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Aquatic Research Facility Update

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Aquatic Research Facility Update

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Aquatic Research Facility Update

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In the spring of 2007, adult golden shiners *Notemigonus crysoleucas* were stocked in the six ponds.

The objectives of the project at the Aquatic Research Facility (ARF) this year were: 1) to evaluate growth of fry in ponds using two fertilization regimes, combination of organic and inorganic vs. only organic, and 2) to evaluate diet selection of fry in ponds using these two fertilization regimes organic.

To accomplish these objectives, 360 broodstock fish, total weight per pond of 4.2 kg, were stocked in each pond (25.2 kg total weight for all fish). The fish were then allowed to spawn naturally on spawning mats that were staked on the edge of the pond slightly below the water surface.

After the spawning activity concluded, the broodstock were left in the pond with the resulting fry. All fish in the six ponds were then cultured for 210 days from the beginning of May until the end of November.

The ponds were then harvested at the end of November and all fish were weighed, counted, and measured. A total of 260 kg (106,125 fish) were harvested from this experiment, approximately 10-fold increase in fish biomass.

As a final note, the bentonite application last year has seemed to fix the leaking ponds. The application was applied to pond 1 through 5; pond 6 did not leak. This year it was noted that pond 6 developed a leak. In the spring of 2008, bentonite will be applied to pond 6.

The next research project will be initiated in spring of 2008 with additional research being conducted on a new year class of golden shiners.

You can find more information about the facility at http://www.nrem.iastate.edu/arf/.