

# Lake Michigan Exploration Workshop

## Chicago, IL Aug. 2-8, 2008

### AGENDA

### Saturday, August 2

#### Introductions and Workshop Overview

TIME	EVENT	LOCATION	SPEAKER/LEADER
2:30 p.m.	Meet at Belden-Stratford Hotel and walk together to meeting site.	Belden-Stratford Hotel	Robin Goettel, COSEE Great Lakes (COSEE GL)
3:00-3:45	Introductions and icebreaker activity	Peggy Notebaert Nature Museum, 2 <sup>nd</sup> floor North Gallery	Terri Hallesy, COSEE GL
3:45-4:15	Presentation of previous workshop experiences	"	Jen Fleck and Anne-Marie Potter Mentors for this year's workshop
4:15-4:45	Workshop overview Participant responsibilities	"	Robin Goettel, COSEE GL
4:45-5:15	Concept mapping overview	"	Howard Walters, COSEE GL
5:15	Walk to hotel and get room keys		
6:15	Leave Hotel for Dinner	Cosi—Walk together	
7:30	Enjoy Chicago (participants can explore the city in groups and get to know one another)	Ideas: Navy Pier fireworks, Jazz or Blues club, Evening cruise from Navy Pier	Robin is going to Navy Pier and has room in van for 8 people.



THE PEGGY NOTEBAERT  
**NATURE MUSEUM**  
*The Museum of the Chicago Academy of Sciences*



We thank our two primary host sites, the Peggy Notebaert Nature Museum and the John G. Shedd Aquarium, for providing us meeting space in their facilities and for their education staff assistance. Special thanks to Raphael Rosa, Laura Nitanda, and Crystal Jones at the Nature Museum and to Joy Kubarek-Sandor and Amy Christiansen at the Shedd for all their help in planning our workshop.

## Sunday, August 3 Great Lakes Overview and Life in the Lakes

TIME	EVENT	LOCATION	SPEAKER/LEADER
7:00 a.m. 7:45	Cont. breakfast Extended breakfast	Hotel Peggy Notebaert Nature Museum	
8:00-9:10	Outline day's activities Teachers sit in grade-level groups	Peggy Notebaert Nature Museum, 3 <sup>rd</sup> floor	Jim Lubner, COSEE GL
9:15-9:30	Board bus and leave for Milwaukee	Circle drive in front of Notebaert Museum	
9:30-2:30	Field tour	Northpoint Marina, Racine, Kenosha, Chiwaukee Prairie, and Grant Park	Jim Lubner, COSEE GL
2:45-3:45	Great Lakes Overview presentation	UW-Milwaukee, Great Lakes Water Institute	Jim Lubner, COSEE GL
3:45-5:15	Prepare for Monday's monitoring activities on R/V Neeskay	UW-Milwaukee, Great Lakes Water Institute	Carmen Aguilar and Russell Cuhel, Gr. Lakes Water Institute
6:00	Check into dorms	UW-Milwaukee	
7:00-8:00	Dinner	Oakland Tratoria	Jim Lubner has van for those who do not wish to walk.
8:30-?	Journaling and Lake Michigan Exploration blogging	Hotel	

# Lake Michigan Exploration Workshop

## Monday, August 4 Lake Michigan Ecosystems/Habitats

<b>TIME</b>	<b>EVENT</b>	<b>LOCATION</b>	<b>SPEAKER/LEADER</b>
7:00 a.m.	Breakfast	Dorm cafeteria	
7:30-8:00	Concept mapping	Dorm—Channel room	Howard Walters, COSEE GL
8:00-8:30	Check out and board bus	Dorm area	
9:00	Board R/V Neeskay	GL Water Institute dock	
9:15-2:00	Lake Michigan Ecosystems/Habitats (lunch provided on boat)	R/V Neeskay	Carmen Aguilar and Russell Cuhel, Gr. Lakes Water Institute
2:20-5:00	Process and analyze water samples	GLWI lab	Carmen Aguilar and Russell Cuhel, Gr. Lakes Water Institute
5:00-5:30	Go over activity, “Who can harvest a Walleye?” from Greatest of the Great Lakes collection	“	Terri Hallesy, COSEE GL
5:30-6:45	Pizza Dinner	“	
6:45-8:45	Board bus to return to Chicago	Ocean Literacy Principles orientation	Steve Stewart, COSEE GL
9:00-?	Journaling and Lake Michigan Exploration blogging	Hotel	

