

Conference Program, Page One * Eighth International Conference on Recirculating Aquaculture

Thursday, August 19, 2010

2:00 p.m. - 8:00 p.m.

Exhibitor Set-up

Friday, August 20, 2010

7:30 a.m. - 5:00 p.m.

Registration

8:00 a.m. - 5:00 p.m.

Continuous Refreshment Break

9:00 a.m. - 9:00 p.m.

Trade Show Open, Roanoke Ballroom

8:30 - 9:30 a.m.

Welcome - **George Flick** and **German Merino**

Plenary Session - **Rick Barrows**, USDA, Agricultural Research Service

Coordinating Improvements in Alternative Feeds with Improvements in Rearing Systems

	Crystal Ballroom A,B,C	Crystal Ballroom D,E	Washington Lecture Hall	Wilson Room
AM	SYMPOSIUM 1 Denitrification and Sludge Handling, Moderator: D. Kuhn	SYMPOSIUM 2 Culture of Algae as an Alternative Fuel Source, Moderator: G. Boardman	SYMPOSIUM 3 RAS Process Control – Session I, Moderator: T. Pfeiffer	SYMPOSIUM 4 Salmon / Trout Contributed Session, Moderator: D. Taylor
9:30 - 10:00	M.J. Sharrer Coupled Geotextile Dewatering and Activated Sludge Treatment of Biosolids Discharged from a Recirculating Aquaculture System	Z. Wen Production of Omega-3 Polyunsaturated Fatty Acids from Biodiesel-Waste Glycerol by Microalgal Fermentation	M. Anderson An Overview of the Point Four Oxygen Control and Monitoring System for RAS	N.O.G. Jorgensen Tainting of Rainbow Trout by Taste and Odor Compounds in Freshwater Aquaculture Systems in Denmark
10:00 - 10:30	K. Saito Anaerobic Microbial-Mediated Waste Treatment in a Marine Recirculating Aquaculture System	F. Chen Isolation and Characterization of Durable, Fast-Growing and Oleaginous Microalgae	C. Cole Higher Yields and Lower Costs: Advantages of Integrated Hatchery-Wide Control Solutions	T.L. Johnson Wild Rose State Fish Hatchery Renovation Project
10:30 - 11:00	BREAK	BREAK	BREAK	BREAK
11:00 - 11:30	M.J. Sharrer The Cost and Effectiveness of Solids Thickening Technologies for Treating Backwash and Recovering Nutrients from Intensive Aquaculture Systems	R. Ruan Algae Production System Design	C. Windsor Aquaculturists Use Oxygen Monitoring and Control Systems to Automate Oxygen Management, Minimize Risk, and Improve Profitability	E. Maghsoudloo Use of Matrix Method in Comparison of Rainbow Trout Fish Culture in Extensive, Semi-Intensive and Closed (Intensive) Systems in Islamic Republic of Iran
11:30 - 12:00	P.G. Hightower Passive Denitrification Research/Technology using Biodegradable Biopolymers (PHAs)	Y. Chen Use of Catfish Ponds Algae for Biofuels: Energy, Environmental, and Economic Benefits	T.A. Grooms Advances in RAS Monitoring and Control Systems	H. Hosseinzadeh Sahafi Rainbow Trout Culture in Recirculating Systems, Advantages and Constraints in Iran
12:00 - 2:00	LUNCH	LUNCH	LUNCH	LUNCH
PM	SYMPOSIUM 5 Fish Health and Welfare, Moderator: C. Good	SYMPOSIUM 6 Innovative Feeds, Moderator: G. Flick / S. Craig	SYMPOSIUM 7 RAS Process Control – Session II, Moderator: T. Pfeiffer	SYMPOSIUM 8 Recirculating Systems for Penaeid Shrimp Culture, Moderator: T. Samocha
2:00 - 2:30	G. Baeverfjord Critical Factors for Skeletal Deformities in Salmonids I: The Effects of Rearing Temperatures	J. Davidson Comparing the Effects of Grain- versus Fish Meal-Based Diets on Water Quality and Waste Production within Low Exchange Water Reuse Aquaculture Systems Culturing Rainbow Trout, <i>Oncorhynchus mykiss</i>	T.J. Pfeiffer Use of Micro Programmable Logic Controller for Oxygen Monitoring and Control in Multiple Tanks of a Recirculating Aquaculture System	D.D. Kuhn Nitrogen Considerations for Culturing Shrimp in Clear Water Systems using Autotroph-Based Recirculating Aquaculture Technology
2:30 - 3:00	G. Baeverfjord Critical Factors for Skeletal Deformities in Salmonids II: The Influence of Minerals Nutrition	R. Barrows Methods and Approaches for the Development of Improved and Novel Aquaculture Feed Ingredients, and Characteristics Important for Recirculating Aquaculture Systems	T.A. Grooms Advances in Dissolved Oxygen Measurement Technologies	W. Wasielesky, Jr. Recent Advances of Biofloc Super-Intensive Shrimp Culture in Southern Brazil
3:00 - 3:30	BREAK	BREAK	BREAK	BREAK
3:30 - 4:00	S. Storey FDA Approval for Drugs for Aquatic Species	T.G. Gaylord Reducing Nitrogenous Waste by Feeding Amino Acid Balanced Diets	L. Dimache Heat Distribution Impact on Culture Environment Parameters in Indoor Recirculating Systems	R. Boopathy Use of a Sequencing Batch Reactor in Treating Shrimp Aquaculture Wastewater Sludge
4:00 - 4:30	S.A. Smith Incorporation of Veterinary Medicine and Biosecurity into Modern Aquaculture	S.R. Craig Taking Experimental Feeds Out of the Laboratory and into the Real World	T.L. Johnson Instrumentation, Alarm and Control Systems at the Wild Rose State Fish Hatchery	J.H. Anderson Commercial Opportunities and Challenges with Indoor Shrimp Biofloc Systems in USA
4:30 - 5:00	C. Good Comparing the Health, Performance, and Welfare of Juvenile Chinook Salmon (<i>Oncorhynchus tshawytscha</i>) Raised in a Pilot Partial Water Reuse System Versus a Flow-Through Raceway	P.G. Hightower Development of a Commercial Continuous Culture Hatchery System for the Production of <i>Brachionus rotundiformis</i> (S-type) Rotifers	H-C Kromand Water Quality Control Today	T.M. Samocha Biofloc-Dominated Zero Exchange Intensive Nursery and Grow-Out of the Pacific White Shrimp, <i>Litopenaeus vannamei</i> , in Greenhouse-Enclosed Raceways

