PROGRAM

Third International Symposium on Ecology and Biodiversity in Large Rivers of Northeast Asia and North America

Memphis, Tennessee **September 20-24, 2010**

U.S. FISH & WILDLIFE SERVICE

EPA United States Environmental Protection Agency

LOWER MISSISSIPPI RIVER CONSERVATION COMMITTEE

MICRA Mississippi Interstate Cooperative Resource Association P.O. Box 774 - Bettendorf, IA 52722 - (309) 793-5811

Third International Symposium on Ecology and Biodiversity in Large Rivers of Northeast Asia and North America

AT-A-GLANCE

SYMPOSIUM REGISTRATION DESK OPEN Kress Building Annex of Marriott SpringHill Suites Hotel	**Sunday, September 19** 2:00 pm – 8:00 pm
	Monday (09/20) – Wednesday (09/22) 7:30 am – 5:30 pm

MONDAY, SEPTEMBER 20

9:00 – 10:30	OPENING PLENARY SESSION (Kress Ballroom)	
10:30 – 11:00	*Coffee Break*	
11:00 – 12:45	OPENING PLENARY SESSION (Kress Ballroom)	
12:45 – 2:00	*Lunch On Your Own*	
*2:00 – 3:30**	GIS AND REMOTE SENSING OF WATER RESOURCES (Kress Ballroom)	MONITORING - SESSION I (Renaissance Room)
3:30 – 4:00	*Coffee Break*	
*4:00 – 5:30**	RESTORATION AND CONSERVATION SESSION I (Kress Ballroom)	MONITORING - SESSION II (Renaissance Room)
7:00 – 9:00	*Reception And Dinner At Mud Island River Terrace Club (included in registration fee)*	

TUESDAY, SEPTEMBER 21

*9:00 – 10:30**	RIVER FAUNA AND FLORA (Kress Ballroom)	MONITORING - SESSION III (Renaissance Room)
10:30 – 11:00	*Coffee Break*	
*11:00 – 12:30**	GENETICS AND ECOLOGY (Kress Ballroom)	RESTORATION AND CONSERVATION – SESSION II (Renaissance Room)
12:30 – 2:00	*Lunch On Your Own*	
2:00 – 3:30	PLENARY SESSION PART I (Kress Ballroom)	
3:30 – 4:00	*Coffee Break*	
4:00 – 5:30	POSTER SESSION (Room To Be Announced)	

WEDNESDAY, SEPTEMBER 22

*9:00 – 10:30**	RIVER MONITORING AND RESTORATION (Kress Ballroom)	LANDSCAPES AND CONSERVATION (Renaissance Room)
10:30 – 11:00	*Coffee Break*	
*11:00 – 12:30**	FISHERY MONITORING AND RESTORATION (Kress Ballroom)	MONITORING - SESSION IV (Renaissance Room)
12:30 – 2:00	*Lunch On Your Own*	
2:00 – 3:30	PLENARY SESSION: PRESENTATIONS BY MISSISSIPPI INTERSTATE COOPERATIVE RESOURCE ASSOCIATION (MICRA) – Kress Ballroom	
3:30 – 4:00	*Coffee Break*	
2:00 – 5:30	PLENARY SESSION: PRESENTATIONS BY MISSISSIPPI INTERSTATE COOPERATIVE RESOURCE ASSOCIATION (MICRA) – Kress Ballroom	

THURSDAY, SEPTEMBER 23

9:00 am – 8:00 pm	ALL-DAY FIELD TRIP ON MISSISSIPPI RIVER (U.S. Army Corps of Engineers vessel); Lunch, Dinner, and Live Music at Tunica River Park Museum included in Registration Fee

FRIDAY, SEPTEMBER 24

9:00 – 10:30	PLENARY SESSION PART I (Kress Ballroom)
10:30 – 11:00	*Coffee Break*
11:00 – 12:00	CLOSING PLENARY SESSION (Kress Ballroom)

* denotes concurrent sessions

A G E N D A

SYMPOSIUM REGISTRATION DESK OPEN
Kress Building annex of Marriott SpringHill Suites Hotel

