Rainbow Trout Production



Kentucky trout production region

- Located in the central "cave" region
- Limited year round springs
- Has supported 10 small trout farms with 1,000,000 lbs production



Kentucky trout water quality

- Limestone rock formations
- ∼13 degrees C
- Hardness and Total Alkalinity 100-150 mg/L
- ▶ pH 7.0 8.0
- 4 8 reuses



Kentucky's Oldest Aquaculture Industry

- Produce from 20-40 lbs per gallon per minute
- Trout are sold live at \$1.25 lb
- Fish sold via catering
- Processing plant closed 3 years ago



Raceways

Concrete

Excavated





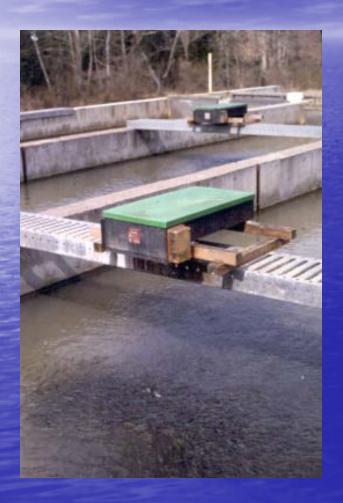
Eyed eggs are shipped in from the western US







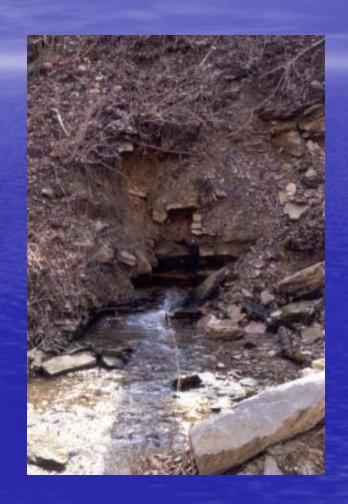
Bagged, sinking feed is used in raceways, floating feed in ponds and cages





Drought has....

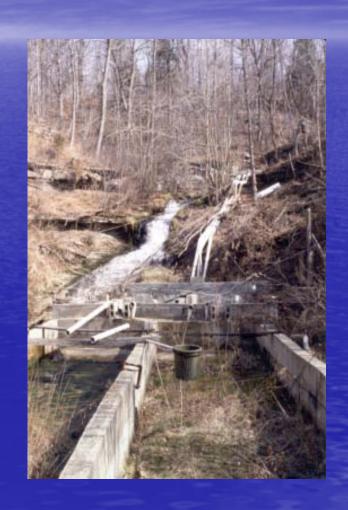
- Reduced water volume
- Increased water temperature
- Decreased water quality
- Limited production



Withdrawal and discharge issues

 One farm lost over a water withdrawal permit

Discharge permits have yet to be a problem



Winter trout culture in ponds and cages

- Grown in both cages and open ponds
- From November to March
- Requires large stocker fish (8 inches)
- Use floating feed
- Profitable?
- Markets?



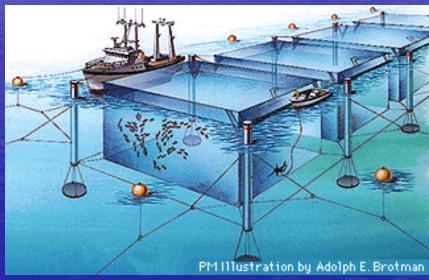
Cages for trout

- size or shape?
- ~ 1000 lbs per acre
- Aeration desirable
- Varied growth
- Won't feed or grow much below 50°F
- Water temp should remain below 68°F



Size and scale of operation?





Cage placement

- Top of cage should be
 6 inches above the
 waters surface
- Suspended at least 2 feet off the pond bottom
- Subject to wind and water current movement



Problems

- Erratic weather
- Feeding in bad weather
- Short growing season
- High cost of stockers and feed for small scale operations
- Varied growth
- Poaching



Trout raised in ponds

- Stock ~1,000 -1,500
 fish per acre in ponds
 that can be seined –
 Shrimp ponds
- Stock 10" fish where bass are present
- Must come out before water temperature reaches 70°F, or 65°F for live trout



good / bad news....

- For KY, drought may be over
- Markets for live fish fee fishing
- Out of state markets
- Foreign and domestic competition
- Low prices
- Poor economy
- Over production?



Coal mine water trout culture?

- Deep mines located in eastern KY coal fields
- Good quality water
- Year round supply
- Some sites are hard to access
- Coal company and other restrictions





Thank You!



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