Economic Comparison of Split-Pond Systems

Carole R. Engle

University of Arkansas at Pine Bluff

Major Cost Effects

- Additional Investment Costs
- Higher Yields
- Good FCR
- Higher Energy Costs/Acre
- Higher Repair & Maintenance?

Stoneville System

Screw Pump System

Fish Side
Screw Pump System

Waterwheel System of David Heikes at Alice-Sydney

Breakdown of Investment Costs

	Paddlewheel	Waterwheel	Screw Pump
Concrete	$30,000	0	0
Dirt work	$9,050	$9,050	$9,050
Structures	$15,250	$19,500	$6,500
Electrical	$3,000	$3,000	$3,000
Labor	$1,500	$1,500	$1,500
Monitoring	$9,000	$9,000	$9,000
TOTAL	$67,800	$42,050	$29,050

Yields and FCR

	Yield	FCR
Paddlewheel	15,111 - 17,700	1.78 – 1.90
Waterwheel	?????	????
Screw Pump	7,376 – 22,039	2.1 - 2.3

Costs Per Pound

Traditional Ponds = $0.76/lb & $0.91/lb

	BEP[1] above Variable Costs	BEP above Total Costs
Paddlewheel	$0.68	$0.80
Waterwheel	$0.68	$0.76
Screw Pump	$0.74	$0.81

[1]BEP = Break Even Point

Pond Size: Effects on Costs (BEP above TC)

System	8-acre	10-acre	12-acre
Paddlewheel	$0.82	$0.80	$0.79
Waterwheel	$0.79	$0.78	$0.77
Screw pump	$0.83	$0.82	$0.81

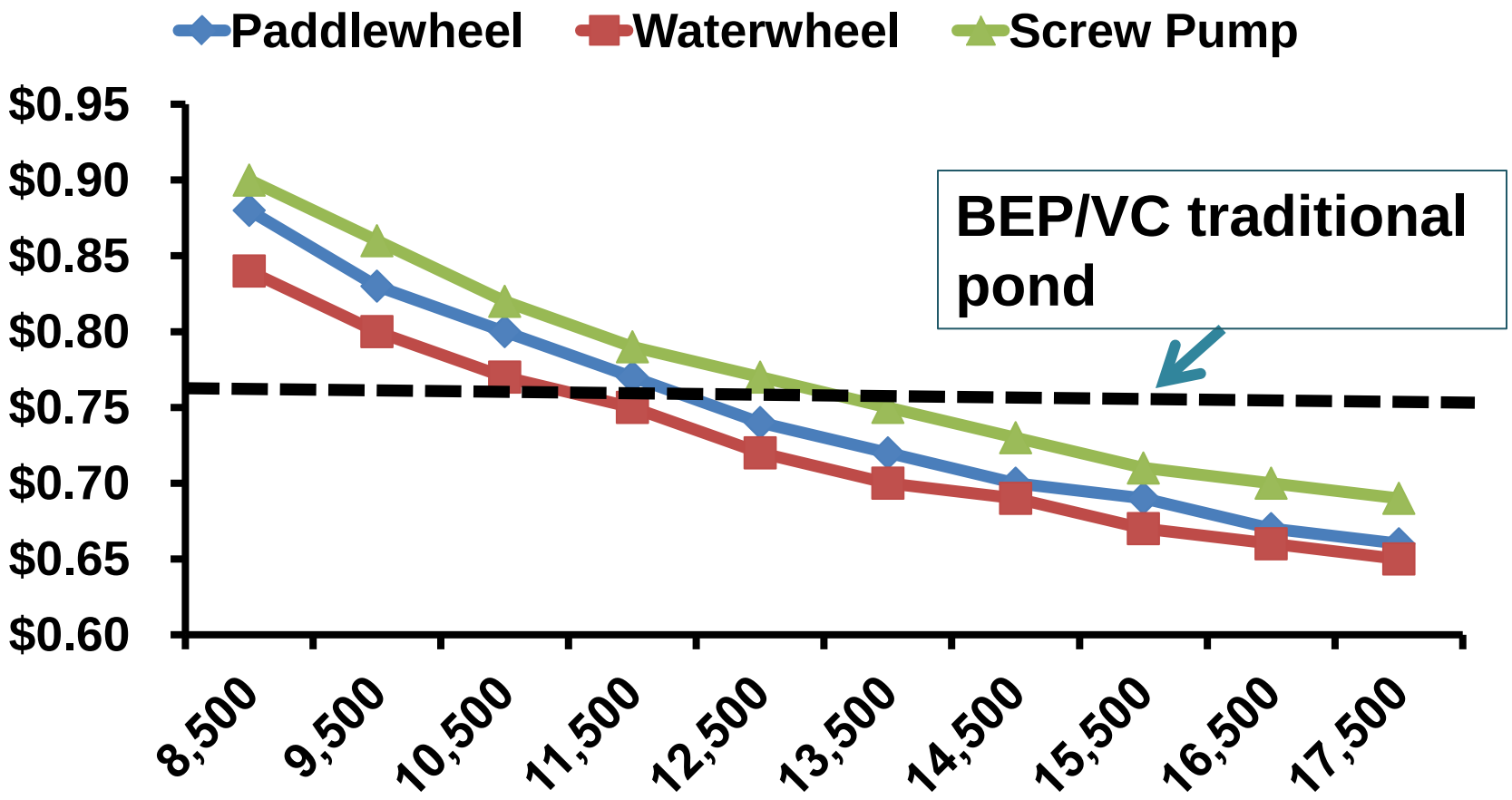
Traditional Ponds = $0.91/lb

Prices of Hybrid Catfish Fingerlings: Effects on Costs (BEP above TC)

