spoooner hatchery crew)

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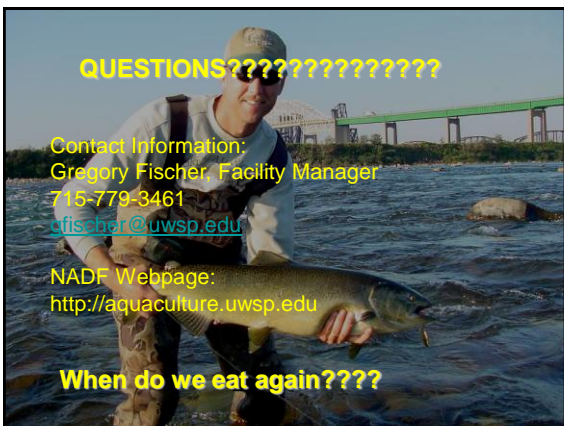
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**QUESTIONS????????????????**

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NADF Webpage:  
<http://aquaculture.uwsp.edu>

**When do we eat again????**

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