

# Program

Tuesday, September 20, 2011

0930 – 1030 Registration

## Agenda Item 1. Introductory Items

<Convener, T. Tanabe>

1030 – 1050 Opening of the meeting

Welcome participants

<Y. Uozumi, Director-General, National Research Institute of Far Seas Fisheries>

Introduction of the participants

Appointment of chairpersons

Adoption of the agenda

Appointment of rapporteurs

Logistical information

## Agenda Item 2. Environmental and biological characteristics influencing the distribution, growth, survival, and recruitment of the early life stages of pelagic top predators

<Chairperson, A. Garcia>

<Key note presentations>

1050 – 1130 Interannual larval growth and condition variability of bluefin (*Thunnus thynnus*) consequent with climate-induced environmental changes off the Balearic Sea (A. García, D. Cortés, J. Quintanilla, F. Alemany, L. Quintanilla, J.M. Rodríguez, T. Ramírez).

1130 – 1210 Early life history of Atlantic reef and pelagic fishes: using otolith microstructure to reveal ecological and oceanographic processes (S. Sponaugle).

1210 – 1340 Lunch break

<General presentations>

1340 – 1410 Regional and taxonomic comparisons of the feeding ecologies of larval tunas, mackerels, and billfishes (J. Llopiz).

1410 – 1440 Study on transport, distribution and growth of larval patch of Pacific bluefin tuna (*Thunnus orientalis*) in the northwestern Pacific Ocean (K. Satoh, M. Masujima, Y. Tanaka, M. Okazaki).

1440 – 1510 Annual changes in larval catches of Pacific bluefin tuna (*Thunnus orientalis*) from 2007 to 2010 around the Ryukyu Archipelago (N. Suzuki, T. Tanabe, W. Doi, H. Ashida, T. Kameda, Y. Aonuma).

1510 – 1540 Coffee break

<Chairperson, J. Llopiz>

1540 – 1610 Environmental factors affecting tuna larvae distribution in the Balearic Sea (F. Alemany, P. Reglero, A. García).

1610 – 1640 Climate change impacts on spawning grounds of Atlantic tunas in the northern Gulf of Mexico (B. Muhling, J. Lamkin, Y. Liu, S-K. Lee).

1640 – 1710 Incorporating habitat preference information in the development of annual

abundance indices of bluefin tuna in the U.S. Gulf of Mexico (G.W. Ingram Jr, B.A. Muhling, J.T. Lamkin).

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<Adjourned due to typhoon warning>

Thursday, September 22, 2011

**Agenda Item 3. Recent progress in CLIOTOP activities: from perspectives of advancing comparative life history studies on bluefin tuna and related species and effects of environmental changes on oceanic top predators**

<Chairperson, J. Llopiz>

0900 – 0925 Overview of CLIOTOP activities (J. Young).

**Agenda Item 4. Trophic pathways and relative importance of prey resources**

<Chairperson, M. Kiyota>

<Key note presentation>

0925 – 1000 Trophodynamics of ocean top predators: a comparative study from the Indian, Atlantic and Pacific Oceans (J. Young, R. Olson, F. Menard, L. Duffy, P. Kuhner).  
nert).

<General presentations>

1000 – 1025 What can stable isotope studies tell us about early life trophic pathways of top predator larvae? Case study of bullet tuna larvae (A. García, R. Laiz-Carrión, J.M. Quintanilla, A. Pérez-Torres, P. Reglero, F. Alemany).

1025 – 1040 Coffee Break

1040 – 1105 Diet of young Atlantic bluefin tuna (*Thunnus thynnus*) in eastern and western Atlantic forage grounds (J.M. Logan, E. Rodríguez-Marín, N. Goñi, S. Barreiro, H. Arrizabalaga, W. Golet, M. Lutcavage).

<Mini-Session: Current progress on research on non-tuna top predators and mesopelagic midtroph>

1105 – 1115 Introduction for current progress on researches for non-tuna top predators and mesopelagic midtroph (M. Kiyota).

1115 – 1140 Habitat utilization in summer by small cetaceans in the North Pacific (Y. Kanaji, M. Okazaki, T. Miyashita).

1140 – 1205 Shift in trophic role of northern fur seals in the northwestern Pacific Ocean (S. Yonezaki, M. Kiyota).

1205 – 1305 Lunch break

1305 – 1330 Trophic interactions of the jumbo flying squid, *Dosidicus gigas*, in the south-eastern Pacific Ocean (Y. Kato, T. Wakabayashi, M. Sakai) .

1330 – 1355 Development of an acoustic-optical system for myctophid fishes (K. Sawada).

**Agenda Item 5. Recent progress in research activities targeting oceanic top predators**

<Chairperson, J. Young>

<General presentations>

1355 – 1420 Numerical studies focusing on the early life stage of Pacific bluefin tuna (*Thunnus orientalis*) (M. Masujima, Y. Kato, K. Segawa).

1420 – 1445 Potential application of an underwater towing camera system enabling direct observation of fish behavior towards a trolling lure in monitoring of recruitment status in southern bluefin tuna (O. Sakai, T. Itoh).

1445 – 1500 Coffee break

1500 – 1525 Ontogenetic changes in schooling behavior and visual sensitivity during larval and juvenile stages in Pacific bluefin tuna, *Thunnus orientalis* (H. Fukuda, S. Torisawa, T. Takagi).

**Agenda Item 6. On-going and future research plans for larval tuna ecology**

<Chairperson, J. Young>

<General presentations>

1525 – 1550 Bluefin tuna larval ecology studies off the Balearic Sea: historical review, ongoing projects and future plans (F. Alemany, A. García).

1550 – 1615 A collaborative approach to larval bluefin tuna ecology (J. Lamkin, F. Alemany, W. Ingram, A. Garcia, B. Muhling, E. Malca).

1615 – 1640 NRIFSF research plan for Pacific bluefin tuna biology and ecology (O. Abe, W. Doi, I. Yamasaki).

**Agenda Item 7. Future meeting and publications**

<Chairperson, T. Tanabe>

1640 – 1650 Future meeting schedule and publication of workshop proceedings

<Reporting>

1650 – 1800 Reporting (chairpersons, conveners and rapporteurs meet to report on the workshop)

Friday, September 23, 2011

0900 – 1000 Reporting (continued)

1000 – 1030 Coffee break

**Agenda Item 8. Adoption of the workshop report**

<Chairperson, A. Garcia>

1030 – 1230 Adoption of the workshop report

**Agenda Item 9. Closing of the workshop**

1230 – 1240 Closing remarks