Sunday, September 19 2:00 pm – 8:00 pm
Monday, (09/20) through Wednesday (09/22) 7:30 am – 5:30 pm

MONDAY, SEPTEMBER 20

9:00 – 12:45	**Opening Plenary Session** (Kress Ballroom)
9:00 – 9:15	*Welcome* Charles WOOLEY, U.S. Fish and Wildlife Service Midwest-Great Lakes Region Deputy Regional Director
9:15 – 9:30	*Welcome* Memphis Mayor A. C. WHARTON and other city officials
9:30 – 9:45	*Welcome* District Engineer Colonel Vernie REICHLING, Jr., Memphis District, U.S. Army Corps of Engineers
9:45 – 10:00	*Opening Statement – U.S.* *Conservation and Management of Large Rivers in the United States* Cynthia DOHNER, U.S. Fish and Wildlife Service Southeast Region Regional Director
10:00 – 10:15	*Opening Statement – Russia* *Conservation of River Ecosystems in Protected Areas of Far Eastern Russia* Olga REPINA, Office of Policy and Regulation of Environmental Protection and Safety, Ministry of Natural Resources and Environment
10:15 – 10:30	*Opening Statement – China* *Conservation and Management of Large River Ecosystems in China* Qing LIU, Vice President, Academy of Fishery Sciences, China
10:30 – 11:00	**Coffee Break**
11:00 – 11:30	*The Mississippi River: Hydrological and Historical Contexts for Restoration* Robert MEADE
11:30 – 11:45	*Integrated Amur River Basin Management: Problems and Challenges* Yury DARMAN
11:45 – 12:00	*Crisis and Conservation Strategies for Fish Biodiversity in the Upper Reaches of the Yangtze River: An Analysis and Case Study of a Major Chinese River* Yamin WANG
12:00 – 12:30	*200-Year Vision for the Mississippi River* Major General Michael WALSH, Division Engineer, Mississippi Valley Division Corps of Engineers, and President, Mississippi River Commission
12:30 – 12:45	*Signing of Memorandum of Understanding between U.S. Army Corps of Engineers and Lower Mississippi River Conservation Committee* MG Michael WALSH, U.S. Army Corps of Engineers, and Janet STERNBURG, Chair, Lower Mississippi River Conservation Committee

12:45 – 2:00	**Lunch on Your Own**	
Concurrent Sessions **2:00 – 3:30**	**GIS and Remote Sensing of Water Resources** (Kress Ballroom)	**Monitoring - Session I** (Renaissance Room)
2:00 – 2:15	*GIS as a Watershed Planning Tool for Environmental Monitoring of Natural Gas Development within the Susquehanna River Basin* Dale BRUNS	*Monitoring of Biological and Abiotic Factors in Rivers and Other Water Bodies for Conservation of Salmonids in southern Primorye, Russia* Viktor MARKOVTSEV
2:15 – 2:30	*An Intelligent Layout for Investigations of Fishery Aquatic Habitats* Weigang SHI	*Fishery Eco-environmental Characteristics of the Middle and Lower Xijiang River, Spring 2009* Zini LAI
2:30 – 2:45	*GIS Tools for Fire Detection in Khinganskiy Nature Reserve on Amur River* Mikhail PARILOV	*Development of an Integrated Monitoring and Information System for Invasive Species in the Columbia River Basin* Tim COUNIHAN
2:45 – 3:00	*Mapping the Influence of Local Watershed Characteristics of Riverine Water Quality Chemistry: Integration of High Resolution Data, Unmanned Vehicles and Geospatial Techniques* Andrew CASPER	*Invasion of Exotic Fish Species and Fish Community Succession in Ulungur Lake, China* Fujiang TANG
3:00 – 3:15	*Time Series Envisat ASAR Backscattering Signatures and Optical Beijing-1 Spectral-Based Classification of Freshwater Wetlands at Poyang Lake* Lin WANG	*Anthropogenic Impact on Fish Habitat in Littoral Areas of the Upper Volga Reservoir* Sergey PODDUBNIY
3:15 – 3:30	*GIS and Habitat-Based Modeling as Sample Design Drivers for Experiments and Monitoring in Large Rivers* Jill HARDIMAN	*Biotic and Abiotic Monitoring of a Large-Scale Restoration Effort to Reconnect a Southern River with Its Historic Floodplain in Northern Louisiana* Thomas KENNEDY
3:30 – 4:00	**Coffee Break**	
Concurrent Sessions **4:00 – 5:30**	**Restoration and Conservation – Session I** (Kress Ballroom)	**Monitoring - Session II** (Renaissance Room)
4:00 – 4:15	*Fish Spawning Habitat and Remediation within the Huron-Erie Corridor: Past, Present and Future* David BENNION	*Temporal Variation in Spatial Sources of Mercury Loading to Rivers* David RAIKOW
4:15 – 4:30	*Fishery Resources of the Amur River, and Their Conservation* Feng JI and Zuofa JIANG	*Methods of Determination of Nitrobenzene Residue in Environmental Samples* Zhongxiang CHEN
4:30 – 4:45	*Coupling Sturgeon Conservation and River Rehabilitation: A New Approach to Fish Passage Design* Vladimir LAGUTOV	*Monitoring of Anthropogenic Impact on the Bolonsky Wetlands of International Significance in the Amur River Basin* Irina NIKITINA
4:45 – 5:00	*Twenty-Five Years of the Missouri River Mitigation Project* Neil BASS	*Analyzing Bed Degradation on the Kansas River* John SHELLEY