# Lake Michigan Exploration Workshop

Tuesday, August 5

## Human-Lake Interface—Lake Michigan Issues

TIME	EVENT	LOCATION	SPEAKER/LEADER
7:00 a.m.	Cont. breakfast Extended breakfast	Hotel Peggy Notebaert Museum McCormick Room	
8:00-8:30	GLERL and other Great Lakes data sets	Peggy Notebaert Museum	Rochelle Sturtevant and Ann Marshall, COSEE GL
8:30-9:00	Concept Mapping	Peggy Notebaert Museum	Howard Walters, COSEE GL
9:00-9:45	<b>“Contaminants in Great Lakes air, fish, and water: Trends and emerging concerns”</b> The movement of contaminants in the environment through atmospheric deposition	“	Todd Nettesheim, U.S. EPA Great Lakes National Program Office
9:45-10:30	<b>“Endocrine Disruption in Fish and Wildlife”</b> Effects of chemical contamination on aquatic organisms	“	Marisol Sepulveda, Purdue University, West Lafayette
10:30-11:15	Grade level group discussions with scientists to discuss classroom applications	“	Todd Nettesheim and Marisol Sepulveda; Susan Boehme and Leslie Dorworth, IL-IN Sea Grant
11:15-11:45	<i>Lunch presentation:</i> Student stewardship on Lake Michigan and other Great Lakes	“	Stephanie Smith, Alliance for the Great Lakes
12:00	Board bus <b>promptly</b>	Stickney Water Reclamation Plant	
1:00-3:00	Tour wastewater treatment facility	Stickney Water Reclamation Plant	Water Reclamation Plant tour guide with comments by Todd Nettesheim, U.S. EPA Great Lakes National Program Office
3:00-4:00	Return to Peggy Notebaert	Peggy Notebaert Museum	
4:30-5:15	<i>Greatest of the Gr. Lakes</i> activity: “Which Fish Can We Eat?”	Peggy Notebaert Museum	Terri Hallesy, COSEE GL
6:30-7:30	Dinner	RJ Grunts	
8:00-?	Journaling and Lake Michigan Exploration blogging	Hotel	

We gratefully acknowledge the Alliance for the Great Lakes for contributing complimentary copies of the *Great Lakes in My World* curriculum resource.

# Lake Michigan Exploration Workshop

Wednesday, August 6  
Coastal Processes

TIME	EVENT	LOCATION	SPEAKER/LEADER
6:30 a.m.	Cont. Breakfast	Hotel	
7:20 <b>sharp</b>	Board bus and leave for Indiana Dunes Nat'l Lakeshore	Hotel	
9:00	Arrive in Gary, IN	Paul Douglas Center for Environmental Ed.	
9:30-10:00	Concept Mapping	"	Howard Walters, COSEE GL
10:00-11:10	<b>"Modern And Ancient Coastal Processes Along A Sandy Coastline: The Southern Shore Of Lake Michigan"</b>	"	Todd A. Thompson, Senior Scientist, Indiana Geological Survey and Indiana University
11:15-11:45	Lunch (Gr. Lakes issues disc.— Water Quantity, etc.)	"	
11:45-12:45	Dune ecology tour and "Indoor Dunes" (Part 1) Activity from <i>Great Lakes in My World</i> and <i>Greatest of the GL</i>	Gary Beach	Wendy Smith, NPS Great Lakes Research and Education Center (GLREC)
12:45-2:00	Field trip: Sandy Beach—Beach morphology, bedforms, and structures	Gary Beach	Todd A. Thompson and Carolyn Estell, Indiana Geological Survey at Indiana University
2:00-3:00	"Indoor Dunes" (Part 2)	Paul Douglas Center for Env. Education Boardwalk	Wendy Smith, NPS GLREC
3:00-4:00	Field trip: Beach ridges and wetlands	Paul Douglas Center for Env. Education Center Boardwalk	Todd A. Thompson, IN Geological Survey at Indiana University
4:10	Take bus back to Chicago		
7:00	Dinner for teachers Dinner for COSEE Team/Review Team (Don Elthon and Sharon Walker)	Emilios Tapas Mon Ami Gabi	Irene Miles, IL-IN Sea Grant Robin Goettel, COSEE GL
8:00-?	Journaling and Lake Michigan Exploration blogging	REMINDER: Wear COSEE GL shirt tomorrow!	



