



## ORAL PRESENTATIONS

### DAY 1

Introduction	Chairs: Steering Committee and International Scientific Committee
Keynote address No. 1: <i>Understanding and managing fisheries enhancement systems</i>	Kai Lorenzen
Theme 1 - Restocking and stock enhancement systems and their role in fisheries management	Chairs: Ken Leber, Josianne Støttrup
Mini-keynote: Scallop stock enhancement in New Zealand: lessons from applying an integrated approach	Mike Arbuckle
Enhancing the recovery of depleted <i>Tripneustes gratilla</i> stocks through sea ranching and restocking	Marie Antonette Juinio-Meñez, H. Bangi, D Pastor
30 years of sea ranching manila clams <i>Tapes philipinarium</i> : successful techniques and lessons learned	Peter Becker, C. Barringer
Marine stock enhancement in Florida: a multidisciplinary, stakeholder-supported, accountability-based approach	Michael Tringali, K. Leber, W. Halstead, R. McMichael, J. O'Hop, B. Winner, R. Cody, C. Young, C. Neidig, H. Wolfe, A. Forstchen, L. Barbieri
Mudcrabs and mangroves; an example of integrated approaches to stock enhancement	Lewis Le Vay, M. Walton, J. Leбата, J. Primavera, E. Quinitio, F. Parado-Esteva, E. Rodriguez, V. Noc Ut, T. Nghia, P. Sorgeloos M. Wille
Restocking the eastern Baltic cod: insight or distant?	Josianne Støttrup, J. Overton, H. Paulsen, J. Tomkiewicz, C. Møllmann, P. Pedersen, P. Lauesen
Improving yield and market traits of southern rock lobsters through translocation	Arani Chandrapavan, C. Gardner

<b>Theme 2 - When can hatchery releases add value to other forms of management?</b>	<b>Chairs: Kai Lorenzen, Caleb Gardner</b>
<b>Mini-keynote:</b> Metapopulation source-sink dynamics and stock enhancement of marine species	<b>Rom Lipcius, S. Schreiber, H. Wang, J. Shen, M. Sisson</b>
Uses and limitations of contemporary genetic analyses in delineating biological populations for stock enhancement	<b>Michael Tringali</b>
Complete optimization: integrating management with hatchery releases	<b>Robert Aguilar, A. Hines, M. Kramer, M. Goodison</b>
Have reseedings contributed to the stock enhancement of abalone in Japan?	<b>Tomohiko Kawamura, T. Horii, H. Takami</b>
Variable long-term performance of released sandfish	<b>Steven Purcell, M. Simutoga</b>
Simultaneous estimation of mixing proportions of released populations and genetic drift based on individual genotypes	<b>Toshihide Kitakado, S. Kitada, H. Kishino</b>
Manipulations of stocking magnitude: addressing density-dependence in juvenile populations of a marine carnivore	<b>Nathan Brennan, K. Leber, C. Walters</b>
Fisheries management in troubled waters: the need for scientifically informed decision making.	<b>Willis McConnaha, L. Mobrand, J. Waldo</b>

## DAY 2

<b>Theme 3 – Institutional and socio-economic issues</b>	<b>Chairs: PingSun Leung, Jurgenne Primavera</b>
<b>Mini-keynote 1:</b> On the economics of ocean ranching and stock enhancement	<b>Ragnar Arnason</b>
<b>Mini-keynote 2:</b> Legal framework of sea ranching: The Norwegian experience and management strategy.	<b>Britt Leikvoll</b>
Property rights in fish in sea ranching and enhancement – real or de facto	<b>Bernard Walrut</b>
Stock enhancement and fisheries management of the Japanese flounder in Fukushima, Japan	<b>Takeshi Tomiyama, M. Watanabe, T. Fujita</b>
Geoduck enhancement in British Columbia: a case study of incentives for enhancement	<b>Michelle James</b>
The economic feasibility of increasing rock lobster yield by translocation in Tasmania, Australia	<b>Caleb Gardner, I. van Putten</b>
Stocking and aquatic ranching in South America: lessons from stocking non-indigenous species for fisheries	<b>Theresa Bert, H. Ortega, H. López-Rojas, A. Bonilla-Rivero, C. Alves, P.</b>

