

THE THIRD BIENNIAL CONFERENCE OF THE LAKE ERIE MILLENNIUM NETWORK

Provisional Program

May 6-7, 2003

Conference Location: Ambassador Auditorium, CAW Student Centre,
University of Windsor

Monday 5 May

5:30p.m. Welcome Social and Poster Viewing. Location: CAW Student Centre, Commons Area

Tuesday 6 May

8:30a.m. Opening Remarks - Welcome and introduction-Jan Ciborowski, Co-convenor

Ross Paul, President, University of Windsor

Ashley Scott, Executive Director, Great Lakes Institute for Environmental Research

Rt. Hon. Herb Gray, Co-Chair, Canadian Section, International Joint Commission

9:00a.m. **Review of progress on Research need #1 & #4 - Factors regulating the trophic status of Lake Erie-Gerald Matisoff, Moderator**

- | | | |
|-------|--|--|
| 9:00 | An historical perspective on the expected relationships among changes in dissolved oxygen, total phosphorus, and nitrogen in Lake Erie. | Murray Charlton, NWRI, Environment Canada |
| 9:15 | Lake Erie monitoring 1983-2002 and total phosphorus load analysis. | David Rockwell et al., US EPA |
| 9:30 | Sediment analyses of historical trends in oxygen depletion and sediment oxygen demand. | Gerald Matisoff et al., Case Western Reserve University |
| 9:45 | Regulation of microbial productivity at the base of the Lake Erie food web. | Robert Heath, Kent State University & M. Munawar, Department of Fisheries & Oceans |
| 10:00 | Contribution of lower trophic level dynamics, dreissenids, and physical processes to Lake Erie changes. | Joseph Conroy et al., Ohio State University |
| 10:15 | Benthic and pelagic microbial assemblages. | Hunter Carrick, Pennsylvania State U. & Nathaniel Ostrom, Michigan State U. |
| 10:30 | Break | |
| 10:45 | The nearshore shunt: ecological engineering in the Great Lakes. | Ralph Smith et al., University of Waterloo |
| 11:00 | Trace metal controls over primary productivity in Lake Erie: the role of Fe and Zn as examined using trace metal clean sampling methods. | Michael Twiss, Clarkson University & Mike McKay, Bowling Green State University |
| 11:15 | Changes in zoobenthic distribution & relation to trophic status. | Dave Barton et al., University of Waterloo |
| 11:30 | Walleye: trophic regulator or victim of change? | Roger Knight et al., Ohio DNR |
| 11:45 | Recent changes in Lake Erie trophic status? Summarizing the evidence and possible explanations. | Jan Ciborowski, University of Windsor |
| 12:00 | Great Lakes forecasting-Lessons from the EEGLE Project--Web site. | Brian Eadie, NOAA |

12:15	Discussion and comments-next steps	
12:30	LUNCHEON and Poster Viewing	
1:30	Research Need #2. Habitat Issues-Donna Myers, Moderator	
1:30	Report on Great Lakes Climate Change.	Bryan Tugwood & Heather Auld, Environment Canada
1:45	The GLEI Approach to characterizing anthropogenic stress at the Lake Erie coastal margin--Web site.	Nick Danz et al., University of Minnesota
2:00	The roles of flood timing and intensity in regulating nutrient bioavailability, transport, and loadings to Lake Erie.	David Baker & Peter Richards, University of Waterloo
2:15	Substrate mapping and water mass characterization as tools to delineate aquatic habitat.	Hans Biberhofer et al., Environment Canada
2:30	An integrated habitat classification system for the Lake Erie basin: proposal and pilot study opportunities	Donna Myers, USGS & Patricia Chow-Fraser, McMaster University
2:45	Western Lake Erie wildlife refuge.	Lauri Elbing, Congressman Dingell's office
3:00	Discussion & comments-next steps	
3:15	Break	
3:30	Research Need #6. Emerging Issues: reports on botulism; microcystin, pharmaceuticals- Jan Ciborowski, Moderator	
3:30	Type E botulism in the Great Lakes.	Tonie Rocke et al., USGS, National Wildlife Health Center
3:45	Botulism E-related fish and wildlife die-offs on the southern Great Lakes.	Jeff Robinson, CWS & Bill Culligan, NY Dept. of Enviro. Conservation
4:00	Putative role of fish in the epidemiology of avian botulism in Lake Erie.	Richard D. Moccia et al., University of Guelph
4:15	Re-emergence of Cyanobacteria harmful algal blooms in the Great lakes - The CyanoHABs.	Wayne Carmichael, Wright State University
4:30	Sewage treatment plants as sources of drugs in the Detroit River and western Lake Erie.	Chris Metcalfe & Xiu-Sheng Miao, Trent University
4:50	Discussion & comments-next steps	
5:00	Overview of research needs and opportunities	
5:00	Environment Canada's research needs & opportunities	Simon Llewellyn, Environment Canada
5:10	US EPA's Research needs & opportunities	Paul Horvatin, US EPA
5:25	Close for the day	
5:30	Social and poster viewing	
	Supper on peoples' own	

Wednesday 7 May

8:30	Research Need #2. Contaminant Issues - Chris Marvin, Moderator	
8:30	Sediment contaminant distribution and the sediment quality index.	Chris Marvin, NRRI, Environment Canada
8:45	Evaluating ecosystem results of PCB control measures within the Detroit River-western Lake Erie basin.	John Hartig et al., Greater Detroit American Heritage Rivers Initiative
9:00	The Detroit River as a loadings source of PCBs and Hg to western Lake Erie.	Stan Reitsma, University of Windsor
9:15	Biomonitoring and contaminant trophodynamics in the Detroit River and western Lake Erie.	Ken Drouillard et al., University of Windsor
9:30	Discussion & comments	
9:45	Break	
10:00	Research Need #5 - Invaders - Murray Charlton, Moderator	
10:00	Role of invaders on habitat function and structure.	Madeline Austen, Environment Canada
10:15	Round gobies increase phosphorus transfer to the pelagic zone of central Lake Erie.	Bo Bunnell et al., Ohio State University
10:30	Update on ballast work, continuing risks and prognosis.	Robert Colautti, et al., University of Windsor
10:45	Discussion & comments-next steps	
11:00	New directions and next steps: integration and needs - Jeff Reutter, Moderator-- Presentation	
11:10	Ecosystem forecasting, Great Lakes Observing System and IFYGL-2 GLOSI-IOOS Web site).	Steve Brandt, GLERL NOAA
11:25	A Scaleable Architecture For Whats Beyond and Underneath Ecosystem Forecasting.	Keith Bedford, Ohio State University
11:40	Adding the 'Ecosystem' to the Great Lakes Observation and Ecosystem Forecasting System.	Joe DePinto, Limno-Tech, Inc.
11:55	Charge to researchers and collaborators. Final comments	
12:00	Formal Conference close	
12:00 - 2:00	Lake Erie Research Synthesis and Needs-Linking land and the water Working lunch in breakout groups <i>How do pressures from the land regulate timing and degree of loadings of nutrients and sediment, ultimately affecting primary and secondary production, and the distribution of benthic organisms?</i> <i>How do pressures from the water (water level, erosion, temperature inversions, colonizers) regulate the character and health of shoreline margin features and the biota that occur there?</i>	
12:00-1:30	Breakout discussion by group	
1:30	Reporting out & opportunities-Jan Ciborowski, Moderator	
2:00	Workshop ends	