Net Pen Culture in Ohio Quarries

Dr. David A. Smith, Ph.D.
Freshwater Farms of Ohio, Inc.
Net Pen Culture in Ohio Quarry Lakes
Gravel Quarry Lakes
(near Dayton along Hwy 4 Corridor)
Gravel Quarries
(near Troy, Ohio)
Cage Culture Operation in Urbana Gravel Quarries (1994)
Urbana Gravel Quarries (2012)
Winter Trout Cage Culture in Gravel Quarry
Rainbow Trout Feeding in Floating Fish Cage
On Site Water Quality Monitoring at Cage Culture Site (Jim Ebeling, Ohio State Univ. 1993)
Infrastructure supporting net pen culture:
Docks, Boats, Feed Storage, De-Icers
Aerated Ponds Adjacent to Urbana Quarry Lakes
Ohio Cage Culture in Gravel Quarry (2010)

• One of the many large carp in residence at this site
Rainbow trout in 10’x 10’ cages with feeding rings (2010)
Typical borrow lakes from highway construction
(one of two proposed sites for net pen demo project in the Dayton Region)
Gravel Quarry (Borrow Pits) along Interstate 70
Quarry Lakes  (south of Columbus)
Ohio
Limestone Quarries
Overflowing spring-fed quarry pond (1500gpm)
Challenges of open spring-fed quarry ponds
Feeding trout at spring-fed quarry pond (1/2 acre)
• Coldwater Aquaculture in the US has great potential due to consumer acceptance of salmonids as a known food item
• Production is constrained by lack of genetic improvement, disease, and low production efficiency
• Economically important traits can be developed through family-based selective breeding programs with native species.