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Friday, August 20, 2010, continued

5:00 - 6:00 p.m.
Poster Session

Roanoke Ballroom

Presenters will be available for questions

<p>R. Arantes Preliminary Results of a Pump Driven Water Circulation System for Shrimp Production on a Super-Intensive Recirculating Biofloc Culture</p> <p>R.R. Cabrera Estimation of Fish Biomass in Laguna de Bay Based on Primary Production</p> <p>H.V. Daniels Water Flow Characteristics and Flounder Distribution Patterns at Three Different Depths in a D-Ended Rectangular Tank (DERT)</p>	<p>G.J. Flick Effect of Feeding Omega-3 Fatty Acids on Striped Bass Filet Composition</p> <p>M.R. Guedes Nitrogen Uptake Kinetics in Aquatic Vascular Plants in a Defined Nutrient Solution and in Recirculating Aquaculture Effluent</p> <p>K. Jeffery A Review of the Current Status of Land-Based, Warm Water Recirculating Fish Farms in England</p> <p>K. Jeffery Potential Disease Problems for the Emerging English Tilapia Industry</p>	<p>D.D. Kuhn Nitrifying Bacteria Product Successfully Improved Nitrification in Recirculating Aquaculture Systems</p> <p>L.C. Lima Bacterial Infections of Tilapia and Yellow Perch Reared in Alternative Recirculating Aquaculture Systems</p> <p>L. Marsh Dry Shipping of Live Shrimp</p> <p>M. Pretorius A Comparison of Sediment Loading, Water Quality, Physico-Chemical Variables and Abalone Growth Rates and Health Produced By Artificial and Seaweed Diets in Flow-Through and Integrated Recirculating Aquaculture Systems on a Commercial South African Abalone Farm</p>	<p>S.T. Summerfelt Water Treatment Process Efficiencies in Replicated Recirculating Systems Operated with and without Ozonation at High and Low Flushing Rates</p> <p>M. Vetrivelvan Impact of Physico-Chemical Parameters on <i>Artemia</i> Cyst Production in the Salt Ponds of Kelambakkam, Chennai, South India - A Case Study</p> <p>C. Xuan A Study on Performance of Sequencing Microbead Biofilter</p>
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6:00 – 9:00 p.m. **Deluxe Reception**, Host: Greg Boardman

