



# ASLO 2017

## MOUNTAINS *to the* SEA

**AQUATIC  
SCIENCES  
MEETING**

- HAWAII CONVENTION CENTER
- HONOLULU, HAWAII
- 26 FEBRUARY – 3 MARCH

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- 10:00 **Ratnarajah, L.**; Lannuzel, D.; Bowie, A. R.; Meiners, K. M.; Nicol, S.; Townsend, A. T.; Kawaguchi, S.: NATURAL IRON FERTILISATION BY BALEEN WHALES IN THE SOUTHERN OCEAN (29139)
- 10:15 **Bowman, J. S.**; Kavanaugh, M.; Doney, S.; Ducklow, H. W.: CHARACTERIZING TEMPORAL AND SPATIAL ECOSYSTEM VARIABILITY WITH OBJECTIVELY DEFINED BIOMES IN A TWENTY-PLUS YEAR TIME SERIES FROM THE WEST ANTARCTIC PENINSULA (29297)
- 10:30 **Lee, Y.**; Yang, E. J.; Park, J.; Jung, J.; Ko, E. H.; Kim, T. W.; Kim, C. S.; Lee, S.: THE INFLUENCE OF REDUCED LIGHT ON THE PHYTOPLANKTON BIOMASS AND COMMUNITY STRUCTURE DURING SPRING BLOOM IN THE AMUNDSEN SEA POLYNYA, ANTARCTICA.\* (28843)
- 10:45 **Sherrell, R. M.**; Fitzsimmons, J. N.; Annett, A. L.; Rocanova, V. J.; Schofield, O.; Meredith, M. P.: DISSOLVED FE (AND MN, ZN, CU, NI, CD AND PB) IN THE WESTERN ANTARCTIC PENINSULA SHELF WATER COLUMN: HOW NATURAL FE FERTILIZATION WORKS AND DOESN'T WORK (30069)

### 082 COUPLING AND EXCHANGE ACROSS THE SEDIMENT-WATER INTERFACE

- Chair(s): Gary Fones, gary.fones@port.ac.uk  
Anouska Panton, anouska.panton@port.ac.uk  
Charlie Thompson, celt2@soton.ac.uk
- Location: 306 B
- 14:30 **Weigelhofer, G.**; Pözl, E.; Hein, T.: EFFECTS OF AGRICULTURAL LAND USE ON THE ADAPTION AND SATURATION OF BENTHIC PROCESSES IN HEADWATER STREAMS (28576)
- 14:45 **Kim, S. H.**; Lee, J. S.; Hyun, J. H.: IMPACTS OF LARGE-SCALE ARTIFICIAL DYKE ON SULFATE REDUCTION, SEDIMENT OXYGEN DEMAND AND BENTHIC NUTRIENT FLUX IN THE YEONGSAN RIVER ESTUARY, YELLOW SEA (29283)
- 15:00 **Orvain, F.**; Rakotomalala, C.; Israël, S.; Meynard, G.; Grasso, F.; Le Hir, P.; Maire, O.: AN OVERVIEW OF MODELS SIMULATING DENSITY-EFFECTS OF MACROFAUNAL BIOTURBATORS ON BED ERODABILITY TO DEFINE A STRATEGY FOR 3D SEDIMENT TRANSPORT MODELS (29811)
- 15:15 **Clark, J. B.**; Long, W.; Hood, R. R.: MODELING DISSOLVED ORGANIC MATTER CYCLING AND FLUXES IN ESTUARINE SEDIMENTS (29716)
- 16:30 **Algar, C. K.**: THE INFLUENCE OF ALTERNATIVE NITRATE REDUCTION PATHWAYS ON NITROGEN CYCLING IN MARINE SEDIMENTS. (29957)
- 16:45 **Cesbron, F.**; Brooks, K.; Hernandez, P.; Haynes, K.; Barfield, C.; Caffrey, J. M.: PRIMARY PRODUCTION, RESPIRATION AND NUTRIENT FLUXES ON THE SHALLOW NORTHEASTERN GULF OF MEXICO SHELF (29505)
- 17:00 **Sanial, V.**; Kipp, L. E.; Henderson, P. B.; van Beek, P.; Reyss, J. L.; Hammond, D. E.; Moore, W. S.; Charette, M. A.: TRACES ELEMENT FLUXES ACROSS THE PERUVIAN CONTINENTAL MARGIN DERIVED FROM RADIUM-228 (29639)
- 17:15 **Homoky, W. B.**; Conway, T. M.; John, S. G.; Woodward, E. M.; Mills, R. A.: MODEL EVALUATIONS OF PORE WATER IRON ISOTOPE SIGNATURES IN THE SOUTH ATLANTIC OCEAN - IMPLICATIONS FOR BENTHIC EXCHANGE (29870)

