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Pond Construction at the Horticulture Station

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Abstract
Work began on the research ponds at the Horticulture Station in the second week of October (2003) and was completed in May 2004. The project consisted of constructing 6, 0.2 acre research ponds, an access road, wetland, well, and a staging area. The Iowa State University Aquatic Research Facility has a total of 1.2 surface acres of water. The total project area covers 3.58 acres; approximately 20,000 cubic yards of dirt will be moved and reshaped for pond construction.

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The ponds will be used primarily for aquatic research projects within the ISU Department of Natural Resource Ecology and Management. In June 2004, young catfish were stocked into the ponds; stocking rate of 15,000 per acre. This research is being done in cooperation with the Iowa Department of Natural Resources. The project will investigate two different feed types and their effects on water quality. Numerous water quality and fish growth parameters will be measured over the course of the project.

Some additional site details are:

- Ponds—62 ft wide, 177 ft long, water depth 8 ft.
- Manholes—water leaves the ponds through 6-inch pipes that lead into a manhole with a valve. The water then goes to the wetland.
- Wetland—allows pond water to be filtered naturally before entering the waterway leaving the property.
- Well—pumps 55 gallons/hr (6 pond fill time ≈ 10 days through a 2 inch pipeline).
- Staging area—a hydrant and several large holding tanks for receiving the fish before stocking and at harvest time.
- All surface runoff was diverted around the research ponds.
- Ponds will be harvested using a seine.