Saturday, August 21, 2010

8:00am - 10:00 a.m. Registration
8:00am - 4:00 p.m. Continuous Refreshment Break
9:00am - 3:00 p.m. Trade Show Open

	Buck Mountain Room	Monroe Room	Washington Lecture Hall	Wilson Room
AM	SYMPOSIUM 9 Closed-Containment Systems for Salmonid Culture – Session I, Moderator: S. Summerfelt	SYMPOSIUM 10 Sustainable RAS – Session I, Moderator: D. Kuhn	SYMPOSIUM 11 Recirculating Systems for Mollusk Culture, Moderator: G. Merino / S. Hall	SYMPOSIUM 12 Contributed Session I, Moderator: D. Taylor
9:00 - 9:30	D.A. Smith Land-Based Indoor Salmonid Recirculating Aquaculture – A 25-year Commercial Perspective on Practical and Economical Approaches	R. Malone Fractal Design of Large Scale Commercial Recirculating Aquaculture Systems	S. Hall and F. Wheaton Marine Recirculating Technologies for Mollusks: Review and Future Directions	D. Kauffman A Preliminary Investigation: Buyer Evaluations of Cobia Purchased from Live Tanks in the D.C. Metro Area
9:30 - 10:00	D. Stechey and J. Eastman Agriculture to Aquaculture – Adapting Barns for Recirculating Aquaculture: The Manitoba-Canadian Model Farm Initiative	M. Shpigel Land Based-Multi-Tropic Systems: Benefits and Constraints	J. Barraza Engineering Design of a Modular Recirculating Land Based Red Abalone (<i>Haliotis rufescens</i>) Production Facility	G.J. Fischer An Overview of Production and Hybridization Technologies for Producing Walleye (<i>Sander vitreus</i>) for Stocking and Food Fish in a 23°C Water Recirculating System at the UWSP Northern Aquaculture Demonstration Facility
10:00 - 10:30	BREAK	BREAK	BREAK	BREAK
10:30 – 11:00	S.T. Summerfelt Rainbow Trout Performance in Circular Tank-Based Water Recirculating Systems	O. Schneider The Dutch Case for Practices in Finfish Aquaculture Using RAS	G. Merino Do Abalones Reared in RAS Require a Calcium Carbonate Source for Shell Growth?	A.O. Akinwale Evaluation of Growth Performance of <i>Clarias gariepinus</i> Juveniles in Static Water Exchange and Water Reuse Culture Facilities
11:00 - 11:30	I. Gallego Alarcon Evaluation of a RAS for Rainbow Trout Culture in a Developing Country	I. Seginer Optimal Stocking in Intensive Aquaculture under Sinusoidal Temperature, Price and Marketing Conditions	R. Bishop A Fully Integrated Marine Environmental Aquaculture Recirculation System (MEARS™) in Conjunction with a Marine Environmental Recirculation Waste Aquaculture Treatment System (Merwats™) for Land Based Abalone Farming	A. Parashar Rehabilitation and Conservation of Endangered Fish (Mahseer) in M.P. India
11:30 - 12:00	KC Hosler New Alaska Sport Fish Hatcheries: A Project Overview	M. Terzich Sustainable Coral Aquaculture in Recirculating Systems on the Eastern Shore of Maryland	M.A. del Río-Portilla Past, Present and Future of the Abalone Recirculating Systems in Baja California, México	O. Schneider RAS CO ₂ Foot Print for African Catfish Smaller than for <i>Pangasius</i> Pond Culture
12:00 - 2:00	LUNCH	LUNCH	LUNCH	LUNCH

