

NCCOS Sponsored Research: ASLO '13 Aquatic Sciences Mtg., Feb. 17-22, New Orleans

REGIONAL ECOSYSTEMS

Regional Ecosystem Prediction Program: From Science to Management (REPP/FSM)

Session Chairing

“Catapults, Ferries, and Bridges: Getting Aquatic Science Results to Policy and Management ,” Elizabeth Turner (NCCOS/CSCOR), Dwight Trueblood (NOS/OCRM/ERD), Kalle Matso (University of New Hampshire), Felix Martinez (NCCOS/CSCOR) (Tuesday, Feb. 19, Session SS02)

Oral Presentations

THE FEASIBILITY OF TRANSITIONING COASTAL ECOSYSTEM MANAGEMENT MODELS FROM DEVELOPMENT TO OPERATIONAL STATUS. Brady, D. C.; Fitzpatrick, J.; DePinto, J.; Di Toro, D. M.; Kemp, W. M.; Scavia, D. (Tuesday, Feb. 19, Session SS02, 10:30-10:45)

SCIENCE TO MANAGEMENT: EXPERIENCES IN THE GREAT LAKES. Stow, C. A.; Kashian, D. R.; DePinto, J. V.; Peacor, S. D.; Hook, T. O. (Tuesday, Feb. 19, Session SS02, 11:30-11:45)

INVASIVE SPECIES FORECASTING: BRIDGING THE CULTURES OF SCIENCE, POLICY, AND MANAGEMENT. Lodge, David M., Univ. Notre Dame (Thursday, Feb. 21, Session SS13, 10:00-10:15)

USING STRUCTURED EXPERT JUDGMENT TO QUANTIFY THE IMPACT OF ASIAN CARPS (BIGHEAD AND SILVER) ON THE LAKE ERIE COMMERCIAL AND RECREATIONAL FISHERY. Wittmann, M. E.; Cooke, R. M.; Rothlisberger, J. D.; Rutherford, E.L; Zhang, H.; Lodge, D. M.; Mason, D. (Thursday, Feb. 21, Session SS13, 11:15-11:30)

DEVELOPMENT OF A CLIMATE-TO-FISH-TO-FISHERS MODEL: IMPLEMENTATION IN THE EASTERN PACIFIC SARDINE AND ANCHOVY SYSTEM. Curchitser, E. N.; Rose, K.; Fiechter, J.; Hedstrom, K.; Bernal, M.; Creekmore, S.; Haynie, A.; Checkley, D.; McClatchie, S.; Werner, F. (Thursday, Feb. 21, Session SS42, 3:15-3:30)

HYPOXIA

Gulf of Mexico Ecosystems & Hypoxia Assessment (NGOMEX)

Session Chair

“Advances in Coastal Hypoxia Modeling: From Physics to Fish,” Robert Hetland (Texas A&M University) and Dubravko Justic (Louisiana State University) (Wednesday, Feb. 20, Session SS05)

Oral Presentations

INTERANNUAL VARIATIONS OF STRATIFICATION OVER THE TEXAS-LOUISIANA SHELF AND EFFECTS ON SEASONAL HYPOXIA. Hetland, R. D.; Zhang, X. Q. (Wednesday, Feb. 20, Session SS05, 10:15-10:30)

GULF HYPOXIA MODELING 1994-2012: PROGRESS, CHALLENGES AND PROSPECTS. Justic, D.; Wang, L. (Wednesday, Feb. 20, Session SS05, 10:30-10:45)

PRIMARY PROCESSES CONTROLLING OXYGEN DYNAMICS ON THE TEXAS-LOUISIANA SHELF. Yu, L.; Fennel, K.; Laurent, A.; Hetland, R.; Murrell, M. C.; Lehrter, J. C. (Wednesday, Feb. 20, Session SS05, 10:45-11:00)

SENSITIVITY OF HYPOXIA PREDICTIONS FOR THE TEXAS-LOUISIANA SHELF TO SEDIMENT OXYGEN CONSUMPTION AND MODEL NESTING. Fennel, K.; Hu, J.; Laurent, A.; Marta-Almeida, M.; Hetland, R. (Wednesday, Feb. 20, Session SS05, 11:00-11:15)

EFFECTS OF PHOSPHORUS LIMITATION ON OXYGEN DYNAMICS IN THE MISSISSIPPI AND ATCHAFALAYA RIVER PLUMES. Laurent, A.; Fennel, K.; Hetland, R. (Wednesday, Feb. 20, Session SS05, 11:15-11:30)