### 106 FISH

- Chair(s): David Delaney, Delaney7@hawaii.edu  
Location: 302 A/B
- 14:30 **Zhang, L.**; Yang, Y.; Bi, H.; Shahrestani, S.; Fan, C.: SELF-ORGANIZED FISH SCHOOLING: FROM INDIVIDUAL VARIABILITY TO SYNCHRONY (29463)
- 14:45 **Cornic, M.**; Rooker, J. R.: INFLUENCE OF THE MESOSCALE OCEANOGRAPHIC FEATURES ON THE SPATIOTEMPORAL DISTRIBUTION OF BIGEYE AND YELLOWFIN TUNA LARVAE (29074)
- 15:00 **Demirel, N.**: IMPLEMENTATION OF CMSY METHOD FOR ESTIMATING FISHERIES REFERENCE POINTS IN TURKISH STOCKS (28671)
- 15:15 **Delaney, D. G.**; Teneva, L. T.; Koike, H.; Ogawa, T.; Friedlander, A. M.; Kittinger, J. N.: CREEL SURVEYS AS TOOLS FOR MORE EFFECTIVE MONITORING AND MANAGEMENT OF COASTAL FISHERIES AND SEAFOOD SECURITY IN HAWAII (28765)
- 16:30 **TinHan, T. C.**; Rooker, J. R.; Wells, R. J.: VERTEBRAL CHEMISTRY OF JUVENILE BULL SHARKS IN THE NORTHWESTERN GULF OF MEXICO (29252)
- 16:45 **McManus, M. C.**; Hare, J. A.; Richardson, D. E.; Collie, J. S.: TRACKING SHIFTS IN ATLANTIC MACKEREL (*SCOMBER SCOMBRUS*) LARVAL AND SPAWNING HABITAT SUITABILITY ON THE NORTHEAST U.S. CONTINENTAL SHELF (28492)
- 17:00 **Robinson, H. E.**; Strickler, J. S.; Lenz, P. H.: PREDATION STRATEGIES OF LARVAL CLOWNFISH TO CAPTURE EVASIVE PREY (30072)

### 110 AQUATIC INVASION ECOLOGY

- Chair(s): Joy L. Shih, joyshih@hawaii.edu  
Location: 323 C
- 10:00 **Casties, I.**; Briski, E.: PERFORMANCE OF GAMMARID SPP. FROM DIFFERENT REGIONS UNDER STRESSFUL CONDITIONS IN COMMON GARDEN EXPERIMENTS (28467)
- 10:15 **Bradie, J. N.**; Broeg, K.; Gianoli, C.; He, J.; Heitmüller, S.; Lo Curto, A.; Nakata, A.; Rolke, M.; Schillak, L.; Stehouwer, P.; Vanden Byllaardt, J.; Veldhuis, M.; Welschmeyer, N.; Younan, L.; Zaake, A.; Bailey, S.: SAILING TOWARDS A BETTER UNDERSTANDING OF THE STRENGTH AND CHALLENGES OF ANALYTIC DEVICES FOR BALLAST WATER COMPLIANCE MONITORING (29802)
- 10:30 **Paiva, F.**; Briski, E.: COMPARATIVE ASSESSMENT OF SALINITY TOLERANCE OF GAMMARIDAE SPP. ORIGINATING FROM DIFFERENT REGIONS (28468)
- 10:45 **Hackerott, S.**; Valdivia, A. S.; Cox, C. E.; Silbiger, N.; Bruno, J. F.: IMPACTS OF INVASIVE LIONFISH ARE NOT APPARENT ON FISH COMMUNITY STRUCTURE ON THE MESOAMERICAN BARRIER REEF, BELIZE (29773)
- 12:00 **Shih, J. L.**: NUTRIENT CYCLING AND SEAWATER PUMPING RATES BY THE INVASIVE SPONGE *MYCALE GRANDIS* IN KANE'OHE BAY, O'AHU (29984)
- 12:15 **Chiquillo, K. L.**; Campese, L.; Winters, G.; Barak, S.; Procaccini, G.; Barber, P. H.; Willette, D. A.: COMPARING THE GENETIC DIVERSITY OF THE INVASIVE SEAGRASS *HALOPHILA STIPULACEA*, BETWEEN ITS NATIVE AND INVASIVE RANGE (29099)
- 12:45 **Raut, Y.**; Matzke, S.; Vieira, C.; Capone, D.: NITROGEN FIXATION ASSOCIATED WITH *SARGASSUM HORNERTI* AND *SARGASSUM PALMERI* (29235)



# Mountains to the Sea

## Feb 26 – Mar 3, 2017

### Honolulu, Hawai`i

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## VIEW ABSTRACT

### IMPLEMENTATION OF CMSY METHOD FOR ESTIMATING FISHERIES REFERENCE POINTS IN TURKISH STOCKS

The aim of ecosystem-based fisheries management is to provide the maximum sustainable take of target organisms with the minimum impact on other ecosystem components. The main challenge of the approach is that in the developing countries, including Turkey, stock assessments have been made only for a tiny minority of stocks with the rest of these being categorized as "data poor stocks". Based on this motivation, we will focus on the question: Can we successfully develop an ecosystem based management scheme for the data-poor fish stocks of Turkey? Surplus production modeling was used to estimate fisheries reference points in a maximum sustainable yield (MSY) framework. Fishing pressure and biomass were estimated from 2000 to 2015. Results are presented by region and by main functional groups (benthic fish & invertebrates, small pelagics, benthopelagics, large predators). Cumulative biomass of exploited species was well below the MSY-level in all regions. Large predators have low biomass and were subject to strong overfishing in all regions. In the last year with available data, 60% of the stocks were subject to ongoing overfishing and 60% of the stocks were outside of safe biological limits, potentially suffering from impaired reproduction. Only 8% of the stocks fulfilled the requirement of the Common Fisheries Policy of Europe as being not subject to overfishing and having a biomass above the level that can produce maximum sustainable yields. After rebuilding of the stocks and assuming a precautionary target of 90% of the maximum sustainable yield, an increase of about 60% over current catches could be possible.

[https://www.researchgate.net/profile/Nazli\\_Demirel](https://www.researchgate.net/profile/Nazli_Demirel)

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#### DETAILS

Oral presentation

Session #:106

Date: 02/28/2017

Time: 15:00

Location: 302 A/B

Presentation is given by student: No

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