	Vigliano, M. Alonso, M. Pascual, J. Ciancio
An economic analysis of stock enhancement of Persian sturgeon in Iran	Hassan Salehi
<b>Theme 4 – Release strategies</b>	<b>Chairs: Dave Eggleston, Reiji Masuda</b>
<b>Mini-keynote:</b> Release strategies for estuarine species with complex migratory life cycles: stock enhancement of Chesapeake blue crabs	<b>Anson Hines, E. Johnson, A. Young-Williams, R. Aguilar, M. Kramer, M. Goodison, O. Zmora, Y. Zohar</b>
Optimizing enhancement strategies: predicting growth and survival of hatchery-reared blue crabs under varying release scenarios	<b>Eric Johnson, A. Hines, M. Kramer, A. Young-Williams</b>
Optimal release site, season and size of spotted halibut determined by cage experiments and landing	<b>Toshihiro Wada, T. Yamada, M. Aritaki, H. Sudo, Y. Yamashita, M. Tanaka</b>
Evaluating the effect of size at release on recapture rates of Japanese spanish mackerel in the eastern Seto Inland Sea, Japan	<b>Yasuhiro Obata, H. Yamazaki, A. Iwamoto, S. Kitada</b>
Optimal location for cultured and released juveniles of ocellate puffer <i>Takifugu rubripes</i> identified by tag and release experiments using fluorescent elastomer	<b>Hiroshi Nakajima, M. Kai, K. Koizumi, T. Tanaka, M. Machida</b>
Differences in predation between wild and hatchery-reared juveniles of tiger puffer in a salt pond mesocosm	<b>Daisuke Shimizu, K. Sakiyama, Y. Sakakura, T. Takatani, Y. Takahashi</b>
Stock enhancement of a marginal abalone fishery in trouble - the challenge continues	<b>Mike Heasman</b>
Behavioral patterns of hatchery-produced abalone <i>Haliotis asinina</i> for stock enhancement: predator avoidance and search for food and shelter	<b>Shelah Mae A. Buen-Ursua, W. Gallardo, A. del Norte-Campos</b>
Application of the larval phase in marine invertebrate population restoration	<b>William Arnold, J. Leverone, S. Geiger, J. Greenawalt</b>
A generalized predator-impact model to optimize stocking of estuarine finfish	<b>Matthew Taylor, I. Suthers</b>

### DAY 3

<b>Keynote Address No. 2: <i>The Chesapeake Bay blue crab (Callinectes sapidus): a multidisciplinary approach to responsible stock enhancement</i></b>	<b>Yonathan Zohar</b>
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<b>Theme 5 – Interactions between wild and released stocks</b>	<b>Chairs: Devin Bartley, Mike Tringali</b>
<b>Mini-keynote:</b> Genetic effects of hatchery releases on marine finfish populations: case studies from Japan	<b>Shuichi Kitada</b>
Restocking of endangered marine fish: genetic monitoring of breeding practices for <i>Epinephelus marginatus</i>	<b>Sabrina de Innocentiis, A. Longobardi, G. Marino</b>
Loss of family variation in Japanese flounder during seed production and shortly after release	<b>O. Tominaga, J. Hasegawa, T. Tsusaki, S. Shiozawa, T. Seikai, Y. Tanaka, T. Fujii</b>
Genetic risk of stocking on fishes having environmentally influenced sex-determination	<b>Minoru Kanaiwa, Y. Harada</b>
Experimental study on broodstock management of barfin flounder under the concept of minimum kinship selection	<b>Shigenori Suzuki, S. Sekiya, T. Sugaya, M. Del Mar Ortega-Villaizan Romo, T. Matsubara, N. Taniguchi</b>
Genetic diversity, migration, and reproduction of released hatchery-reared Japanese flounder <i>Paralichthys olivaceus</i>	<b>Tetsuo Fujii, T. Ito, M. Nishida</b>
Genetic considerations during the experimental and expanded phases of blue crab stock enhancement in Chesapeake Bay	<b>Allen Place, X. Feng, J. Hill</b>
Monitoring of the stock enhancement program for black sea bream ( <i>Acanthopagrus schlegelii</i> ) in Hiroshima Bay, Japan	<b>Enrique Blanco Gonzalez, D. Jeong, T. Umino, K. Nagasawa</b>
Ecological impact of sea-ranching lobster: current research and future perspectives	<b>Ann-L. Agnalt, K. Jørstad, E. Farestveit</b>
Testing differences between wild and hatchery-reared blue crabs: minimizing potential negative interactions at release	<b>Alicia Young, J. Davis, E. Johnson, A. Hines</b>
The concept of carrying capacity in red drum stock enhancement	<b>Michael Denson, W. Jenkins, T. Smith</b>
The optimum stocking density in relation to carrying capacity of nursery grounds for Japanese flounder	<b>Yoh Yamashita, Y. Kurita, Y. Tanaka, J. Miller, M. Tanaka</b>
<b>Theme 6 – Biological insights from hatchery releases</b>	<b>Chairs: Neil Loneragan, Shuichi Kitada</b>
<b>Mini-keynote:</b> Overview of queen conch ( <i>Strombus gigas</i> ) restoration	<b>Megan Davis, G. Delgado, R. Glazer</b>