NEW APPROACHES FOR EXPLORING TRENDS IN GULF HYPOXIA FORMATION. Obenour, D. R.; Michalak, A. M.; Rabalais, N. N.; Scavia, D. (Wednesday, Feb. 20, Session SS05, 11:30-11:45)

THE EFFECTS OF HYPOXIA ON THE FOOD WEB OF THE NORTHERN GULF OF MEXICO: AN ATLANTIS ECOSYSTEM MODELING APPROACH. Vander Woude, A. J.; Mason, D. M.; Zhang, H.; Stow, C. A.; Adamack, A. T.; de Mutsert, K.; Pierson, J. J.; Roman, M. R.; Brandt, S. B.; Kolesar, C. and Sellinger, S. (Wednesday, Feb. 20, Session SS05, 16:30-16:45)

Coastal Hypoxia Research Program (CHRP)

Session Chairing

“Advances in Coastal Hypoxia Modeling: From Physics to Fish,” Robert Hetland (Texas A&M University) and Dubravko Justic (Louisiana State University) (Wednesday, Feb. 20, Session SS05)

Oral Presentations

MODELING ESTUARINE HYPOXIA IN NARRAGANSETT BAY, R.I. WITH AN INTERMEDIATE-COMPLEXITY APPROACH. Brush, M. J. (Wednesday, Feb. 20, Session SS05, 15:00-15:15)

EVIDENCE OF MULTIPLE PHYSICAL DRIVERS ON THE CIRCULATION AND THERMAL REGIME IN THE GREEN BAY OF LAKE MICHIGAN. Hamidi, S. A.; Bravo, H. R.; Klump, J. V.; Waples, J. T. (Wednesday, Feb. 20, Session SS05, 15:15-15:30)

MODELING THE FORMATION OF PERIODIC HYPOXIA IN A TRIBUTARY ESTUARY: THE YORK RIVER, VIRGINIA. Lake, S. J.; Brush, M. J. (Wednesday, Feb. 20, Session SS05, 16:00-16:15)

EXPLORING PHYSICAL AND BIOLOGICAL CONTROLS ON CHESAPEAKE BAY HYPOXIA USING A COUPLED HYDRODYNAMIC-BIOGEOCHEMICAL MODEL. Testa, J. M.; Li, Y.; Lee, Y.; Lj, M.; Kemp, W. M. (Wednesday, Feb. 20, Session SS05, 16:15-16:30)

COUPLING THE SPATIAL AND TEMPORAL DYNAMICS OF HYPOXIA WITH JUVENILE ESTUARY DEPENDENT FISH BEHAVIOR REGIONAL ECOSYSTEM PREDICTION: FROM SCIENCE TO MANAGEMENT. Brady, D. C.; Targett, T. E.; Di Toro, D. M.; Kemp, W. M. (Wednesday, Feb. 20, Session SS05, 17:45-18:00)

Poster Session

DRIVERS OF SEASONAL HYPOXIA IN GREEN BAY, LAKE MICHIGAN. Klump, J. V., Univ. WI; Bravo, H. R.; Waples, J. T.; LaBuhn, S. L.; Anderson, P. D.; Grunert, B.R.; Valenta, T., Green Bay Metropolitan Sewerage District; Zorn, M. (Thursday, Feb. 21, Session SS05, 18:00-19:30)

HARMFUL ALGAL BLOOMS

Ecology and Oceanography of Harmful Algal Blooms (ECOHAB) Program

Session Chair

“Factors Promoting the Expansion of Harmful Algal Blooms in Marine and Freshwater Ecosystems,” James Ammerman and Christopher J. Gobler, Stony Brook University (Wednesday-Thursday, Feb. 20-21, Session SS44)

Oral Sessions

A FLORIDA RED TIDE BLOOM COLLABORATIVE RESPONSE – OVERVIEW. Corcoran, A. A.; Flewelling, L. J.; Henschen, K.; Wolny, J.; Kirkpatrick, G. J.; Lovko, V. J.; Kirkpatrick, B. A.; Hu, C.; Lenes, J. M.; Weisburg, R. H. (Monday, Feb. 18, Session SS74, 10:15-10:30)