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Saturday, August 21, 2010, continued

	Buck Mountain Room	Monroe Room	Washington Lecture Hall	Wilson Room
PM	SYMPOSIUM 13 Closed-Containment Systems for Salmonid Culture – Session II, Moderator: S. Summerfelt	SYMPOSIUM 14 Sustainable RAS – Session II, Moderator: D. Kuhn	SYMPOSIUM 15 Contributed Session II, Moderator: L. Marsh	SYMPOSIUM 16 Contributed Session III, Moderator: L. Granata
2:00 - 2:30	E. Emparanza Design and Performance of Water Recirculating Systems for Commercial Salmon Smolt Production	R.C. Shultz Alternative Solids Treatment Technology for a Raft Aquaponic System	J. van Rijn Production and Removal of Off-Flavor Compounds, Geosmin and 2-Methylisoborneol, in a Zero-Discharge Recirculating System	S. Awal The Effects of Unilateral Eyestalk Ablation on Molting and Spawning of Yabbies, <i>Cherax destructor</i> in a Recirculating Aquaculture System
2:30 - 3:00	C. Good Atlantic Salmon (<i>Salmo salar</i>) Growout in Freshwater Closed-Containment Systems: (1) Effects of High (20 mg/L) and Low (10 mg/L) Carbon Dioxide Concentrations and (2) Effects of Strain and Photoperiod Manipulation	R. Baptiste Foam Fractionation Efficiency for Particulate Matter Removal from a Low Salinity, Lowhead Recirculating Aquaculture System Utilized for the Culture of Red Drum, <i>Sciaenops ocellatus</i>	J.M. Ebeling Engineering Design of a “Boutique” Recirculating Aquaculture Production System Using Mixed-Cell Raceways for Tilapia Production	R. Rahmatullah Integrated Culture of Fish and Vegetables in a Recirculating Aquaculture System in Bangladesh
3:00 - 3:30	BREAK	BREAK	BREAK	BREAK
3:30 - 4:00	T. Waldrop A Factorial Study to Investigate the Effects of Swimming Speed and Dissolved Oxygen Concentration on Rainbow Trout Performance, Health, and Welfare	M.F. Couturier Novel Approach for Sizing Rotary Drum Filters	P. Hamilton and P. Appleton Economic Benefits in Aquaculture Production of Utilizing Nanotechnology to Increase Oxygenation by Distributing Oxygen by Micro Nanobubbles	H.K. Bakhsh Growth Performance, Density and Nutrients in Integrated Culture of <i>Macrobrachium rosenbergii</i> and <i>Lactuca sativa</i>
4:00 - 4:30	W. Wolters Weight Loss and Fillet Quality Characteristics of Atlantic Salmon (<i>Salmo salar</i>) after Purging for 5, 10, 15, or 20 Days	S. Patnaik Optimization of Feed Rate for Higher Production of <i>Litopenaeus vannamei</i> under Super-Intensive Culture Systems	R. Dodd Acoustic Waste Feed Sensory for Tanks	R.H. Khalil Synopsis of Bacterial Diseases and Heavy Metal in Freshwater Crayfish (<i>Procambarus clarkia</i>) Populations in Egypt
4:30 - 5:00	P-D Sindilariu Ammonia and Nitrite Oxidation in Moving Bed Bioreactors Used in Salmon Smolt RAS and the Corresponding Microbial Community	J.M. Ebeling Improving Single Pass Solids Removal in Bead Bioclarifiers by Optimizing Media Size and Shape	A. Parashar A System Dynamics Model for Designing Ecological Engineering of Fish Ponds Towards Optimizing Production	D.D. Baliao Low/Partial Discharge and Closed-Recirculating Systems Culture Techniques for Marine Shrimp <i>Penaeus monodon</i> (Fabricius) at SEAFDEC/AQD Demonstration Sites in the Philippines

Sunday, August 22, 2010

Field trip (includes lunch)
 6:00 a.m. - 6:00 p.m.

Freshwater Institute, Shepherdstown, WV