

W5

FIS Workshop Understanding the links between fishing technology, bycatch, marine ecosystems and ecosystem-based management

Co-Convenors: Heui Chun An (Korea), Kaoru Fujita (Japan) and Craig Rose (U.S.A.)

The methods and gears used to capture fish affect how many unwanted fish are captured (bycatch) and can disrupt other ecosystem components. Bycatch and discards significantly impede the sustainable use of living marine resources that are captured by commercial fisheries. To minimize unintended impacts on the environment, commercial fisheries should strive to improve selectivity to reduce the bycatch and discards of non-target species, as well as undersized commercial species. Research is exploring other effects of fishing gears on ecosystems, such as habitat damage and ghost fishing of derelict fishing gear, and developing new technologies to minimize such unintended impacts. This workshop will focus on the linkages between fishing technologies, ecosystems and ecosystem-based management, as well as on recent methodologies to reduce unintended effects of fishing. Particular emphasis will be placed on studies that have changed commercial fishing practices.

Friday, October 23 (9:00-12:45)

- 9:00 **Introduction by Convenors**
- 9:05 **Tatsuro Matsuoka (Invited)**
Negative impacts in capture fisheries: Bycatch, discards, derelict fishing gear, and ghost fishing (W5-5995)
- 9:45 **Craig S. Rose**
Fishing gear technology to reduce bycatch and other ecosystem effects of Alaska trawl fisheries: Cooperative research with the fishing industry (W5-5763)
- 10:05 **Jong-Hun Na, Chul-Woong Oh and Sung-Tae Kim**
Variations in species composition, biomass, and density in shrimp trawl bycatch across seasons and tidal phases in southern Korean waters: Developing a fisheries risk management approach (W5-5679)
- 10:25 **Maria Rebecca A. Campos**
Linking fishing technology, bycatch, and marine ecosystems in Philippine fisheries policies (W5-5508)
- 10:45 **Coffee / tea break**
- 11:05 **Heui Chun An, Bong Jin Cha, Seong Hun Kim, Chang-Doo Park, Kyoung-Hoon Lee, Seong-Wook Park and Jong Keun Shin**
Modification of white-spotted conger eel *Conger myriaster* net trap for reducing bycatch of non-target species (W5-5610)
- 11:25 **Réka Domokos**
Environmental effects on forage and longline fishery performance for albacore (*Thunnus alalunga*) in the American Samoa Exclusive Economic Zone (W5-5570)
- 11:45 **Yonghae Kim and Daesung Whang**
The effect of netting twine contrast on escape of juvenile sea bream in model trawl cod-ends (W5-5930)
- 12:05 **Kaoru Fujita, Yoshiki Matsushita and Seizo Hasegawa**
Development of bycatch reduction trawl nets to have benefits for fishermen (W5-5875)
- 12:25 Discussion and Recommendations
- 12:45 **Workshop ends**

W5 Poster

- W5-5982 **Ji Hyun Lee, Wan Ki Kim, M. Sidharthan, Sang Mok Jung, Hyun Woung Shin and Chae Sung Lee**
Comparison of benthic assemblages and associated fish communities on two artificial reef types deployed along the Pohang coast, South Korea