HAB MONITORING DURING A MAJOR EFFLUENT DIVERSION EVENT IN COASTAL SOUTHERN CALIFORNIA: THE ROLE OF SCIENCE AND PARTNERSHIPS IN MONITORING AND DECISION MAKING. Caron, D. A.; Jones, B. H.; Robertson, G.; Mengel, M.; Kudela, R.; Howard, M.; Ryan, J.; Scholin, C.; Terrill, E.; Holt, B. (Monday, Feb. 18, Session SS74, 10:45-11:00)

DEVELOPING A LONG TERM RECORD OF HISTORICAL ALEXANDRIUM BLOOMS USING SEDIMENT CORES. Feifel, K. M.; Lessard, E. J.; Fletcher, S. J. (Tuesday, Feb. 19, Session SS62, 17:30-17:45)

TRANSCRIPTOME PROFILING IN NATURAL POPULATIONS OF A. ANOPHAGEFFERENS PROVIDE INSIGHT INTO NUTRITIONAL DRIVERS OF HARMFUL BROWN TIDES. Wurch, L. L.; Gobler, C. J.; Walker, E.; Dyhrman, S. T. (Wednesday, Feb. 20, Session SS44, 10:00-10:15)

WHOLE TRANSCRIPTOME RESPONSE OF THE TOXIC, BLOOM FORMING CYANOBACTERIUM, MICROCYSTIS AERUGINOSA, TO NUTRIENT AVAILABILITY. Harke, M. J.; Gobler, C. J. (Wednesday, Feb. 20, Session SS44, 10:15-10:30)

HABITAT MODELING OF PSEUDO-NITZSCHIA DISTRIBUTION AND TOXICITY IN THE COASTAL WATERS OF THE NORTHWEST PACIFIC USING NON-PARAMETRIC MULTIPLICATIVE REGRESSION. Lubetkin, S. C.; Lessard, E. J. (Wednesday, Feb. 20, Session SS44, 11:45-12:00)

CONTROLLING HARMFUL CYANOBACTERIAL BLOOMS IN A MORE CROWDED, WARMER WORLD: RETHINKING NUTRIENT REDUCTION PARADIGMS AND STRATEGIES. Paerl, H. W.; Otten, T. G.; Xu, H.; Qin, B.; Zhu, G.; Wilhelm, S. W.; Scott, J. T.; Hall, N. S. (Wednesday, Feb. 20, Session SS44, 13:30-13:45)

ORIGINS OF HARMFUL ALGAL BLOOMS ALONG THE TEXAS COAST. Thyng, K. M.; Hetland, R. D.; Zhang, X.; Campbell, L. (Thursday, Feb. 21, Session SS44, 10:00-10:15)

CHANGES IN THE BACTERIAL COMMUNITY SURROUNDING MULTIPLE STAGES OF BLOOMS OF THE RED TIDE DINOFLAGELLATE KARENIA BREVIS. Meyer, K. A.; O’Neil, J. M.; Crump, B. C.; Heil, C. A. (Thursday, Feb. 21, Session SS44, 10:15-10:30)

BLOOM DYNAMICS OF ALEXANDRIUM IN THE GULF OF MAINE: INSIGHTS FROM LABORATORY EXPERIMENTS ON NITRATE UTILIZATION AND ALLELOPATHIC INTERACTIONS. Karp-Boss, L.; Thomas, M. A.; Lyczkowski, E. R.; Townsend, D. W. (Thursday, Feb. 21, Session SS44, 11:00-11:15)

INDUCTION OF TOXIN PRODUCTION IN THE DINOFLAGELLATE ALEXANDRIUM FUNDYENSE DEPENDS UPON PREDATOR-PREY EVOLUTIONARY HISTORY. Senft-Batoh, C. D.; Dam, H. G.; Shumway, S. E.; Wikfors, G. H.; Schlichting, C. D. (Thursday, Feb. 21, Session SS44, 11:15-11:30)

PSP TOXIN LEVELS AND GRAZER COMPOSITION AND ABUNDANCE IN PLANKTON SIZE FRACTIONS DURING ALEXANDRIUM FUNDYENSE BLOOMS IN THE GULF OF MAINE AND ON GEORGES BANK. Petitpas, C. M.; Deeds, J. R.; Turner, J. T. (Thursday, Feb. 21, Session SS44, 11:30-11:45)

THE ABILITY OF HARD CLAMS (MERCENARIA MERCENARIA) AND EASTERN OYSTERS (CRASSOSTREA VIRGINICA) TO CONTROL THE BROWN TIDE ALGAE, AUREOCOCCUS ANOPHAGEFFERENS. Wall, C. C.; Merlo, L.; Koch, F.; Griffith, A.; Gobler, C. J. (Thursday, Feb. 21, Session SS44, 11:45-12:00)