5:00 – 5:15	*Evaluation of Paddlefish Stocking Demonstrates Need for Cohesive Interjurisdictional Paddlefish Management* Brenda PRACHEIL	*Study of the Supersaturation of Dissolved Gas and Influence on Downstream Fisheries Caused by Draw-Off Water at Three Gorges Dam on the Yangtze River* Yunfeng LI
5:15 – 5:30	*Status and Trends of Fishery Resources, 1951-2007, in Lake Khanka* Hongxian YU	*Role of Bottom Sediments in Secondary Pollution of the Amur River* Natalia FISHER
7:00 – 9:00	**Reception and Dinner** (Mud Island River Terrace Club)	

TUESDAY, SEPTEMBER 21

Concurrent Sessions 9:00 – 10:30	**River Fauna and Flora** (Kress Ballroom)	**Monitoring - Session III** (Renaissance Room)
9:00 – 9:15	*Potential Effects of Silver Carp (Hypophthalmichthys molitrix) on the Plankton Community in Floodplain Lakes of the Lower Mississippi River Basin* Orathai PONGRUKTHAM	*Progress in Understanding Pallid Sturgeon Reproduction and Recruitment in the Lower Missouri River* Aaron DELONAY
9:15 – 9:30	*Phytoplankton Production in the Lower Mississippi River: Temporal Variation and Possible Relationship to Climate Change* Clifford OCHS	*Study of the Age and Growth of Taimen (Hucho taimen) in the Ussuri River* Jiasheng YIN
9:30 – 9:45	*Mesozooplankton Communities in the North Channel and North Branch of the Yangtze River Estuary* Qian GAO	*Asian Carp Nurseries in Backwaters of the Mississippi River* Larry SOUTHERN
9:45 – 10:00	*Winter Aquatic Macroinvertebrate Communities in Mississippi River Alluvial Valley Forested Wetlands* Justyn FOTH	*Fishery Monitoring in the Ussuri River and Division of the Water Basin into Sections with Various Fish Assemblages* Evgeny BARANSHCHIKOV
10:00 – 10:15	*Red Oak Acorn Dynamics in the Lower Mississippi River Alluvial Valley* Jake STRAUB	*Multi-Scale Hydroacoustic Remote Sensing of Endangered Pallid Sturgeon and Their Habitats in the Lower Missouri River* Brandon MCELROY
10:15 – 10:30	*Rare Birds on the Russian Side of the Sanjiang Plain* Andrei AVERIN	*Research and Conservation of Four Well-Known Chinese Carps in the Yangtze River* Daqing CHEN
10:30 – 11:00	**Coffee Break**	