Stock enhancement and ecosystem carrying capacity in blue crab nursery habitats of Chesapeake Bay	<b>Rochelle Seitz</b> , R. Lipcius, K. Knick, M. Seebo, W. Chris Long
The CARE experience: post-larval collection and rearing for restocking of Marine Protected Areas	<b>Sven-Michel Lourié</b> , G. Lecaillon
Spatial scales of movement of released hatchery-reared and wild Atlantic cod	<b>Torstein Pedersen</b> , E. Cuveliers, E. Berg
Dispersal, habitat associations, survival, and residence time of hatchery-reared and wild juvenile red drum, <i>Sciaenops ocellatus</i> , in the Alafia River, Tampa Bay, Florida	<b>Carole Neidig</b> , D. Roberts, C. Armstrong
Stocking the Blackwood River Estuary, Western Australia, with the black bream <i>Acanthopagrus butcheri</i> .	<b>Greg Jenkins</b> , D. French, I. Potter, S. de Lestang, N. Hall, G. Partidge, A. Hesp, G. Sarre
Natal homing of herring released in Miyako Bay	<b>Hiroyuki Okouchi</b> , M. Nakagawa
Optimizing fish size and applying a conditioning trial in a Danish flatfish stocking program.	<b>Claus Reedtz Sparrevohn</b> , J. Støttrup
Movements of cultured white seabass, <i>Atractoscion nobilis</i> , released throughout the southern California Bight	<b>Michael Shane</b> , M. Drawbridge, D. Kent

## DAY 4

<b>Theme 7 – Arenas of progress</b>	<b>Chairs: Lee Blankenship, Barry Berejikian</b>
<b>Mini-keynote:</b> Restocking, stock enhancement and sea ranching: arenas of progress	<b>Devin Bartley</b> , J. Bell
Stock enhancement and sea ranching- practices at Zhangzidao Island in the northern Yellow Sea, China	<b>Qingyin Wang</b> , H. Wu, J. Fang, S. Wang
Enhancement of paua (abalone) stocks in New Zealand	<b>Jeremy Cooper</b>
Current situation and the future of stock enhancement of yellowtail, <i>Seriola quinqueradiata</i> , in Japan	<b>Keiichi Mushiake</b> , H. Yamasaki, H. Fujimoto
Stock enhancement program for threatened species in Southeast Asia	K. Okuzawa, <b>Ronald Maliao</b> , S. Buen-Ursua, J. Primavera
Current trends in hatchery techniques and stock enhancement for Chinese mitten crab, <i>Eriocheir sinensis</i>	<b>Yongxu Cheng</b> , X. Wu, X. Yang, A. Hines
Mark-release-recapture experiments of kuruma prawn by using microsatellites and mitochondrial DNA markers	<b>Takuma Sugaya</b> , S. Nakano, M. Oka, K. Mushiake
Utilization of deep seawater for Japanese scampi lobster broodstock, <i>Metanephrops japonicus</i>	<b>Kazutoshi Okamoto</b>

Using forced upwelling for nutrient enrichment to increase ocean ecosystem carrying capacity	Philip Kithil
Enhancing the production of the open ocean ranch	Ian Jones
Presentation of prizes for best student, oral and poster presentations	
Summing up and general discussion	International Scientific Committee