Poster Sessions

A FLORIDA RED TIDE BLOOM. Lenes, J. M.; Kirkpatrick, G. J.; Weisberg, R. H.; Walsh, J. J.; Hu, C.; Lembke, C.; Lovko, V. J.; Kirkpatrick, B. A.; Corcoran, A. A. (Monday, Feb. 18, Exhibit Hall E #240)

ENVIRONMENTAL PARAMETERS AFFECTING THE HALO-TOLERANCE OF THE TOXIC RAPIDOPHYTE HETEROSIGMA AKASHIWO. Hickcox, R.; Harvey, E.; Menden-Deuer, S. (Thursday, Feb. 21, Session SS44, Exhibit Hall E #344)

MULTIPLE KARENIA SPP. BLOOMS: PATTERNS OF PHYTOPLANKTON COMMUNITY WITH SELECTED NUTRIENTS (AND LACK THEREOF). Dixon, L. K.; Kirkpatrick, G. J.; Nissanka, A. (Thursday, Feb. 21, Session SS44, Exhibit Hall E #352)

Monitoring and Event Response for Harmful Algal Blooms (MERHAB) Program

Session Chair

“Factors Promoting the Expansion of Harmful Algal Blooms in Marine and Freshwater Ecosystems,” James Ammerman and Christopher J. Gobler, Stony Brook University (Wednesday-Thursday, Feb. 20-21, Session SS44)

Oral Session

A FLORIDA RED TIDE BLOOM COLLABORATIVE RESPONSE – OVERVIEW. Corcoran, A. A.; Flewelling, L. J.; Henschen, K.; Wolny, J.; Kirkpatrick, G. J.; Lovko, V. J.; Kirkpatrick, B. A.; Hu, C.; Lenes, J. M.; Weisburg, R. H. (Monday, Feb. 18, Session SS74, 10:15-10:30)

DEVELOPMENT OF THE CALIFORNIA HARMFUL ALGAL BLOOM MONITORING AND ALERT PROGRAM (CALHABMAP). Kudela, R. M.; Caron, D. A.; Carter, M. L.; Cochlan, W. p.; Dale, G.; Howard, M. D.; Langlois, G.; McAfee, S.; Stumpf, R.; Gulland, F. (Monday, Feb. 18, Session SS74, 10:30-10:45)

COMPARISON OF SANDWICH HYBRIDIZATION ASSAY AND QUANTITATIVE PCR FOR HAB RESEARCH AND MANAGEMENT USING THE RAPIDOPHYTE HETEROSIGMA AKASHIWO. Greenfield, D. I.; Coyne, K. J.; Doll, C. R.; Main, C.; Bianco, C. (Monday, Feb. 18, Session SS74, 11:00-11:15)

CONSTRUCTION OF A COMMUNITY BASED HARMFUL ALGAL BLOOM MONITORING PROGRAM: BRIDGING UNIVERSITY RESEARCH WITH INFORMAL SCIENCE CENTERS. Seubert, E. L.; Chilton, L.; Gellene, A. G.; Stauffer, B. A.; Jones, A.; Seegers, B.; Thomas, J.; Terrill, E.; Caron, D. A. (Monday, Feb. 18, Session SS74, 14:00-14:15)

Prevention, Control and Mitigation of Harmful Algal Blooms (PCM HAB) Program

Session Chair

“Factors Promoting the Expansion of Harmful Algal Blooms in Marine and Freshwater Ecosystems,”
James Ammerman and Christopher J. Gobler, Stony Brook University (Wednesday-Thursday, Feb. 20-21,
Session SS44

Oral Session

REGULATION OF GENE EXPRESSION BY LIGHT AND NITROGEN SOURCE IN HETEROSIGMA AKASHIWO.
Coyne, K. J.; Bouchard, J. N.; Hennige, S. J.; Warner, M. E. (Wednesday, Feb. 20, Session SS74, 10:30-
10:45)

Event Response Program

Oral Session

FROM RED TIDES TO GREEN AND BROWN TIDES IN THE INDIAN RIVER LAGOON FLORIDA: A RESPONSE
TO SHIFTING CLIMATIC CONDITIONS? Phlips, E. J.; Badylak, S.; Lasi, M. (Thursday, Feb. 21, Session SS44,
10:45-11:00)