Concurrent Sessions ***11:00 – 12:30***	**Genetics and Ecology** (Kress Ballroom)	**Restoration and Conservation – Session II** (Renaissance Room)
11:00 – 11:15	*Studies of Genetic Diversity of Macrobrachium hainannense in Five Rivers* Hongtuo FU	*Some Practical Realities of Restoring the 'Natural Processes' of the River* Ken LUBINSKI
11:15 – 11:30	*Introgressive Hybridization as a Confounding Factor in the Adaptive Management of Endangered Colorado River Fishes* Marlis DOUGLAS	*International Cooperation and Management of Wetlands of International Significance in Bolonsky State Nature Reserve, Russia* Vitaliy TYAGUNIN
11:30 – 11:45	*Determination and Identification of Small Molecule Biomarkers in Cyprinus caprinus using UPLC-PDA and UPLC-MS/MS* Yanchun SUN	*Historic Development of Sturgeon Fisheries and Current Status of Sturgeon in the Amur River, and Resource Conservation in China* Qiuzhi QU
11:45 – 12:00	*DNA Barcoding Applications for Aquatic Bioassessments* Erik PILGRIM	*Dynamics of the Oriental Stork Population as an Indicator of Hydrological Cycles in the Amur Basin Using the Example of Khingansky Reserve* Mikhail PARILOV
12:00 – 12:15	*Study of Growth and Fecundity Characteristics of Skygazer (Culter albarnus) in Lake Khanka* Peirong ZHAN	*The U.S. Environmental Protection Agency's Wetland Ecosystem Services Research Program* Charles LANE
12:15 – 12:30	*Riverscape Genetics and Its Implications for Conservation and Management of a Long-Lived Colorado River Fish* Michael DOUGLAS	*Reasons and Countermeasures for Population Decline in Landlocked Ayu (Plecoglossus altivelis) in Biliuhe Reservoir* Xiaolin ZHAO
12:30 – 2:00	**Lunch on Your Own**	
2:00 – 4:30	**Plenary Session** (Kress Ballroom)	
2:00 – 2:15	*Global Change Impacts on Biophysical Processes Controlling Elevation Dynamics in Wetlands of the Mississippi River Delta* Karen McKEE	
2:15 – 2:30	*Green Shield of the Black Dragon: Public Education Campaigns in the Amur River Basin* Svetlana TITOVA	
2:30 – 2:45	*Changes in Fish Assemblage Composition and Diversity in the Upper Yangtze River Before and After Impounding of Three Gorges Reservoir* Fei XIONG	
2:45 – 3:00	*Biotic Indicators of Condition and Their Response to Stressors in North American Mid-Continent Great Rivers (USA)* Ted ANGRADI	
3:00 – 3:15	*Current Status of Ecosystems and Fish Populations of the Main Rivers of the Central Asian Closed Basin* Yury SLYNKO	
3:15 – 3:30	*Great Rivers Partnership: a Five-Year Journey of Partnership Development between the Mississippi and Yangtze River Basins* Yao YIN	
3:30 – 4:00	**Coffee Break**	