## Thursday, August 7 Fisheries/Invasive Species Day

TIME	EVENT	LOCATION	SPEAKER/LEADER
7:00 a.m.	Cont. Breakfast Extended breakfast at Shedd Aquarium	Hotel	
7:45-8:00	Board bus and leave by 8:00	Hotel	
8:45-9:15	Concept Mapping	Shedd Aquarium Aquatic Education Center	Howard Walters, COSEE GL
9:15-9:30	Logistics preparing participants to finalize group presentations	"	Cindy Hagley, COSEE GL
9:30-9:40	<b>"Aquatic Invasive Species: Great Issue for Great Lakes"</b>	"	Kristin TePas, Illinois-Indiana Sea Grant Program
9:40-10:30	<b>"Alterations of Lake Michigan Benthic Communities by the Invasive Colonial Hydroid, Cordylophora caspia: Effects on Fish Prey"</b>	"	Nadine Folino-Rorem, Wheaton College
10:30-10:45	Break	"	
10:45-12:00	Guided opportunity to observe AIS in their L. Michigan environment	Burnham Harbor and nearby beach	Nadine Folino-Rorem, Wheaton College and Kristin TePas, Illinois-Indiana Sea Grant Program
12:00-12:15	Group photo of workshop participants	"	
12:30-1:30	<b>"On the Great Turtle's Back, the Potawatomi and Michigama--the Great Lake"</b>	Shedd Aquarium Teacher Center	John Low, Mitchell Museum of the American Indian
1:30-2:15	<i>Greatest of the Great Lakes</i> activity. "Don't Stop for Hitchhikers"	"	Robin Goettel, COSEE GL
2:15-2:45	Tour of "Great Lakes Invasions" exhibit	Shedd Aquarium—Gr. Lakes Gallery	Shedd Aquarium Interpretor Kristin TePas, Nadine Folino-Rorem
3:00-3:15	Board bus and leave	Shedd circle drive	
4:00	Fine tune and work on final group presentations for Friday morning	Peggy Notebaert Museum	Teachers
6:00-7:30	Pick up dinner in Robin Goettel's hotel room and continue group work		Teachers
7:30-?	Share impressions of the week's activities/Enjoy visit from local invaders Zelda and Helga	Robin Goettel's hotel room	Everyone!

## Friday, August 8 Teacher Presentations

TIME	EVENT	LOCATION	SPEAKER/LEADER
7:00-8:00	Cont. breakfast and Checkout	Hotel	
8:30-8:45	Expanded breakfast and discuss format for group presentations	Peggy Notebaert Museum(McCormick Room)	
9:00-9:30 9:30-9:45	High School group presentation Q&A	"	Teachers
9:45-10:15 10:15-10:30	Middle School group presentation Q&A	"	Teachers
10:30-10:45	Break	"	
10:45-11:15 11:15-11:30	Upper Elementary group presentation Q&A	"	Teachers
11:30-12:15	Application of Ocean Literacy Principles in the classroom	"	Steve Stewart, COSEE GL
12:15-1:00	Lunch (discussion of requirements for those requesting graduate credit)	"	Robin Goettel, COSEE GL
1:00-2:00	Final observations from teacher participants (scientist connections, favorite journal entries, etc.)	"	Teachers
2:00-2:30	Final thoughts from COSEE LMEW Team Leaders and Adjourn	"	COSEE GL Team

### COSEE Great Lakes Lake Michigan Exploration Workshop Planning Committee

Robin Goettel, COSEE Great Lakes, Lake Michigan Leader, Illinois-Indiana Sea Grant Program  
 Terri Hallesy, Illinois-Indiana Sea Grant Program  
 Jen Fackler, Illinois-Indiana Sea Grant Program  
 Steve Stewart, Michigan Sea Grant Program  
 Cindy Hagley, Minnesota Sea Grant Program  
 Marti Martz, Pennsylvania Sea Grant Program  
 Jim Lubner, Wisconsin Sea Grant Institute  
 Howard Walters, Ashland University  
 Rochelle Sturtevant, NOAA/Great Lakes Environmental Research Lab

**COSEE Great Lakes Director:** Dr. Rosanne Fortner

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