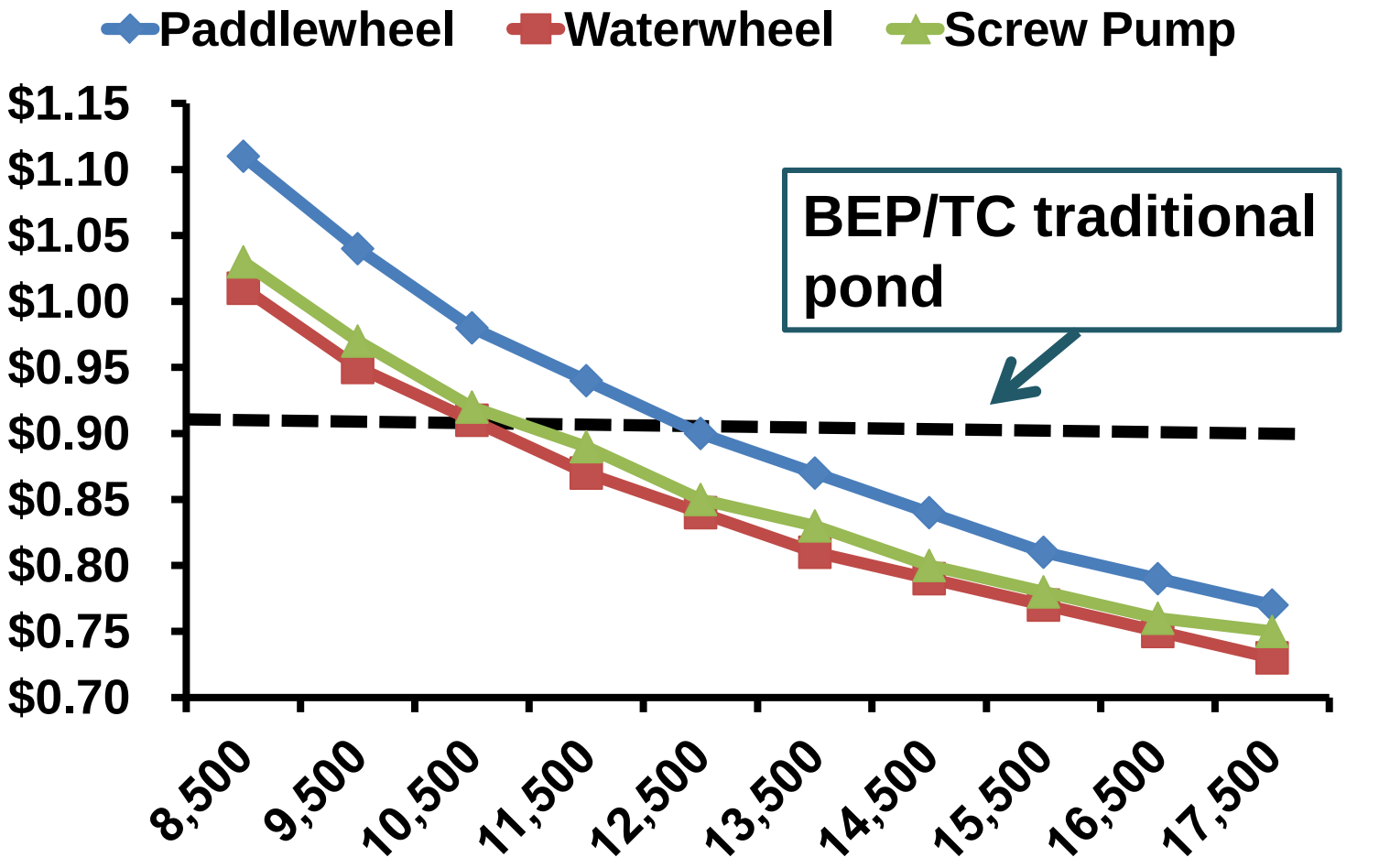
System	$0.02/in	$0.025/in	$0.03/in
Paddlewheel	$0.78	$0.80	$0.83
Waterwheel	$0.75	$0.78	$0.80
Screw pump	$0.78	$0.81	$0.84

Traditional Ponds = $0.91/lb

Effect of Yield on BEP/Variable Costs



Effect of Yield on BEP/Total Costs



Risks!!!!!

- Power outages will be catastrophic.
- Diseases & other losses may be greater.
- Financial risk will be higher.
- Would hybrids with intensive aeration do as well?

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