4:00 – 5:30	**Poster Session** (Location To Be Announced)
	A Summary of Shallow Water Habitat Creation Projects on the Lower Missouri River Joseph BONNEAU
	Applying Spatial Analysis Techniques to Monitor Floodplain Forest Land Use Dynamics of West Tennessee River Systems Christopher BRIDGES
	Development of a Sturgeon Information Management System (SIMS) to Support Science for the Recovery and Management of an Endangered Large River Species Kimberly CHOJNACKI
	Spatial Patterns of Macroinvertebrate Communities and the Importance of Island Sloughs in Mississippi River Pool 25 Michael FLINN
	Assessing the Ecological Significance of Large Hydrogeomorphic Patches within Two Large River Watersheds Joseph FLOTEMERSCH
	Collaborative Development of a North American Spatial Framework for Rivers Assessment and Classification Joseph FLOTEMERSCH
	A Preliminary Assessment of Performance Metrics in Created Shallow Water Habitat Sites on the Lower Missouri River Todd GEMEINHARDT
	Hydrologic and Geomorphic Considerations in Restoration of River-Floodplain Connectivity, Lower Missouri River Robert JACOBSON
	Changes in the Fish Population of the Selenga and Orkhon Rivers (Mongolia) under the Influence of Anthropogenic and Geoclimatic Factors Dmitry KARABANOV
	Movements, Habitat Use, and Conservation of an Imperiled River Leviathan: Alligator Gar (Atractosteus spatula) Edward KLUENDER
	Challenges of Integrated River Basin Management in China Wei LI
	Retrospective Monitoring of Ecosystem Changes Using Published Data and Lessons Learned from Egypt's Nile River Delta Autumn OCZKOWSKI
	Effects of Hydrological Connectivity on Physicochemical Properties and Phytoplankton Biomass of Lakes In the Lower Mississippi River Floodplain Orathai PONGRUKTHAM
	Movement and Habitat Use of Wild and Hatchery Origin Paddlefish: Implications for Species Restoration Brenda PRACHEIL
	Fish Habitat Assessment and Restoration in the Huron-Erie Corridor Edward ROSEMAN
	Upper Mississippi River System Ecosystem Restoration Objectives: 2010 Charles THEILING

WEDNESDAY, SEPTEMBER 22

Concurrent Sessions ***9:00 – 10:30***	**River Monitoring and Restoration** (Kress Ballroom)	**Landscapes and Conservation** (Renaissance Room)
9:00 – 9:15	*Floodplain Restoration and Reconnection at Upper Ouachita National Wildlife Refuge, Louisiana* Steve HAASE	*Hydrogeomorphic Characterization of Rivers, and Implications for Ecological Processes and Ecosystem Services* Joseph FLOTEMERSCH
9:15 – 9:30	*Principal Environmental Risk Factors in Major Tributaries of the Amur River* Liubov KONDRATYEVA	*International Cooperation of Khankaisky State Biosphere Nature Reserve* Yury SUSHITSKY
9:30 – 9:45	*Great Lakes Connecting Channels Offer Unique Habitat Rehabilitation Opportunities* Edward ROSEMAN	*Ecosystem Service Changes Due to Water Level Fluctuation in Lake Poyang, China* Cai LU
9:45 – 10:00	*Defining Ecosystem Restoration Potential Using a Multiple Reference Condition Approach: Upper Mississippi River Ecosystem* Charles THEILING	*A Landscape Assessment Approach of Proper Functioning Condition in the Humboldt River Basin, Nevada* Robert HALL
10:00 – 10:15	*Analysis of Prevention and Cure for Desertification of Aquatic Areas* Quan LU	*Conservation of Threatened and Endangered Species of Birds in Botchinsky State Nature Reserve* Sergei KOSTOMAROV
10:15 – 10:30	*A Habitat Restoration Strategy for the Lower Mississippi River* Jack KILLGORE	*Implications of Regional Climate Change for River Hydrology and Habitat: Examples from Florida, Great Lakes and New England River Systems* Andrew CASPER
10:30 – 11:00	**Coffee Break**	
Concurrent Sessions ***11:00 – 12:30***	**Fishery Monitoring and Restoration** (Kress Ballroom)	**Monitoring - Session IV** (Renaissance Room)
11:00 – 11:15	*Abundance and Disappearance of Introduced Fish Species in the Xiangmoshan Reservoir* Zhaoting FAN	*Development of cBARBEL, a Catfish Genome Database* Jianguo LU
11:15 – 11:30	*Sturgeon Species as an Incentive for River Restoration Programs and Indicator of Their Success: the Ural River Case* Viktor LAGUTOV	*Management and Restoration Implications from a Stock-Recruit Model for Bighead Carp in Portions of the Illinois and Mississippi Rivers* Michael HOFF
11:30 – 11:45	*Management of Endangered Paddlefish and Sturgeon In the Yangtze and Mississippi Rivers* Jan HOOVER	*Lower Mississippi River Side Channel Change, 1960-2000* Amanda OLIVER
11:45 – 12:00	*Study of Gymnocypris przewalskii and Resource Protection Strategies* Jianquan SHI	*Conservation of Endangered Aquatic Species in the Yangtze River* Ying LIU

12:00 – 12:15	*Asian Carp Swimming Performance: Implications for Containing Invasive Fishes* Alan KATZENMEYER	*Polychlorinated Biphenyls (PCBs) in Inland Waters of Russia* Grigory CHUIKO
12:15 – 12:30	*Distribution, Ecology and Conservation of Lena River Grayling in the Amur River Basin* Alexander ANTONOV	*Restoring Environmental Benefits and Services in Navigable Rivers: a Cost-Effective Reach-to-Basin-Level Framework* Andrew CASPER
12:30 – 2:00	**Lunch on Your Own**	
2:00 – 5:30	**Plenary Session: Presentations By Mississippi Interstate Cooperative Resource Association (MICRA)** (Kress Ballroom)	
2:00 – 2:20	*Introducing the Mississippi Interstate Cooperative Resource Association (MICRA)* Jerry RASMUSSEN	
2:20 – 2:50	*The Upper Mississippi River Sub-Basin* Ronald BENJAMIN	
2:50 – 3:10	*The Upper Missouri River: Past Alterations and Current Cooperative Resource Management Efforts* George JORDAN	
3:10 – 3:30	*Lower Missouri River Resource Management* Schuyler SAMPSON	
3:30 – 4:00	**Coffee Break**	
4:00 – 4:20	*Ohio River Sub-Basin* Brian SCHOENUNG	
4:20 – 4:40	*Tennessee-Cumberland River Sub-Basin Conservation and Management* Eric GANUS	
4:40 – 5:00	*Arkansas and Red River Sub-Basins* Chris RACEY	
5:00 – 5:30	*Lower Mississippi River Sub-Basin* Cynthia WILLIAMS	

THURSDAY, SEPTEMBER 23

9:00 am – 8:00 pm	**All-Day Field Trip On Mississippi River** (U.S. Army Corps of Engineers vessel)
9:00	*Embark M/V Strong at Mud Island River Park (15-minute walk from hotel)*
9:30	*Depart Mud Island Landing; Tour of Loosahatchie Bar Aquatic Habitat Rehabilitation Project and & Live Mississippi River Fish Exhibit*
12:30 – 2:00	*Lunch (Provided)*
2:00 – 4:00	*Integrating Large River Flood Control, Navigation, and Environmental Benefits; Free Time Aboard Vessel*

4:00 – 4:30	*Arrive Tunica River Park , Mississippi*
4:30 – 4:45	*Disembark MV Strong*
4:45 – 6:00	*Tour River Park Museum & Grounds*
6:00 – 8:00	*Catfish/Chicken Dinner Provided (with live music)*
8:00	*Board Buses and Return to Memphis*

FRIDAY, SEPTEMBER 24

9:00 – 10:30	**Plenary Session** (Kress Ballroom)
9:00-9:15	<Title to be Provided> Ruxian CHEN
9:15-9:30	*Rivers of the Aral Sea Basin: Restoring an Old, or Supporting a New Ecosystem?* Kristina RODINA
9:30-9:45	*Development of a SWAT Model to Quantify Large-Scale Biofuel Production-Related Impacts on the Mississippi River* Zhonglong ZHANG
9:45-10:00	*International Ecological Importance and Contemporary Problems of the Upper Basin of the Amur River* Olga KIRILYUK
10:00-10:15	<Author/Title To Be Announced>
10:15-10:30	<Author/Title To Be Announced>
10:30 – 11:00	**Coffee Break**
11:00 – 12:00	**Closing Plenary Session** (Kress Ballroom)